

February 28, 2024

The Honorable Board of Directors Great Lakes Water Authority

RE: CEO Report – February 28, 2024

Chairperson Baker and Directors,

I'll begin this month's report by providing you with an update on the status of the settlement agreement that resulted from many hours of discussion between GLWA, the city of Highland Park and the state of Michigan. Although your honorable body approved the settlement agreement at your February 14, 2024 meeting, I am disappointed to share that the Highland Park City Council tabled their discussion of it. As a result, Judge Rashid has requested that all parties return to mediation.

I'd also like to share that early in the morning of January 26, 2024, GLWA experienced a break on a 30-inch water transmission main on Baseline Road between Novi Street and Oakland Avenue in the city of Northville. Crews were immediately dispatched and within just a few hours the break was isolated, and within a week the repair was complete. I want to thank our Field Services team for their hard work and the city of Northville for their assistance and patience as we worked to implement the repair.



Staying with the theme of system resiliency, GLWA and the Oakland Macomb Interceptor Drain Drainage District (OMID) recently met with Detroit City Councilperson Scott Benson to give him an update on the status of three capital projects underway in his district on the city's eastside – one by GLWA and two by OMID.

GLWA's \$30 million project near Outer Drive, south of Seven Mile Road, involved making improvements to our Northeast Raw Water Tunnel, which is 10-foot wide and draws raw or untreated water from the Detroit River via our intake located on Belle Isle. Contractors built two access shafts from the surface down to the top of the raw water tunnel, approximately 85 feet below ground. These access shafts allowed commercial divers to place a strong new lining in the existing tunnel and

grout areas that have been shown to have stress cracks, an indicator of distress that must be addressed to prevent failure of the tunnel. We were able to share with Councilperson Benson that our project is wrapping up, with restoration work to be completed by early May.

The two OMID projects are at two locations within the North Interceptor East Arm and involve installing new state-of-the-art lining techniques to protect the sewer from the highly corrosive effects of the wastewater environment. We are grateful to DWSD Director and GLWA Board Member Gary Brown for bringing the groups together so that we could provide the update to Councilperson Benson.

With the start of the new calendar year, I have begun another round of facility visits, with a focus on gathering smaller groups of team members together to ensure that I can spend time with everyone in attendance. As an example, on February 15th, I held a breakfast for the team members from the Fleet and Facilities teams (about 20 people), and a pizza lunch for the team members from our Systems Control Center (about 18 people).

I also continued my group meetings with the team leaders/management professionals from the above-mentioned teams. These were wonderful events that produced a lot of great conversations and generated some excellent suggestions. I want to thank Chief Organizational Development Officer Jordie Kramer for committing to joining me for all of these meetings moving forward, since so many of the questions raised are OD-related. I'd also like to thank Public Affairs for their work coordinating the logistics behind these meetings.

After four successful months, the first phase of our TAP IN recruitment campaign has wrapped up. I am pleased to announce, that as a result of the campaign, visits to the GLWA careers page on the public website doubled from the previous four-month period, and our Tap IN video received a total of more than 740,000 video views across TV, digital, and social media outlets. You can see a full report of all the impressive statistics on Page 29.

Finally, I want to close with a recognition of Lake Huron Team Member Donald Kraft. Don recently achieved an extraordinary milestone by earning the *highest score* on the state of Michigan's F3 Drinking Water Operator Certification Exam. This remarkable achievement not only reflects his individual triumph, but also underscores our commitment to fostering a culture of growth and excellence. Congratulations, Don! Outstanding work.



PLANNING SERVICES

Enterprise Asset Management Group (EAMG)

The EAMG has been working on the continual refinement of assets within NEXGEN, GLWA's replacement of the Oracle Work and Asset Management system. EAMG team members have been busy auditing and tagging various Sewage Pump Stations, Southwest Water Treatment Plant, and Lake Huron Water Treatment Plant electrical distribution system assets.

The Linear System Integrity Program has been busy planning for the execution of the assessment of the 36-inch pipeline on 24 Mile Road. The inspection is scheduled to begin in early March 2024, and will consist of dewatering, inspection, validation of inspection results, and potential repairs if significant defects are observed. GLWA has engaged in robust member partner outreach to prepare for this work and anticipates completing the inspection before the start of peak demand season.

Capital Improvement Planning Group (CIP)

The diligent efforts of the CIP Delivery Team over the past eight months have culminated with the successful presentation of the FY 2025-2029 CIP Plan to the GLWA Board on January 24, 2024. The figure below provides overarching statistics of the CIP plan. This remarkable achievement was only made possible through the collective efforts and support of the entire CIP Delivery Team including Chiefs, Directors, and Project Managers. The team extends its heartfelt gratitude to all who contributed to delivering this outstanding plan.



The CIP Team remains steadfast in its mission to optimize the CIP process and enhance the user experience by simplifying the online portal's interface. With unwavering dedication, the CIP Delivery Team has started ramping up efforts to improve upon current CIP processes and platforms for the next cycle.

Lastly, after nearly four years of collaborative effort by GLWA Leadership, CIP, Engineering, CIP Delivery Partners, and AECOM, we are excited to announce a monumental achievement -- as of January 2024, we have officially launched the rollout and implementation of Program Management Plan (PMP) chapters. The PMP is a document that establishes the framework, business requirements, processes, and procedures for use by the CIP Delivery Team in delivering the CIP. This marks a pivotal moment for everyone involved in Capital Delivery at GLWA and signifies our collective commitment to excellence and progress.



Systems Planning Group

The **Charges Work Group** met twice in January for the FY 2025 Charges Rollout series. Charges Rollout #3 meeting was held on January 11 and began with a welcome from Chief Executive Officer (CEO) Sue Coffey, followed by an update from Chief Administrative and Compliance Officer Bill Wolfson about the status of the per- and polyfluoroalkyl substances, otherwise known as PFAS, settlement and the announcement of the hiring of David Jones, GLWA's new General Counsel. Next, Chief Financial Officer (CFO) Nicolette Bateson and Financial Services Chief of Staff Lisa Mancini delivered a presentation on the proposed FY 2025 and FY 2026 Biennial Budget and Five-Year Financial Plan. This was followed by presentations from Bart Foster of the Foster Group on both water and wastewater charges for FY 2025. (See Figure 1 to the left). Charges Rollout #4 meeting was held on January 18 and began, once again, with opening remarks from CEO Coffey before a follow-up presentation from CFO Bateson and Bart Foster led open discussions, fielded questions regarding water and wastewater charges, and invited those in attendance to raise other charges-related topics and questions. These two meetings concluded the FY 2025 Charges Rollout series.



Figure 1 - Charges Rollout #3





The **Watershed Hub Work Group** held its first meeting of 2024 on Wednesday, January 24. The meeting began with Dan Gold of GLWA providing an update on recent additions to the Watershed Hub GIS Mapper, including new E. coli monitoring data in the Rouge and Clinton Rivers, and the locations of rain gauges in Oakland County. Next, the group furthered discussion about the content of the first annual report which remains in development and will be released in February. The report will summarize the group's progress on multiple initiative's including year one of the piloting of the Investigational E. coli Sampling Program and the status of the United States Geological Survey (USGS)-GLWA

Regional Water Quality Monitoring Program. The final topic on the agenda was refining the draft agenda for the next Watershed Hub webinar scheduled for February 28, 2024. The webinar will feature presentations from GLWA alongside representatives of Wayne, Oakland, and Macomb Counties, and the Alliance of Rouge Communities. Please contact <u>Outreach@glwater.org</u> if you do not have an invitation to the webinar and would like one.

On January 17, the **Water Management Best Practices** work group convened in a hybrid format to deliberate on forthcoming topics and propose workshops for 2024. The agenda included discussions on GLWA's implementation of the NEXGEN enterprise asset management system, a debriefing on the November 1 Operators Best Practices workshop, and a focused exploration of reservoir disinfection.

A feature presentation of the meeting was given by Edwin Merriweather, Water Asset Maintenance Manager, who presented a comprehensive overview of the NEXGEN implementation within GLWA's water treatment plants. This strategic initiative is anticipated to enhance GLWA's current asset management system by minimizing human error and establishing itself as a data-rich repository. Leveraging machine learning capabilities, NEXGEN is poised to monitor asset conditions with unprecedented accuracy, thus fortifying decision-making processes in maintenance, engineering, finance, and capital allocation.





Yvette Johnson-Hayes, Water Quality Team Leader, delivered a detailed presentation on the crucial topic of reservoir disinfection within the GLWA system (29 reservoirs). Emphasizing the importance of reservoir disinfection for routine inspections and water purity, Yvette explained the meticulous training process undertaken by the Water Quality team members. This two-year training regimen encompasses a deep understanding of regulations and practical experience shadowing senior team members before individuals are entrusted with the responsibility of overseeing disinfection procedures.

Members of the **Water Analytical Work Group (AWG)** convened on January 30 to learn about the progress of GLWA's Corrosion Control Treatment Study (CCTS), historical Member Partner data analysis, resiliency, energy management and utilization. In light of regulatory changes, Cheryl Porter, Chief Operating Officer-Water and Field Services, provided an update on the progress of the CCTS to optimize corrosion control in customers' distribution systems and compliance with state and federal regulations. The 48-month project, which included comprehensive hydraulic and water quality monitoring, as well as testing service line materials harvested from member distribution systems is expected to conclude in late 2024. The final recommendation will be shared with GLWA's Board of Directors, followed by Member Partners.

Eric Griffin, Director of Energy and Resiliency, presented an update on GLWA's energy usage and costs, as well as a study to evaluate the power usage at GLWA's Adams Road pumping station. Todd King, System Resiliency Officer delivered a presentation on resiliency within the GLWA system. Within GLWA, resiliency refers to the ability to prepare and adapt to changes, withstand disruptions, recover rapidly, and integrate lessons learned into operations. Because of GLWA's responsibility to preserve public health and the environment, it must be prepared to recover rapidly from emergencies. Key focus areas of the new Resiliency Group include:

- Assistance with the implementation of the separation of Water and Wastewater Field Services groups and development and implementation of rapid training material;
- Prioritizing asset needs to minimize risk before planned renewals are executed and coleading the Linear Systems Integrity Program (LSI);
- Improvement of the technology to communicate asset readiness in support of operations;
- Lead planning efforts of the US Army Corp of Engineers and GLWA Southeast Michigan Resiliency Study; and
- Development of a strategy to improve electrical reliability.



Wastewater Analytics, Planning, and Metering

The Wastewater Analytics, Planning, and Metering group delivered the Annual Flow Balance Report, a necessary component to the collaborative Sewer SHARES charge setting process, as well as a comprehensive quality assurance evaluation of the flow balance process.

On January 26, members of the Wastewater Analytics Task Force (WATF) convened in Ann Arbor to learn about the stormwater management model and water quality models delivered under the Combined Sewer Overflow (CSO) Long Term Control Plan project by LimnoTech. The full-day workshop provided an overview of model updates, best practices, and opportunities for future refinements. The updated comprehensive model is expected to be available in February as a commitment to continue to provide up-to-date hydraulic and hydrologic regional assessments to reduce flooding and improve water quality.

System Analytics & Meter Operations (SAMO)

GLWA has undertaken a comprehensive effort to update and calibrate its hydraulic model for the water transmission network. The project involved several key steps and considerations.

- 1. <u>Data Correction and Integration:</u> The GIS team corrected inaccuracies in the existing GIS layers by geo-referencing as-built drawings. This ensured spatial accuracy in the updated model.
- 2. <u>Model Development and Calibration:</u> A new hydraulic model was developed using updated GIS layers and other resources such as as-built drawings, section maps, gate books, and meter pit exhibits. The model was calibrated with 2016 data, chosen to represent the highest demand over the last decade.
- 3. <u>Scenario Development:</u> Three scenarios representing maximum day, average day, and minimum day demands were selected for extended period simulation (EPS) on specific dates in 2016. This allowed for the representation of seasonal operational strategies and demand variations.
- 4. <u>Peak Hour Steady State Calibration</u>: Calibration was conducted for peak hour steady-state conditions, focusing on June 30 at 8:00 a.m. EST.
- 5. <u>Pressure Zone Division</u>: The model was divided into 17 separate pressure zones using hydraulic head boundaries, facilitating calibration efforts.



<u>Calibration Metrics</u>: Calibration involved comparing model results to observed facility pressures, system pressures, wholesale master meter pressures, water tank levels, and hourly reported pumpage at water treatment plants. Nearly 380 observed parameters were considered for each scenario.



- 6. <u>Validation and Further Adjustments</u>: The hydraulic model was distributed internally for operational and engineering groups' review. Based on internal recommendations, further adjustments, and validation efforts will continue to increase the accuracy of the model.
- 7. <u>Future Applications:</u> The calibrated hydraulic model will be used for various operational and engineering tasks, including master planning, capital improvement, operation management, leak detection, and water quality analysis. Additionally, it will facilitate future analyses such as emergency response, water main redundancy, conditional assessments, and cost optimization.

By updating the hydraulic model in-house, there were significant savings compared to outsourcing. More importantly, managing and updating an in-house hydraulic model will enable us to conduct future analyses efficiently and effectively. Overall, this project highlights the importance of accurate hydraulic modeling in managing and optimizing water transmission systems, the cost savings by using GLWA resources and the benefits of in-house development and calibration efforts.

WASTEWATER OPERATING SERVICES

Wastewater Operations

Water Resource Recovery Facility (WRRF) operations complied with all Water Quality Standards for the month of February.

Maintenance



The UHMW wiper modification has improved grit removal effectiveness from grit crossconvevor

The Primary Team identified excessive wear on the wiper for grit cross-conveyor #1 at Pump Station 1's rack and grit area. In addition to the excessive wear, the previous rubber used was not effective in maintaining the cleanliness of the belt during operation. To save money and increase the effectiveness of the wiper, instead of replacing it, the wiper was reinforced with ultra-high molecular weight polyethylene (UHMW) which remained from a previous project. This material will wear slower than the original rubber and allows better cleaning of the belt. This modification helps minimize the mess in Pump Station 1 rack and grit and ensures housekeeping of the area is easier for operations.



The Central Maintenance team rapidly repaired a stop log cover in the street on plant grounds. Years of traffic, including trucks and heavy equipment, caused the welds to break on one side of the cover. Left in this state, this could have caused serious vehicle damage or injury to personnel walking through the plant. The team stopped traffic flow through the area and quickly welded the cover back together and returned the traffic flow to normal by lunchtime. This fast response made moving around the plant more efficient and prevented any injuries or damage to GLWA vehicles.



The repaired stop log cover in the street at WRRF

Laboratory

The Laboratory is testing a new sampler to improve the consistency of composite sample volumes and performance in cold weather. The new sampler is tested right next to the existing sampler at the main plant influent location #2. Analysis of 12-hour composite samples compared total suspended solids, volatile suspended solids, and total phosphorus. The comparison will be performed over a period of one month. Following that, a second one-month comparison will be conducted at the final effluent sampling location.

Prior to the sampler's installation at WRRF, it was displayed at this year's MWEA-MI-AWWA Joint Expo & Operator Day's in East Lansing. This gave the team an opportunity to speak with the manufacturer and to better understand the functionalities of the vacuum sampler. Wastewater Operations chartered a bus and 33 team members attended the event.



Left to Right: Hainte Tuitupou, Ronnie Jones (Emerald Coast Mfg), Sajad Hyder, Joe Messina, Tosin Olojo, and Elliott Boinois



Wastewater Operations team in Lansing

Process Automation & Control System Team (PACS)



PS1 (left) and PS2 (right) New UPS

New Uninterrupted Power Supply (UPS) Installation at WRRF Pump Stations 1 & 2

PACS team members successfully installed new UPS units at WRRF Pump Station 1 (PS1) and Pump Station 2 (PS2). The UPS units' power electrical panels at PS1 and PS2 provide backup power for workstation support, cabinets, controllers, and nodes.



Baby Creek CSO Screen Control Panel Phase Over

The Baby Creek CSO facility screening controls were successfully phased over to a new control panel this month. The PACS team completed testing and commissioning of the control panel.



New Baby Creek CSO Screens Control Panel

WRRF Pump Station 2 Control Console Replacement

The PACS team installed a repurposed control console this month at the WRRF Pump Station 2. The console was repurposed from a recently replaced console at the Hubbell-Southfield CSO facility. The installation at Pump Station 2 involved installation of new Cat 6 cables for the control computers and the re-working of two electrical feeds into the console transfer switch.

Engineering and Construction Wastewater Projects in Design or Misc.: CIP Design:



PS2 Console Replacement Old (left) New (right)

CIP Design:

CIP-211005 – Contract No. 2103338 – PS2 VFD Replacement

This design project involves replacing end of life Variable Frequency Drives (VFD) for five of the main lift pumps at Pump Station 2, and replacing 4,160V electrical gear, including transformers, that will eventually power all 8 main lift pumps. The 90 percent design review window will last until early March 2024.

CIP 211007, Contract No. 1904337 – Pump Station 2 Bar Rack & Grit System Improvements The second pre-bid meeting was held on January 17, 2024. The team is now answering questions from the bidders. The question and bid due dates for the project were extended. The bids will be due on March 7, 2024. Planning for a community outreach meeting per the Michigan Department of Environment, Great Lakes, and Energy (EGLE) request to discuss the project is in progress.

CIP 211008, Contract No. 2101915 – WRRF Sludge Dewatering Pumps System Improvements A meeting was held to finalize decisions for Technical Memorandum-7 on instrumentation alternatives. As the project nears the 30 percent design submittal, the design and construction schedule will be better defined, as will the projected construction cost.



CIP 216008, Contract No. 2000970 - SFE Pump Station Rehabilitation

GLWA and the vendor are working on final terms for the measurement and verification plan (M&VP), and the lump sum price (LSP) for phase 2 (Construction) for Board approval to proceed to the next phase. The M&VP and LSP are anticipated by mid-2024 for this progressive designbuild project. State Revolving Fund (SRF) requirements are being worked through and coordinated with EGLE.

CIP 222001, Contract No. 2304897 – Northwest Interceptor (NWI) to Oakwood CSO Sewer The design is completed, and bidding docs are with procurement for a March bidding period to start. Property and Easement Acquisition is ongoing. Construction is expected to begin Fall 2024.

CIP 260201, Contract CS-168 – Rehabilitation of Conveyance System Interceptors and Trunk Sewers

This engineering contract is nearing its completion, with construction oversight of CON- 2100891: Rehabilitation of Outfall B-39 and CON-2102824: Rehabilitation of the NWI from 8 Mile to Tireman is expected to be completed in summer 2024. Following completion of those two projects, the final identified task remaining under CS-168 will be warranty inspections of the Outfall B-39 and NWI rehabilitation work, to be completed in early 2025.

CIP 260619, Contract No. 2004538 - St. Aubin, Leib and Seven Mile CSO I&C Replacement

This design-build project will replace the end-of-life control system with a new Ovation control system at three CSO facilities. Contractor, Detroit Electrical Services, have been mobilized at Leib CSO and St. Aubin CSO. Workshops for the Leib control narrative and final network design are scheduled in February. Several critical shop drawings are also on track to be reviewed in February.

CIP 260701, Contract 1803709 – Conveyance System Infrastructure Improvements

The engineering contract includes the inspection, condition assessment, design, and construction assistance associated with performing repairs and replacing existing equipment throughout the GLWA wastewater conveyance system. The design phase of the project was divided into two separate packages, with the CSO outfalls as project 1 and the valve remote sites and in-system storage devices as project 2. These two construction contracts are currently ongoing. Project 1 (CON-2102859) is making progress with newly constructed backwater gate chambers and is expected to reach substantial completion in December 2025. Project 2 (CON-2201142) is making progress with the repair/replacement of critical mechanical components at the in-system storage devices and is expected to reach substantial completion in August 2024. Contract No. 183709 also includes the construction of a river gauge house on the Detroit River. Design work for the river gauge house has been completed and a joint EGLE and US Army Corps of Engineers (USACE) permit application was submitted in October 2023. The permit application is now in final review status. It is expected that mobilization and construction for the gauge house will start in spring 2024.



CIP 260904, Contract No. 2200545 – Professional Services for 3rd Floor Renovation at WRRF NAB

This project will renovate the 3rd Floor New Administration Building (NAB) to maximize and optimize the space utilization of the building as part of the Wastewater Master Plan. The consultant has submitted the 95 percent construction development documents and specifications. The project team will continue to incorporate feedback from various stakeholders and finalize contract drawings.

CIP 270001, Contract No. 2202509 – Pilot CSO Netting and Disinfection Facility

Development of a Request for proposal for an engineering services contract is nearly complete. The project includes disinfection and in-line netting facilities which will remove floatable, trash, and debris for three uncontrolled combined sewer outfalls downstream of the I-94 drainage system.

CIP 270006, Contract 2200061, Design Services of CSO Facilities Improvements II

This project optimizes disinfection and screening at St. Aubin, addresses fall protection safety requirements at all 9 CSO facilities and rehabilitates architectural deficiencies at all 9 CSOs. Hazen & Sawyer has finalized 30 percent Drawings and Basis of Design Report. The 60 percent design documentation will be submitted for review by GLWA.

CIP 270010 – Contracts 2303955 & 2303960 – Puritan Fenkell and Seven Mile HVAC Upgrades The design phase for this CIP is broken into two contracts, including one for Puritan Fenkell CSO and another for Seven Mile CSO. The scope of work includes upgrading the HVAC systems at both CSO Facilities. Proposals in Bonfire will be submitted and evaluated.

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

Wade Trim (WT) continued to perform various studies and conducted flushing, disinfection, and Instrument & Controls workshops with the GLWA team. WT took a 2nd round of sludge samples to understand characteristics of sludge for the event when both basins were full. WT Continued Computational Fluid Dynamic (CFD) analysis and piping system modeling for basin flushing study.

Combined Sewer Overflow (CSO) Control Program

CSO Operations

Operations experienced discharge overflows from eight of nine CSO facilities, with the combined treated flow from these facilities totaling more than 1.8 billion gallons.

The Combined Sewer Overflow Facilities Operations complied with the Water Quality Standards for the month of February, with one exception. For the wet weather event of January 26, the Baby Creek Combined Sewer Overflow facility exceeded the permit limit for fecal coliform. The event average count was 1205/100 ml, in excess of the limit of 1000/100 ml. Combined Sewer Overflow (CSO) personnel are investigating this circumstance.



CSO Maintenance

Maintenance and Operations have been supporting contractors at Baby Creek chemical tank inspections with installation and removal of scaffolding, startup tests for the bar screen's improvement projects at Baby Creek Screening and Disinfection Facility (SDF). Maintenance has been prepping to install the vibration sensors at Conner Creek CSO for the chemical feed pumps and the installation of the sump pumps at Hubbell-Southfield CSO. Variable Frequency Drives (VFDs) were repaired (through contractual services) for the chemical feed pumps at Baby Creek.

The Conveyance and CSO team would like to recognize its newer team members, who contribute to the success of the CSO team. These team members persevered throughout a recent wet weather event which was quite substantial -- discharging over 1.9 billion gallons. The newer team members experienced challenges such as operating multiple facilities and using chlorine tablets to meet the chlorine demand. Although they were guided by our experienced team members and team leaders, they displayed that they could operate at a high capacity when needed.

Recognition of this exceptional performance goes to: *Malcolm Prather, Taron MacDonald, DeSean Lawson, Tarrell Harvey, Justin Davis, Keon Williams, Keion Harris, Nicholas Pettway and Lamar Harris.*

WATER OPERATIONS

Lake Huron Water Treatment Plant

Staff Excellence Report

Donald Kraft, a dedicated and diligent team member at the Lake Huron Plant, recently achieved an extraordinary milestone by securing the highest score in the State's F3 Drinking Water Operator Certification Exam. His unwavering commitment to excellence and tireless efforts in mastering the subject matter were evident throughout his preparation. The entire GLWA team is not only proud but also inspired by Don's accomplishment, recognizing him as a role model within the organization. This remarkable achievement not only reflects his individual triumph, but also underscores GLWA's commitment to fostering a culture of growth and excellence.



Southwest Water Treatment Plant

Chlorine B-Kit Training

The Southwest Water Plant conducted B-Kit training for plant staff, which consisted of watching an instructional video from the chlorine institute, classroom instruction from the repair kit manual, as well as a hands-on demonstration where everyone took a turn applying the B-Kit to a mock cylinder to repair a "leak."



Led by Operations Team Leader Lawanda Rouse, team members from the Southwest Operations, Laboratory, and Maintenance teams found the January 25, 2024, to be very helpful and informative and benefitted greatly from the hands-on training. *(See photo below).*



Field Services

Maintenance & Repair Team

The Field Services Maintenance and Repair teams were busy this month. Some of the corrective maintenance that the team continues to perform to ensure our communities have access to clean drinking water include:

Preventative Maintenance, Remote Sites

- Backwater Gates: 19, 21-32, 34, 36-45, 47-50
- Remote Valves: 4,5,7



Pictured is Lawrence Lewis, Dakarie Tolbert, Marcus Jackson, and Christina Muscat checking coupling fittings as well as greasing and removing debris.



Left: Shane Clarke inspecting one of the eight sanitary motors at Freud Station. He is looking at the slip ring brushes to check for proper seating and length. He will also check for excessive dirt that may be on the rings, brush holders, and insulators, and will then clean them

Right: Dave West is here inside one our variable frequency drives (VFD) at Imlay Station. Electrical Instrumentation Control Technician - Electrician (EICT-E) is working alongside contractor ABB to upgrade these drives so they will be dependable for years to come







Left is the crew recalibrating values at insystem storage device (ISD) #5 Lovett Street

Left: Dave West is inside one our variable frequency drives (VFD) at Imlay Booster Station. EICT-E is working alongside ABB to upgrade these drives so that they will be dependable for years to come

Right: Marcus Henderson is working on a breaker cubicle at our Imlay Booster Station. He is replacing a trip coil that faulted out









Marcus Jackson and Veyon Bentley doing preventive maintenance at West Service Center



Current Emergencies and/or Urgent Item(s)

	т.,	Emergency		N. (
Description	Location	or Urgent	Start Date	Notes
NSC I-Valve Train #4	North Service	Urgent	December 17, 2023	Train #4 is still out of service.
	Center			Received a Scope of Work from
				HDR to design the repair.
				Working to figure out isolation
				and when the repair should take
				place with the system needs.
				Material lead time will be taken
				into consideration.
72" Watermain Leak	Birwood	Emergency	January 23, 2024	Isolation was made on 1/23/2024.
	between Joy			Repair was complete on
	and W.			1/25/2024. Lakeshore Global
	Chicago-			Corporation (LGC) is working on
	Detroit			road restoration and road should
				be re-opened on 1/29/2024. Site
				restoration will continue.
30" Watermain Break	Baseline	Emergency	January 26, 2024	Isolation was made on 1/26/2024.
	Road between		-	Repair was complete 1/29/2024.
	Oakland and			Disinfection started on 2/1/2024
	Novi Road-			and BAC-T Sampling should be
	Northville			complete by 2/7/2024 and main
				back in service by 2/7/2024. Road
				and site restoration will continue.



30-inch watermain break in Northville: Road restoration at the break site





30-inch watermain break in Northville: Installation of repair kit

72-inch watermain leak in Detroit: Road restoration

The Maintenance and Repair Team worked heavily on watermain breaks in late January, one at Birwood Street (72" watermain) in Detroit, and the other in Northville (30" watermain) at Baseline Road.

- The crew assisted a contractor with the 30" water main break in Northville and began prepping it for chlorination; they then began the chlorination process and tracked the chlorine in the 30" main;
- At the 72" main in Detroit, they prepped it for chlorination at the beginning of the week.
- On Thursday, they began the chlorination process at the 72" and tracked the chlorine on Friday.



Electrical Instrumentation Control Technician - Electrician (EICT-E)

The Electrical Instrumentation Control Technicians achieved completing their corrective preventive maintenance (PM), emergency repairs and supported our GLWA contractors in completing their maintenance. Below are the stations EICT-E visited to do troubleshooting work.

- Freud: Troubleshoot ST2, ST4, & ST8 not starting
- Adams: Troubleshoot R2 not tripping
- Bluehill: Troubleshoot sanitary sump pumps not working
- Belle Isle: Troubleshoot sump pumps
- Rochester: Troubleshoot L1 Bypass standby
- West Service Center: Troubleshoot L4 tripping

A number of other sites where EICT-Es worked included:

- Imlay: Verify information needed for the newly installed modems to be activated
- Conner: Assist NexGen team with locating equipment and attaching QR codes (quick-response codes)
- Haggerty: Isolated and locked-out all valves in the bypass pits
- Schoolcraft: Reset and put L2 VFD back online



Pictured left to right:

- Kenny Murphy and David West removing a faulty space heater at Adams Road Booster Station
- David West planning how to move the station batteries so they are easily accessible during maintenance



Systems Control Center (SCC)

There was a 1.4 percent decrease in 2024 pumpage vs 2023 pumpage



Engineering

Project Spotlight

Contract No. DB-150 – Design-Build/Repair for Portions of the Pennsylvania, Springwells and Northeast Raw Water Tunnels (Phase 2)

Contract Amount: \$83,875,430.00 Contract Duration: 1,795 days Contractor / Vendor: Ballard Marine Construction Engineer: Brierly Associates Project Manager: Peter Bommarito

In-water work started (October 2023 – April 2024) during the low demand season, with all of the work in the Pennsylvania Tunnel completed. The primary focus of the current work that is being performed during the first half of the low demand season, is the completion of the Northeast Water Treatment Plant (NEWTP) Raw Water Tunnel.

In mid-September 2023, Ballard Marine Construction remobilized to the WTP Raw Water Tunnel site. On October 2, the Contractor began in-water work installing the final 40 feet of stainless-steel liner plates. These final plates could not be installed utilizing B.U.R.T. (Ballard Underwater Ring Transporter) because they included the closure pieces for both the diver access shaft and the permanent access shaft. The remaining stainless steel liner plates, closure pieces, and permanent access shaft were successfully installed by the end of October. Following theses installations, Ballard Marine began to grout the annular space between the existing concrete tunnel and the new stainless-steel liner plates, and successfully completed this work by the first week of December.



The temporary diver access shaft has been permanently sealed and the permanent access shaft, vent and closure piece have been installed. All work within the NEWTP Raw Water Tunnel has been successfully completed. Restoration of the NEWTP Raw Water Tunnel construction site (Seven Mile Road and Outer Drive) will be completed by late Spring 2024.

In December, the contractor began to demobilize from the NEWTP Raw Water Tunnel Site and fully mobilized to the Springwells WTP Raw Water Tunnel site. On January 2, 2024, the contractor began in-water work at the Springwells WTP site, cleaning all debris that has accumulated over the past year, and beginning to stage the liner plates as they arrive on site. The modifications and maintenance have been performed on B.U.R.T., and it has been delivered to the Springwells site. Within the next week, it will be lowered into the Springwells Raw Water Tunnel, and the crew will begin installation of the stainless-steel liner plates, 650 feet in total. The contractor does not anticipate completing the liner plate installation this low demand season, and it will continue into the next low demand season (October 2024 – April 2025).



Installation of permanent access shaft Northeast WTP RawInstalled permanent shaft and ventWater TunnelNortheast WTP Raw Water Tunnel



Capped off temporary and permanent diver access shaft Access Shaft NEWTP Raw Water Tunnel



Mobilization at Springwells WTP Raw Water Tunnel site



System Resiliency Officer Todd King and Water Transmission Director Peter Fromm visiting Springwells site



Stainless steel liner plates being staged for installation



B.U.R.T. (Ballard Underwater Ring Transporter)

Contract No. 2201068 – Springwells Water Treatment Plant Medium Voltage Electrical System Replacement

Contract Amount: \$64,458,000 Contractor: Clark Construction Engineer: Consultant – CDM Smith Project Manager: Justin Kietur

Overview: Replacement of medium voltage switchgear and feeder cables for Low Lift and High Lift motors and facility substations.

Status: First phase of work (known as Phase 0) is currently ongoing which consists of field investigation of conduit and wiring in the Pump House complex to create as-built drawings.

Demolition of old fan room (future switchgear room) by Global Green is complete. Rotor Electric is in the process of installing new cable tray and conduit in Boiler House, Turbine House, Switch House, and Pump House.

Discussions with DTE are ongoing regarding the new Medium Voltage Switchgear. They have changed direction from what was originally communicated during the project design.

Clark Construction is coordinating with their site civil subcontractors and steel fabricator for installation of drilled piers for a new utility bridge which will carry medium voltage cabling from the existing transformers and emergency generator to the new switchgear in the existing Boiler House building.





New switchgear room after removal of the abandoned equipment and initial cleaning



New cable tray installed in Turbine House basement

Water Engineering Active CIP Project Status

CIP# 119009 (Contract No. 1803990) Lake Huron High Lift and Yard Piping Improvements Project Manager: Brian Vanhall

This project at Lake Huron WTP adds three 20 million gallons per day (MGD) pumps, 72" flow meter on the high lift header with an 84" butterfly valve for isolation, 16" flow metering for process water usage by the plant, blowoff on the high lift header, infrared heating within the pump building on the south side, and replacement valve actuator on 84" butterfly valve on north header. Construction for the south header improvements is forecast to be completed in the summer of 2024. Installation of the new high lift pumps and associated construction has been delayed by the supplier and a forecast is to be determined.

CIP# 112006 (Contract No. 1904231) Northeast Flocculator Replacement

Project Manager: Brian Vanhall

This project at Northeast WTP replaces flocculator equipment in all four basins, demolishes inlet gates to each flocculation chamber and installs a baffle block at the inlet to ensure flow is evenly distributed, improves access to the drywell with stairs and platforming, and replaces the hatches above the inlet gates. This project is in the construction phase and flocculation improvements have been completed for Basin #3. Flocculation improvements for Basin #2 are next and are forecast to be completed in the summer of 2024. The project is on track for overall substantial completion on July 13, 2026, and final completion by March 18, 2027.

CIP# 114011 (Contract No. CON-252) Springwells Steam, Condensate Return and Compressed Air Piping

Project Manager: Brian Vanhall

This project at Springwells WTP replaces the steam generators, majority of steam and condensate piping, condensate pumps and replaces portions of the compressed air and natural gas piping systems. Construction is substantially complete and is tracking for final completion by May 7, 2024.



CIP# 122004 (Contract No. 2300600) 96" Water Transmission Main Relocation - Phase II Project Manager: Corey Brecht

Project is in construction phase. The scope consists of approximately 8,000 ft. of 96" diameter welded steel pipe along Dequindre Road. in Rochester Hills. Currently the contractor has installed 700 ft. of transmission main along the south segment of the project heading to Hamlin Road. The project is currently on track to be completed by fall of 2025.

CIP# 122006 (Contract No. 1803621) Wick Road 48-Inch Water Transmission Main Project Manager: Corey Brecht

Project is in construction phase. The work included installation of approximately 16,500 ft. of 48" diameter prestressed concrete cylinder pipe (PCCP) parallel to the existing 42" transmission main. The scope also included two cross connections and tie-in at the Wick Road Pump Station. All 16,500 ft. of pipe is installed, and the contractor is waiting for favorable weather to finish pavement restoration work near the pump station in spring. Project will be closed out by June of 2024.

CIP# 111001 (Contract No. 1803769) Lake Huron Low/High Lift Pumping and Filter Backwash System

Project Manager: Eric Kramp

This project addresses long-standing issues with the switchgear, low lift, high lift, and corrosion control systems at the Lake Huron WTP. Project is just entering the detailed design stage for the first construction contract associated with it and is in preliminary design for the balance of the work. For the updates to the switchgear and low lift pumping improvements, the consultant has provided a basis of design for the work. The Basis of Design Report (BODR) for the high lift pumping, wash water, and phosphoric acid improvements is anticipated relatively soon, upon receipt of the final target concentrations for optimized corrosion control.

CIP# 111006 (Contract No. 2101680) Lake Huron Filter Instrumentation and Raw Water Flow Metering Improvements

Project Manager: Eric Kramp

This is a progressive design-build project to address outdated and failing programmable logic controllers (PLCs) and controls throughout the plant, with particular emphasis in the filter building. The project is approximately 30 percent complete with Phase I. Contractor is incorporating comments provided to 30 percent drawings and basis of design report into the 60 percent design documents.

CIP# 111012 (Contract No. 2004549) Lake Huron Flocculator Improvements Project Manager: Eric Kramp

This project is to bring the rapid mix and flocculation systems at the Lake Huron WTP to current standards. This project is in the study phase, with piloting of engineered hydraulic flocculation underway. Once sufficient data is collected, GLWA will meet with the Michigan Department of Environment, Great Lakes, and Energy (EGLE) to confirm that Engineered Hydraulic Flocculation will be acceptable to the jurisdictional authority.



CIP# 170801 (Contract No. CS-151A) Reservoir Inspection and Design at Imlay, Lake Huron WTP, Springwell WTP, Southwest WTP

Project Manager: John McCallum

This project is the design and inspection and, construction management/resident project representation services (RPR) for 10 finished water reservoirs. Design started in December 2018 and as-built drawings are in process now. All 10 reservoirs have been inspected and as-built documents are being prepared. The contract had one change order for additional RPR services. The project remains on budget and is ahead of the contract final completion of January 17, 2025. Total contract price for engineering and contract management (CM)/RPR services is \$2,774,692.

CIP# 170801 (Contract No. 1900744) Reservoir Rehabilitation Construction Project at Imlay, Lake Huron, Springwells, and Southwest Water Treatment Facilities. Project Manager: John McCallum

This low bid project cleaned and rehabilitated 10 finished water reservoirs based on the design package provided in CS-151A. Started in November 2019 with punch list items getting wrapped up this winter. The project remains on budget and is ahead of the contract final completion of January 17, 2025. Total contract price \$21,597,998.

CIP# 170802 (Contract No. 2100236) Reservoir Rehabilitation Phase II (Design), Booster Stations and Water Treatment Plants

Project Manager: John McCallum

This project provides the design, inspection services, construction management, and RPR services for 16 of the system finished water booster stations. Started in July 2022 with design and exterior inspections. RPR services are being provided on the first three reservoirs of the contract during the 2023-2024 low water demand season and will continue through 2027. Total price for engineering and CM/RPR services is \$10,778,785 with a final contract completion in March 2028.

CIP# 170802 (Contract No. 2201316) Reservoir Rehabilitation Phase II (Construction), Booster Stations and Water Treatment Plants

Project Manager: John McCallum

This project is the low bid construction component based on Contract No. 2100236 bid package to cleaning, repair, and add select improvements to 16 finished water reservoirs at Eastside, Wick Road, Schoolcraft, Haggerty, Adams Road, Joy Road 1&2, North Service Center 1&2, Water Works Park 1 & 2A/2B, Northeast 1&2, Michigan Avenue, Lake Huron No. 3. Started in December 2023 with construction work underway at three finished water reservoirs, Wick Road, Eastside, and Schoolcraft. The project remains on budget but is marginally behind schedule with recovery expected in 2024-2025. The last set of four reservoirs are scheduled to be completed in April 2027 with final contract completion in July 2028. Total contract price \$35,563,564.



CIP# 114002 (Contract No. 2201068) Springwell's Electrical Gear Replacement

Project Manager: Justin Kietur

This project is in construction phase. Project involves installation of new medium voltage switchgear and cabling from secondary side of GLWA transformers to the switchgear, and from the switchgear to the Low Lift and High Lift Pumps and plant unit substations. Demolition for new switchgear room is complete, and the majority of cable tray within existing facility is complete. DTE requirements for alterations to the current new switchgear layout represent a significant impact to the project cost and budget, the total impact is not yet known.

CIP# 115005 (Contract No. 2103880) Waterworks Park Ventilation System Improvements Project Manager: Mike Dunne

The project goals are to increase air exchanges and improved distribution of fresh air in areas of the plant that are susceptible to an accumulation of off-gassing from treatment chemicals. To achieve these goals, the existing heating, ventilation, and air conditioning (HVAC) systems will be demolished, and replacement and additional HVAC systems will be installed. The new HVAC systems consist of gas fired make up air units (MAUs), exhaust fans, ductwork, natural gas piping, ventilation control panels, electrical power, ambient air monitors and associated appurtenances. To date, nearly all of the new HVAC units have been installed but are not yet operational. Construction trades continue to work on installing electrical power, HVAC controls, gas piping, and ductwork to allow for commissioning of the new HVAC units.

CIP# 116005 (Contract No. 2101255) Belle Isle Seawall Rehabilitation

Project Manager: Mike Dunne

The scope of the Belle Isle Seawall Rehabilitation project is to correct excessive erosion at the tip of the southern dike of the Belle Isle Intake lagoon. The erosion has been caused by years of ice floes scouring the dike and recent high-water events. The repair work will require the installation of new steel sheet piling and a rip-rap stone revetment to protect the earthen dike. Currently, the job is scheduled to begin construction in April of this year, after most of the ice on the river has receded. In preparation for construction, submittals are being delivered and reviewed.

CIP# 132016 (Contract No. 2004674) NSC Pumping Station Improvements

Project Manager: Tim Kuhns

Project is in conceptual design stage. Project will include rehabilitation of the existing station and consolidation of reservoir pumping within the main pump house eliminating the need for separate reservoir pump buildings.

CIP#111011 (Contract No. 1904449) Lake Huron Pilot Plant

Project Manager: Nichole Sajdak

Design, construction, startup, and operation of one raw water skid, one pretreatment skid and two filter skids at the Lake Huron WTP is complete. Pilot plant equipment is currently testing flocculation scenarios to inform CIP# 111012 (Contract No. 2004549) Lake Huron Flocculator Improvements. Contract closed as of February 2024.



CIP# 114017 (Contract No. 2201255) Springwells Flocculator Improvements

Project Manager: Nichole Sajdak

This project replaces the existing horizontal paddle wheel flocculators in the 1958 treatment plant and adds continuous turbidity monitoring of its settled water. Demolition is ongoing in Basins 5 and 6. Flocculators have been released for fabrication with delivery and installation planned in 2024.

CIP# 116002 (Contract No. DB-150) Raw Water Tunnel Rehabilitation

Project Manager: Pete Bommarito

Project is in construction phase. Work within the Pennsylvania Tunnel and Northeast Tunnel is completed. Installation of stainless-steel liner plates is ongoing within the Springwells Tunnel and will be completed next low demand season.

CIP# 114002 (Contract No. 1900134) Springwells Low Lift Suction Isolation Gate Replacement Project Manager: Tim Kuhns

Project is in construction phase. Project involves replacement of eight isolation roller gates that control flow between the raw water tunnel and suction ring and the low lift pumps. Currently, six of the eight gates have been replaced and tested. The remaining two gates will be completed by mid-spring of 2024.

CIP# 115001 (Contract No. 2000610) WWP Yard Piping Replacement and Water Production Flow Metering

Project Manager: Mike Garrett

Project is in construction phase. Project involves complete replacement of yard piping, valves, and venturi meters for the piping system on the discharge of the Water Works Park High Lift Station. The eastern yard piping is completed and venturi meters 5 and 6 have been tested and put into service. The western yard piping is currently under construction and will be completed in summer of 2025.

CIP# 122019 (Contract No. 2204376) Jefferson Main Replacement

Project Manager: Tim Kuhns

Project is at 90 percent design phase. Project involves use of 42", high-density polyethylene (HDPE) to loose fit slip-line, approximately three miles of vintage 1915 cast iron 48" piping along Jefferson between the Water Works Park Water Treatment Plant and Rivard Street just east of downtown Detroit.

CIP# 132015 (Contract No. 1901767) Newburgh Booster Pumping Station Improvements Project Manager: Jorge Nicolas

Project re-started design phase after a long pause due to finding the right site to build the new station, GLWA Budget re-alignment and GLWA needs re-assessment. Contract Amendment is in process.



CIP# 113009 (Contract No. 2300730) Southwest Chain and Flight Upgrades

Project Manager: Vittoria Hogue

Project is in pre-construction phase. Project involves removing and replacing flight and chain equipment in three of the four sedimentation basins at Southwest Water Treatment Plant. Equipment will be removed and replaced in basins 1B and 2A and only removed in 1A. The purchase order is executed, but we are waiting on equipment to arrive. Equipment is slated to arrive in March 2024. Coordination with the plant and the sludge contract is currently taking place.

CIP# 122016 (Contract No. 1803942) Downriver Transmission Main Loop

Project Manager: Vittoria Hogue

Project is at 90 percent design. Project involves installation of looped and redundant mains in the downriver area along Inkster Road and Allen Road to maintain service in the event of a break along the existing mains. Comments on design have been returned to the consultant and they are working on providing responses.

CIP# 132007 (Contract No. 1900516) Imlay Station Pumping Improvements Project Manager: Vittoria Hogue

Project is in construction phase. Project involved right sizing pump 3 at Imlay Pump Station to service the communities west of the station. All equipment has been installed. The pump experienced vibration issues when first tested. Solutions are being completed in February and final testing and close out of the contract will follow.

Research, Innovation & Transformation

Research

Research team members facilitated a Pilot Plant tour at Water Works Park on January 30, 2024. Attendees participating in the tour included faculty of Wayne State University, University of Michigan, and staff from Xylem Water Solutions. This is in line with the continuous objective to foster productive collaborations with external partners for treatment, operation optimization and workforce development. *(See photos below).*





Innovation

GLWA, along with Chicago Metropolitan Water Reclamation District (MWRD), the city of Columbus, Ohio, Green Bay, Wisconsin, Champaign, Illinois, and about 45 other wastewater utilities recently formed the Midwest Biosolids Association. Dr. John Norton, Director of Energy, Research, & Innovation, for GLWA, is vice president of Midwest Biosolids Association (MBA) and is chair of the first MBA annual conference. The conference will be held Tuesday, March 26, 2024, on the Purdue University campus. Approximately 150 practitioners, regulators, academia, consultants, and vendors are planning to attend.

Steve Kuplicki, GLWA's Wastewater Operations – Industrial Pretreatment Manager, and Dr. Norton, will both be giving talks about the future of biosolids.

INFORMATION TECHNOLOGY

In the past month, the IT Security Team has proactively blocked or thwarted 123,157 spam messages, 9,247 spoofed messages and seven viruses. Additionally, 23,911 phishing attempts have been caught and 9,745 malware attempts have been blocked.

The IT Business Productivity Team, in conjunction with the Financial Services Area, continues to make progress on the Workday Finance implementation, which will launch on July 1, 2024. Currently, the project team is conducting end-to-end testing to ensure our business processes work correctly in Workday. At the same time, planning is underway for training and production readiness.

The IT Infrastructure Team along with its partner AT&T, has begun the refresh of the GLWA network infrastructure at all GLWA locations. By refreshing the network technology, it will provide a more flexible wide area network to support our ongoing initiatives of cloud first technologies like Enterprise Assessment Management and Workday implementation. The refresh will provide more resiliency to end users with less possibility of service interruption.

The IT Customer Service Delivery Team along with the IT Infrastructure Team and our Verizon Wireless partners begin installing wiring and equipment to improve the cellular signal at our Water Resource Recovery Facility (WRRF). This project will increase team members ability to work on mobile devices throughout the facility in preparation for the NEXGEN go-live. WRRF is the pilot location. All water plants and other facilities will be added at a later date.



INFORMATION TECHNOLOGY (continued)

The IT Enterprise Asset Management Systems Team along with our consultant partner, NEXGEN, and GLWA's Enterprise Asset Management Group are working together on the System Testing phase of the NEXGEN Enterprise Asset Management (EAM) implementation.

The second stage of testing, User Acceptance Testing, including in-person training and tabletop testing sessions using scripts with 19 teams of over 100 team members across GLWA teams were represented. This process allowed for real work management scenarios to be tested by GLWA end

users and any configuration business process or modifications to be made prior to training and golive. The IT Enterprise Management Asset Systems Team along with the IT Customer Delivery Team assisted with the first mobile device deployment sessions for team members who will be using NEXGEN at go-live. The deployment included enrollment in a Mobile Device Management Android system, basic tablet training, and



assistance with signing into Workday, Teams, and Outlook, among others.

Currently, the IT Project Management Office is managing 21 active projects and is processing six project requests.

PUBLIC AFFAIRS

Transmission Main Repair Communications

Public Affairs assisted GLWA in keeping the public informed through a regular cadence of communications during the repair of a 30-inch water transmission main in Northville. A total of four communications were released to the media and public over the course of six days. The communications highlighted discoveries made at the site, updated timelines on when the repairs were expected to be complete and ended with the completion of repairs. Updates also included images from the scene showing the work being done.



PUBLIC AFFAIRS (continued)

TAP IN Campaign Update

The first phase of GLWA's TAP IN recruitment campaign has wrapped up. successful of Following four months promoting GLWA careers and highlighting our wonderful One Water Team, the Public Affairs team is proud to announce that visits to the GLWA careers page on the public website doubled from the previous four-month period. Other notable statistics include a total of 740,000+ video views across TV, digital, and



social media, almost 1.8 million campaign impressions, and a 92 percent full video view rate on streaming services (which beats out the industry standard of 85 percent)! A full campaign assessment is currently underway in preparation for phase two. You can watch the TAP IN video by clicking <u>HERE</u>.

One Water Campaign

Public Affairs is once again collaborating with the Southeast Michigan Council of Governments (SEMCOG) on the annual One Water public education campaign, which runs during Fresh Water Week in June. The first video shoot of the campaign happened this month in the GLWA studio, utilizing our green screen. SEMCOG expects to release the first video this spring.

LSIP Video

Public Affairs has created a video explaining the importance of the Linear Systems Integrity Program (LSIP), the process we follow through the program and its goal. The video, which was produced in partnership with our LSIP contractor HDR, features CEO Suzanne Coffey, Chief Planning Officer Jody Caldwell and a cross section of team members from HDR and GLWA that are deeply involved in LSIP. Our target audience is residents affected by some of the construction work happening around upcoming LSIP projects, as well as our Water Sector counterparts who may be interested in our approach. This video is a great example of our continued commitment to collaboration at GLWA. You can watch the video by clicking HERE.

CEO Visits

Public Affairs teamed up with the CEO to begin another round of on-location visits with our team members. During the month of February, visits will be held at CSF for our Fleet, Facilities, Systems Control Center, System Analytics and Meter Operations Teams. During these visits, CEO Sue Coffey will be available for informal chats with team members. There will also be group Team Leader meetings. These meetings will not replace the Team Leader Virtual Meetings taking place each quarter.



<u>PUBLIC AFFAIRS</u> (continued)

DEI Standards Committee

Public Affairs Specialist Stefanie Burns was accepted on AWWA's newly formed Diversity, Equity, and Inclusion (DEI) Practices Standards Committee. The DEI Standards Committee is a collaborative group of national water and wastewater professionals that will work to develop a DEI strategy and apply DEI practices to recruitment, culture, leadership, operations, system reliability, community relations and more.

Young Professionals Campaigns



There are two Young Professionals (YP) campaigns in February. The first is a YP In-Person Networking Event and the second is YP's first Pet Photo Contest Engagement Campaign. The Pet Photo Contest is a great way for YPs to share a little bit about themselves in an effort to continue to build positive crossfunctional work relationships across the organization in a fun way. The YP Network partnered with One Water Wellness and WaterWorks Magazine (WWM) to feature these pet photos in the upcoming WWM's Wandering Eye and 2024 Open Enrollment Guidebook to highlight GLWA's additional benefit of offering pet insurance.

SECURITY AND INTEGRITY

The Hazmat Unit coordinated and completed a total of 141 hours of training during the month.

The group conducted a Department of Human Services cyber-security related tabletop at Water Works Park to test Cybersecurity/IT, Organizational Development, Public Affairs and Financial Services' response and capabilities.

Security and Integrity revised and updated the weapons policy to include language regarding secondary weapons, authority of the Chief, and inventory protocols.

Lastly, the group participated in the Emergency Operations Center (EOC) and emergency response to an on-going cybersecurity attack against GLWA.



ORGANIZATIONAL DEVELOPMENT

Benefits and Wellness

Team Member Engagement - Benefits and Wellness

Physical Well-Being

HAP Cooking Well Series

Health Alliance Plan (HAP) provided four Cooking Well in-person sessions at Water Works Park (WWP) during the month of January.

Chef Jeffrey Scott Tatum facilitated the hands-on sessions that taught **38** team members to cook a variety of dishes.

Team members were able to enjoy the meal and take the recipe home.



The recipes included:

- Week 1 Southwest Quinoa Casserole
- Week 2 Rainbow Chickpeas

• Week 3 - Sweet Potato and Black Bean Chili with Hot Water Cornbread

• Week 4 - Cauliflower "Fried Rice"

Drop 5 Virtual Weight-Loss Community

Held Thursdays at noon, the January Drop 5 Community facilitated by the BCBSM well-being team, promoted personal goal setting and various means to help team members boost their well-being. January focus points were:

- Design your 2024 Well-Being Roadmap
- Menopause What to Expect and How to Cope
- Designing a Pollinator Garden for Your Well-Being
- Gut Microbes and Overall Health with Dr. Chandrasekhar







ORGANIZATIONAL DEVELOPMENT (continued)

Wellness Wednesday Meditations



Held Wednesdays at noon, team members participated in January meditations led by the Blue Cross Blue Shield of Michigan (BCBSM) well-being team. Each session focused on helping them to relax during times of turbulence and chaos, and to focus on peace and tranquility. January topics included:

- Setting Intentions for the New Year along Lake Superior
- Slow and Gentle Breathing
- Connect and Breathe with Your Baby
- Breathing Through Challenges
- Sound Bath

Benefit and Wellness Education

One Water Wellness Office Hours

The One Water Wellness Team hosted weekly onsite office hours during the month of January at the following facilities:

- Central Services Facility
- Water Works Park
- Water Resource Recovery Facility
- Lake Huron Water Plant
- Northeast Water Plant
- Southwest Water Plant
- Springwells Water Plant



Cynthia Offutt Leslev V

covern Morgan Mindingall

Over **50** team members were able to meet one-on-one for assistance with benefits, retirement, FMLA, and wellness resources.

Mental Well-Being

GLWA Men's Health Initiative

The second quarterly in-person session of our Men's Health Initiative was held at Water Works Park (WWP) January 25, 2024, with **42** team members in attendance. Dr. Alvin Sims, clinical social worker, facilitated the closed session which gave team members the opportunity to discuss processing and managing grief, trauma, and stress free of judgement while maintaining confidentiality.





ORGANIZATIONAL DEVELOPMENT (continued)



Thank you to Curtis Burris-White, Management Professional - Public Affairs, and Terry Daniel, Deputy Chief Operating Officer - Water and Field Services for leading the initiative and being ambassadors of wellness.

Transformation Thursdays

On January 4, 2024, at 6:00 p.m., GLWA hosted the Transformation Thursdays virtual webinar *The Power of Resiliency*. Ulliance Life Advisor EAP provided five GLWA team members with an overview of becoming more resilient and its many healthy benefits. They also learned how to recharge their batteries when they are in it for the long haul.



Financial Well-Being

Retirement Planning Lunch & Learn

The Lake Huron Water Treatment Plant hosted the MissionSquare Retirement Education on-site lunch and learn seminar with 11 team members on January 30, 2024. All team members were able to meet with MissionSquare retirement plan specialists virtually January 29, 2024. On both dates, team members were able to review their retirement goals and portfolio performance during one-on-one consultations.



Training

During the month of January, **139** GLWA team members completed **21** safety courses and **11** nonsafety courses, for a total of **175** instructor-led training hours. Also, **20** GLWA team members and **three** Member Partners completed **34** 360Water online courses.



ORGANIZATIONAL DEVELOPMENT (continued)

Talent Management

Staffing

The table below provides a breakdown of team members since the last CEO report:

Number of New Hires Due to Workday Go-Live		
Number of Separations		
Total Staffing - Regular FTEs (YTD)	1020	

FINANCIAL SERVICES AREA

February 9, 2024, Audit Committee Recap

The most recent regular monthly Audit Committee meeting was held on Friday, February 9, 2024. This was rescheduled from the regular January 26, 2024, meeting. The GLWA Audit Committee binders are publicly available at <u>www.glwater.org/financials/</u>. The meeting included the following topics:

- ✓ A follow up discussion was held regarding further details of the proposed FY 2025 charges and FY 2025 & FY 2026 biennial budget and five-year plan. The Audit Committee recommended approval by the full Board at the February 28, 2024 Board meeting for the two resolutions requesting adoption of the FY 2025 & FY 2026 Biennial Budget and adoption of the FY 2025 Schedule of Service charges pending public comment at the two scheduled public hearings at the start of that meeting.
- ✓ Introduction of a series ordinance authorizing the issuance of two GLWA Clean Water State Revolving Fund loan. The projects supported by the funding are the 1) Freud Pump Station and 2) Water Resource Recovery Facility (WRRF) Aeration Improvements 1 and 2. The Audit Committee recommended approval of the authorizing resolutions by the full Board at the February 28, 2024 Board meeting.
- ✓ A request for public hearing at the GLWA Board of Directors meeting on April 24, 2024 to receive public comments regarding the proposed FY Clean Water State Revolving Fund (CWSRF) Program project plan submittals. This hearing will encompass three projects: 1) CSO Outfall Rehabilitation Phase VI, 2) Oakwood and Leib CSO Improvements, and 3) Rehabilitation of the 7 Mile Sewer System.
- ✓ Presentation of the October 2023 Monthly Financial Report (Executive Summary attached).



FINANCIAL SERVICES AREA (continued)

Presentation of the Quarterly Business Inclusion & Diversity report reflecting program activity through December 31, 2023, as well as an update from the GLWA Economic Outlook Task Force.

- ✓ Monthly updates on the Charges Outreach and Modeling team efforts, Gifts, Grants & Other Resources activities, and Affordability & Assistance team initiatives.
- ✓ Discussion regarding a new annual report highlighting proposed FY 2025 through FY 2029 Capital Improvement Plan costs allocations.
- ✓ Circulation of the latest Procurement Pipeline.

Additional State Revolving Funds Awarded



Through efforts led by Navid Mehram, Chief Operating Officer for Wastewater Services and assisted by Jackie Morgan, State Revolving Fund Manager, GLWA secured an additional \$45 million in Clean Water State Revolving Funds from the original Intended Use Plan Fiscal

Year 2024 published by the Michigan Department of Environment, Great Lakes, and Energy in October 2023. Additional funds became available when applicants forgo funding that was awarded in the Intended Use Plan. This \$45 million will be added to the already awarded \$90 million to help fund the Water Resource Recovery Facility (WRRF) Aeration Improvements 1 and 2 project. Clean Water State Revolving Funds provide additional saving to GLWA because they have interest rates, for example, of 2 percent when compared to an estimated rate of 5 percent on a market-based transaction.

On January 24, Deputy Chief Financial Officer Kim Garland participated in committee meetings with the Government Finance Officers Association (GFOA). The GFOA represents public finance officials throughout the United States and Canada with over 20,000 members with a mission of advancing excellence in public finance. The GFOA sponsors seven committees comprised of approximately 200 members across key areas of public finance including Treasury & Investment Management, Governmental Budgeting & Fiscal Policy, and Economic Development and Planning.

Kim was recently appointed to a three-year term on the Debt Committee focused on monitoring regulatory activities and impacts on state and local governments. As part of the committee meeting held in Washington D.C., Kim had the opportunity to visit the U.S. Senate Office Buildings and meet with staff members of Senators Debbie Stabenow of Michigan, Christopher Murphy of Connecticut, Kirsten Gillibrand of New York, and Chuck Schumer of New York. She and GFOA colleagues helped staff members understand the impact of key legislation on municipal government and municipal bonds.



FINANCIAL SERVICES AREA (continued)

Charges Outreach & Modeling Update

The Charges Outreach & Modeling team (CO&M) supported a successful Charges Rollout meeting #3 on January 11, 2024 with 78 individuals representing 60 Member Partners in attendance. On January 18, 2024 Charges Rollout Meeting #4 occurred with 81 individuals representing 56 Member Partners. From January 16 through January 22, CO&M hosted office hours for Member Partners to discuss any questions they have on their charges. A total of seven communities scheduled these meetings. Charge sheets were mailed out to all member partner communities on January 24, 2024.

Affordability & Assistance Update



Procurement Pipeline

The WRAP program continues to improve to help ensure eligible residents can access the WRAP program benefits without barriers. Our latest improvement is the introduction of a new toll-free phone number, 1-833-871-WRAP (9727), for residents seeking WRAP services to connect with their appropriate Service Delivery Partner. Residents can call this phone number, select the appropriate county, and be transferred to Wayne Metropolitan Community Action, Macomb Community Action, or United Way for Southeastern Michigan.

The Affordability & Assistance team would like to thank the IT team for their support in this effort and extend a special thank you to the Public Affairs team for their assistance, especially Debbie Frazier for lending her voice to the introduction of the recording.

The January Procurement Pipeline is attached. This month's edition includes highlights from the second annual Business Inclusion & Diversity (B.I.D.) Program Year-in-Review report as well as guidance to coordinate virtual vendor introduction meetings, a list of upcoming solicitations, and a reminder that the monthly CEO Report is an important source of key GLWA news and information.



OFFICE OF THE GENERAL COUNSEL

- *Legislative Updates*: The Office is monitoring infrastructure spending bills at the federal and state level, supporting the activities regarding proposed water affordability legislation, and working with others to develop state storm water utility legislation.
- *Gordie Howe International Bridge*: GLWA filed a notice of claim with the Court of Claims related to its relocation claim.
- June and July 2021 Rain Events: The Office is providing legal support in response to the significant rain events in June and July 2021. Recently, the trial court dismissed most of the lawsuits against GLWA based on governmental immunity. The Plaintiffs are appealing the decision. The Court recently dismissed an additional lawsuit related to the July 2021 storm event. The Plaintiffs are also appealing the decision.
- *Tonya Wells v Buildings and Safety Engineering Department, City of Detroit, GLWA:* The Court recently entered an order granting GLWA's Motion for Summary Disposition and dismissing Plaintiff's claims.
- *Highland Park Settlement Agreement:* On February 14, 2024, the GLWA Board voted to approve the settlement agreement in final (or next to final) form. The agreed upon settlement documents will be presented to the Highland Park City Council for ratification during the week of February 19, 2024.
- *Mays, et al v GLWA:* The Court recently entered an order partially granting GLWA's Motion for Summary Disposition and partially dismissing Plaintiffs' claims.
- *Trenton Water Main*: The Office is negotiating the transfer of the 24-inch water main to GLWA.
- *Contract Negotiations:* 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.



OFFICE OF THE GENERAL COUNSEL (continued)

- *Record Retention Policy*: The Office submitted GLWA's record retention policy to the State. The Office is working on a record storage and disposal policy to work hand in hand with the record retention policy.
- *Industrial Pretreatment Program ("IPP")*: The Office also continues to provide assistance on PFAS and PFOS matters, including comments on the new drinking water regulations and negotiating an administrative consent order with an industrial user.
- *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. In October 2023, the Board authorized settlements of key litigation including a class action lawsuit regarding IWC charges and the collection actions against Highland Park. The Office is working on implementing those resolutions.
- *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. The Office continues to provide advice on federal grant compliance.



OFFICE OF THE GENERAL COUNSEL (continued)

Statistics:

	#
Contracts approved as to form:	23
Contracts drafted or revised:	83
Subpoenas/Information requests received:	6
Subpoenas/Information responded to:	5

Respectfully submitted,

Suganne R. Coffey Suzanne R. Coffey, P.E.

Chief Executive Officer

SRC/dlr

Attachments - October 2023 Executive Summary, January Procurement Pipeline





Key Financial Metrics

1

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. Staff reviews the need for budget amendments quarterly and requests necessary amendments when required based on the most current information available. At the time this report was prepared first quarter budget amendments have been reviewed by the GLWA Audit Committee and are scheduled for review by the full Board of Directors at their January 2024 meeting. These amendments have been incorporated into this report.

For the current year, water and sewer capital spend reflect variances to budget outside the normal range. Capital spend variances reflect evolving changes in the timing that the Capital Improvement Planning group continues to monitor and review.

As of October 31, 2023						
Metric	FY 2024 Budget	FY 2024 Amended Budget	FY 2024 Actual	Variance from Financial Plan	Report Page Reference	
Wholesale Water Billed Revenue (\$M)	\$125.4	\$121.4	\$120.6	-1%	48	
Wholesale Water Billed Usage (mcf)	5,399,000	4,942,000	4,948,000	0%	40	
Wholesale Sewer Billed Revenue (\$M)	\$94.0	\$94.0	\$94.0	0%	50	
Wholesale Water Operations & Maintenance (\$M)	\$51.0	\$54.4	\$54.0	-1%	5	
Wholesale Sewer Operations & Maintenance (\$M)	\$68.5	\$73.4	\$70.1	-4%	5	
Investment Income (\$M)	\$5.1	\$13.4	\$16.4	22%	37	
Water Prorated Capital Spend w/SRA* (\$M)	\$79.8	\$74.9	\$49.7	-34%	28	
Sewer Prorated Capital Spend w/SRA* (\$M)	\$66.4	\$55.0	\$37.6	-32%	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 53)



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

shortfall of \$2.0 million and DWSD Sewer reports a surplus of \$6.5 million of net receipts over disbursements through October 2023. The Water shortfall relates to the routine monthly transfer of credit balances to the Sewer account which was impacted by a recent change in the customer deposit policy. Preliminary review of November activity reflects continued improvement.

All amounts are unaudited unless otherwise noted. 1

GLWA Audit Committee February 9, 2024



2

Budget to Actual Analysis (page 3)

- The FY 2024 information includes the proposed first quarter FY 2024 budget amendments pending approval by the GLWA Board of Directors.
- The total Revenue Requirements are on target through October 2023.
- The total overall Operations & Maintenance expenses are at 32.4% of budget through October 2023. This positive variance equates to a dollar amount of \$3.7 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 October 2023 is \$30.1 million for the Water fund (23.3% of total revenues) and \$39.2 million for the Sewer fund (24.0 % of total revenues).
- Water Net Position increased by \$ 8.6 million, and Sewage Disposal Net Position increased by \$ 13.0 million for the year to date through October 2023.

Capital Improvement Plan Financial Summary (page 27)

- Water system costs incurred to date are below the 94% Capital Spend Ratio assumption.
- Sewer system costs incurred to date are below the 82.9% Capital Spend Ratio assumption.

Master Bond Ordinance Transfers (page 30)

- For October, transfers of \$13.5 million and \$18.1 million were completed for the GLWA Water and Sewer funds, respectively.
- Also for October, transfers of \$5.6 million and \$6.9 million were completed for the DWSD Water and Sewer funds, respectively.

Cash Balances & Investment Income (page 37)

- Total cash & investments are \$492 million for Water and \$635 million in the Sewer fund.
- Total, combined, cumulative, FY 2024 investment income through October is \$16.4 million.

DWSD Retail Revenues, Receivables & Collections (page 41)

- Water revenue through October 31, 2023 is 100.33% and usage is 101.35% of budget.
- Sewer revenue through October 31, 2023 is 99.75% and usage is 98.16% of budget.
- Combined accounts receivable balances for the water and sewer funds report a decrease of \$40.1 million over the prior year.
- Past dues over 180 days make up of 64.7% the total accounts receivable balance. The current bad debt allowance covers over 99.4% of past dues over 60 days.

GLWA Wholesale Billing, Receivables & Collections (page 47)

- GLWA accounts receivable past due balance net of Highland Park is 9.21% of the total accounts receivable balance, with the majority of that balance related to one water account dispute currently under discussion.
- The Highland Park past due balance is \$54.9 million. It includes \$40.5 million for wastewater treatment services, \$1.9 million for industrial waste control services, and \$12.5 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 \$7.5 million as of October 31, 2023.
- On October 25, 2023, the GLWA Board of Directors approved a term sheet that represents the initial step in implementing a proposed agreement between GLWA, the city of Highland Park, and the state of Michigan. This monthly financial report will reflect the impacts of that term sheet and agreement moving forward as implementation steps occur.

Questions? Contact the Office of the Chief Financial Officer at <u>CFO@glwater.org.</u>



Procurement Pipeline

Great Lakes Water Authority

(313) 964-9157

www.glwater.org

January 2024 - Volume 55

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

New! Second Business Inclusion and Diversity (B.I.D.) Program Year-in-Review Report Now Available

In November 2020, the GLWA Board of Directors approved the Business Inclusion and Diversity (B.I.D.) Program which was launched in February 2021. The goal of this program is to maximize opportunities for small, minority-owned, and disadvantaged businesses as well as a focus on companies within GLWA's service area. The B.I.D. Program second Year-in-Review Report provides a comprehensive review of the program through the program's third year and is available on the <u>GLWA</u> <u>Vendor Webpage</u>. To view the full report, please <u>click here</u>. Highlights include:

- As of June 30, 2023, GLWA has awarded 70 contracts under the B.I.D. Program requirements totaling \$859.8 million.
- GLWA reviewed 245 vendor Diversity Plans outlining efforts to maximize the participation of small, minority-owned, and disadvantaged business enterprises in GLWA's procurement process.
- Of the 70 awarded B.I.D. procurements, 89% of vendors had a business presence in the state of Michigan, 71% in GLWA's service territory area, and 37% in an economically disadvantaged service area.
- Of the \$859.8 million total awarded dollars, \$607.9 million (71%) was awarded to companies located within GLWA's Member Partner Communities and \$322.3 million (37%) to vendors located in the City of Detroit.
- 34% of awarded Vendors held a diversity certification as a Disadvantaged Business Enterprise (DBE), Minority-owned

Business Enterprise (MBE), Womanowned Business Enterprise (WBE), or Small Business Enterprise for a total of \$294.7 million.

In addition, the Year-in-Review Report outlines the efforts that GLWA has taken to refine business processes and to raise awareness of the B.I.D. Program. For a full overview of GLWA's B.I.D. Program and requirements, see the B.I.D. Program Requirements document on the GLWA Vendor Webpage. Any questions about the second Year-in-Review report or the B.I.D. Program may be directed to Michael Lasley and Megan Savage.

Virtual Vendor Introduction Meetings

If you are interested in learning more about doing business with GLWA, contact us at <u>GLWAVendorOutreach@glwater.org</u> to schedule a virtual vendor introduction meeting. Topics include information on submitting a competitive bid or proposal to any GLWA solicitation.

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 December 2023 Monthly Report, please <u>click here</u>.

What's Coming Down the Pipe?

Current Solicitations: Register in GLWA's <u>Bonfire</u> <u>Procurement Portal</u> 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 <u>www.glwater.org</u> or contact us via email at <u>procurement@glwater.org</u>.

Upcoming Solicitations January 2024

Category	CIP #	Description/Project Title	Budget Estimate		
Water System (next four to nine months)					
Construction	112008	Northeast WTP Filter Rehabilitation	\$85,550,000		
Construction	122004	96-Inch Water Transmission Main Relocation - Phase	\$90,000,000		
Construction- Pre- Purchase	122004	96-Inch Water Transmission Main Relocation - Phase III - Pre-Purchase Pipe	\$2,300,000		
Construction	122016	Downriver Transmission Main Loop – Phase 1 – Inkster Rd	\$21,000,000		
Wastewater Systems (r	next four to nin	e months)			
Construction	260510	CSO Outfall Rehabilitation Phase VI	\$10,000,000		
Construction	211005.2	WRRF Pump Station 2 VFD Replacements	\$12,000,000		
Design	270007	CSO Facility Disinfection Improvements	\$3,900,000		
Water System (next three months)					
N/A					
Wastewater (next three	e months)				
Design	270001	Pilot Netting and Disinfection Facilities at B03, B04, and B05	\$8,000,000		
Construction	222001	NWI (Northwest Interceptor) to Oakwood CSO Sewer (NOCSOS)	\$75,000,000		
Projects moved to Proc	urement Tean	n (Preparing for solicitation on Bonfire)			
Supplies	0&M	Phosphoric Acid	\$1,000,000		
Supplies	0&M	Ferric Chloride	\$5,084,700		
		Instrumentation and Control System Plant - wide			
Construction	170306	SCADA Upgrade	\$3,340,000		
Professional Services	0&M	Water and Wastewater Services Charges Consultant	\$300,000		
Professional Services	0&M	Internal Auditor	\$650,000		
Professional Services	O&M	Good Sewer Metering Practice Analysis & Support Services	\$2,710,000		
Professional Services	0&M	Environmental Health and Safety Assistance	\$2,000,000		
Professional Services	0&M	Refuse and Recycling Waste Pickup and Disposal Services	\$655,000		
Professional Services	170506 & 0&M	Water Transmission Main, Valves and Other Urgent Repairs	\$21,500,000		
Professional Services	0&M	Fleet Management Services Including Leasing and Upfitting Vehicles	\$14,667,500		

Vendors should continue to monitor <u>Bonfire</u> for solicitation updates.

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