



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

June 23, 2021

The Honorable
Board of Directors
Great Lakes Water Authority

Dear Chairperson Zech and Directors:

Regarding: CEO's Report – June, 2021

As we approach the fiscal year end on June 30, 2021, I am pleased to say that GLWA remains in solid financial standing. As a result of increased water demand in the fourth quarter and diligent management of the operations and maintenance budget, we look to have positive variances that will largely roll into future years Improvement & Extension Funds to reduce the cost of our capital program. Another highlight is an improved pace of capital delivery with the water system forecasted at 91 percent and sewer system at 78.6 percent - with both exceeding the minimum target of 75 percent. Continuing to responsibly manage and reinvest in the water and wastewater systems at a measured pace is core to achieving long-term sustainability and affordability.

Minding GLWA's finances means being cognizant of the cost of water and sewer service in the region. As a result of COVID-19, GLWA rolled back the proposed FY 2021 charge increases twice to delay implementation from July 1, 2021 to October 1, 2021 and then October 1, 2021 to January 1, 2022. As the pandemic continued, we challenged ourselves to control any charge adjustments for the upcoming FY 2022. The outcome was an average system charge adjustment for water at a 1.5 percent increase and an average sewer system charge decrease of 0.6 percent. These amounts are both well below the four percent promise when GLWA was established and continue to place GLWA charge increases at less than half of peer utilities as published in the 2019 Black & Veatch Utility Rate Index.

Also, as we finish the FY 2021 fiscal year, we are pleased to announce that the Detroit Water & Sewerage Department intends to cure the cumulative shortfall in the sewer fund for FY 2020 and the water and sewer funds for FY 2021. This is remarkable given the challenges of the past year. This has been achieved through a combination of proactively securing CARES act funding, working with Wayne County for tax revolving funds, and budgetary constraints.

GLWA continues to make steady progress on the goals laid out in our 40-year Wastewater Master Plan. Earlier this year, the Authority's Watershed Hub Work Group applied for and was awarded a \$40,000 grant from the Michigan Department of Energy, Great Lakes and Environment's Watershed Council Support Group. The grant will assist in funding the work group's Collaborative Water Quality Sampling project and will be used in the creation of a work plan for routine instream E. coli sampling throughout GLWA's service area to locate and mitigate sources of illicit sanitary discharge.

This effort complements the monitoring program described in GLWA's 2020 Wastewater Master Plan. This grant award demonstrates how GLWA working in the role as a hub utility can facilitate an unprecedented level of regional coordination to improve water quality monitoring in southeast Michigan.

In June, the world celebrates International Women in Engineering Day. I am proud to say that GLWA has 25 highly qualified women team members with an Engineering background working across the utility. These women use their engineering skills in important roles in positions throughout GLWA. In addition to the pivotal roles they play in Water and Wastewater Engineering, they also provide unique perspectives to their roles in Information Technology, System Analytics and Meter Operations, Asset Management, Systems Control, Capital Planning, Member Outreach, Financial Services and Industrial Waste Control as well as serve in various management positions. I appreciate all their efforts and believe they are shining examples of their profession.

PLANNING SERVICES

Asset Management (AMG)

Continuing with GLWA's Strategic Asset Management Plan Improvement Initiatives, the Asset Management Group is embarking on an Asset Tagging pilot project. The pilot project includes the purchase of a tagging printer, testing various label types and sizes, software training, and development of asset tagging standards and standard operating procedures.

The pilot will be conducted with cross-functional team collaboration. All Asset tags will include Asset IDs, a brief description, asset location, and a QR code readable by mobile devices in anticipation of the technology used in the new Enterprise Asset Management system.

The Linear System Integrity Program (LSIP) received Board approval in May. Currently, the contract is being finalized in anticipation of issuing a notice to proceed in July. We are excited to begin this collaborative, long-term, cyclical program that will apply asset management principles to GLWA's infrastructure to proactively evaluate and manage GLWA's water transmission and sewer interceptor systems.



Capital Improvement Planning Group (CIP)

The CIP Team continues to move the Program Management contract with AECOM forward while working on the CIP plan development and CIP delivery initiatives. Most recently, the group has been making progress on the Program Management Plan (PMP) development. This requires the collaboration, engagement, and dedication from multiple CIP Delivery Team Members to continue to develop the best processes.

PLANNING SERVICES (continued)

The CIP Delivery Team finalized the “Change Management” PMP Chapter last month and is working on rollout logistics. “Change Management” was identified as a key process that requires optimization and can have a direct impact on streamlining CIP delivery in GLWA. Next, the CIP Delivery Team will target design, scheduling, and construction PMP Chapters.

The CIP Team is also working closely with the Procurement Team on the Project Management Information System (PMIS) RFP, which is scheduled for release in June. This information technology solution once implemented, will assist the CIP Delivery Team by providing analytical tools and digital workflow. Meanwhile, the CIP Team continues to enhance the CIP portal that is currently serving as the CIP hub for CIP scheduling and cost management. Based on collaboration among the CIP Delivery Team members, this portal gets updated to reflect real-time project accruals and statuses that assist the CIP Delivery Team members in monitoring and reporting on projects.

The CIP Delivery Team anticipates that the water CIP expenditure at the end of this fiscal year will be higher than the Capital Spending Ratio of 75% that was established for this Fiscal Year. This is great news that despite the pandemic, the level of CIP activity is outperforming expectations. This improvement is attributed to many factors including but not limited to:

- Large projects being ahead of schedule.
- Projects entering phases where expenditures are larger and more predictable
- Improved business processes through gradual and steady CIP practices improvement implementation.

Lastly, the CIP Team has hosted an internal CIP Delivery Leadership Town Hall this month to present updates on the CIP initiatives. This is the first town hall but not the last. The CIP Team will continue to update GLWA Leadership on CIP progress and next steps. The Team’s goals continue to focus on optimizing, unifying, and elevating GLWA’s delivery to a high functioning program through leadership support and the collaboration of highly effective CIP Delivery Team members.

Systems Planning Group

It was great to see so many faces – both old and new – at the One Water Partnership meeting on June 3rd with 116 participants! A huge thanks to the Detroit Water and Sewerage Department (DWSD) for being our Member Partner spotlight and sharing what they have done to manage their lead service line replacements and their outreach efforts. Chief Operating Officer, Cheryl Porter, shared great news about a regional American Water Works Association membership model. This will allow GLWA to pay a single dues amount and provide our 112 Member Partners and their employees with the benefits of full membership. Membership will provide access to AWWA’s extensive educational, best practice, and training resources, some at no additional cost, others at a discounted rate. Public Sector Consultants shared an update on the Water Residential Assistance Program (WRAP) and the various changes that will be made in the new fiscal year.

PLANNING SERVICES (continued)

The next One Water Partnership meeting is scheduled for September 30th from 10:00 a.m. – 12:00 p.m. via Zoom.

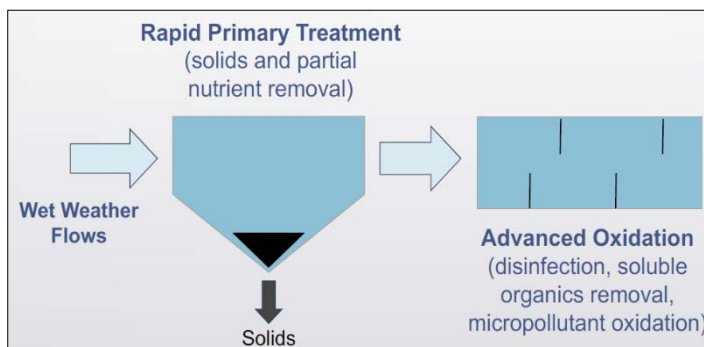
The Communication & Education Work Group held its quarterly meeting in May with a full agenda. They received a sneak peek of the [One Water](#) campaign materials from the Southeast Michigan Council of Governments' (SEMCOG), Katie Grantham. The group also provided feedback and finalized public education materials on water use management. [Click here to view the media kit.](#)

The May Water Analytical Work Group (AWG) meeting consisted of regularly scheduled updates such as Pressure Compliance Reporting and Historical Member Partner Max Day and Peak Hour Overview. Chandan Sood, System Analytics and Meter Operations Manager provided an overview of water pumpage trends over the past six months compared to the 3-year average, and a status update on the meter replacement program. He also shared a reminder to members to take full advantage of the Wholesale Automated Meter Reading Portal, especially during the summer months. A special AWG meeting has been scheduled for June 22nd at 10:00 a.m. via Zoom for a comprehensive update on the 96" water transmission main relocation project.



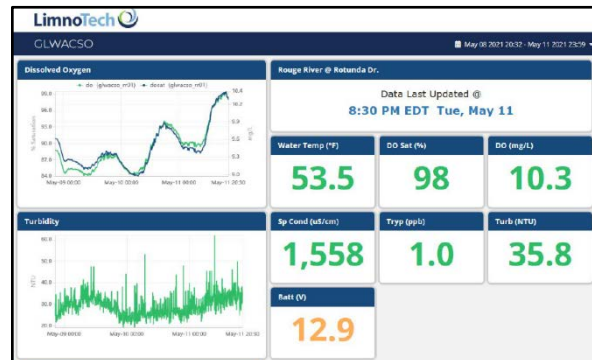
A Wastewater Best Practices (WWBP) workgroup meeting was hosted on May 12, 2021. The meeting began with an announcement from Dan Gold about GLWA's One Water Institute that included an overview of opportunities and step-by-step instructions for Members to earn Continuing Education Credits for several of the classes offered. Next, Members were given time to share

lessons from recent events. This was followed by a presentation by Paige Peters of Rapid Radicals and John Norton of GLWA, about an emerging sanitation technology that uses ozone instead of chlorine to disinfect wastewater. The next Wastewater Best Practices meeting is scheduled for August 4, 2021.



PLANNING SERVICES (continued)

May 25, 2021, the Watershed Hub Work Group meeting began with a presentation from Chirste Alwin of EGLE that included an overview and progress update on the reissuing of MS4 permits for the first time in 18 years. Dan Beauchamp and Phil Argiroff of EGLE were also in attendance to answer questions and discuss permitting needs with Members. Dan Gold of GLWA took this opportunity to thank EGLE and announce the award of a \$40,000 grant from EGLE's Watershed Council Support Group. The grant will be used to create a work plan for a regional E. coli sampling plan. Next, Carrie Turner of LimnoTech presented on water quality monitoring activities that are currently taking place at several locations in the Rouge River watershed in support of the Long-Term CSO Control Plan update. The next Watershed Hub Work Group meeting is scheduled for June 29, 2021.



As a reminder, Member Outreach meetings will continue to be virtual through at least the end of September 2021.

May 2021 Member Outreach Meeting Attendance	
Meeting	# Attended
Wastewater Best Practices (5/12)	31
Communication & Education Work Group (5/13)	33
Water Analytical Work Group (5/18)	57
Watershed Hub Work Group (5/25)	19

Systems Analytics and Meter Operations Group (SAMO)

On April 30, 2021, the GLWA team met with the City of Dearborn and the City of Detroit to introduce the “Transmission Main Metering Concept”. In this metering concept, the water meters would be located on GLWA transmission mains at the municipal boundaries of Dearborn and Detroit. Flows in and out of each municipality would be totaled to produce municipal demands. On June 14, 2021, the Units of Service and Water Audit project team met with Dearborn and Detroit teams as the start of a series of technical meetings to vet the viability of the concept including key topics such as:

1. Overview of the proposed Transmission Main Metering Concept
2. Quantifying losses on Transmission Mains within Non-Master Metered Communities
3. Number of meters required / Hydraulic model outputs
4. Accuracy of existing and proposed meters

PLANNING SERVICES (continued)

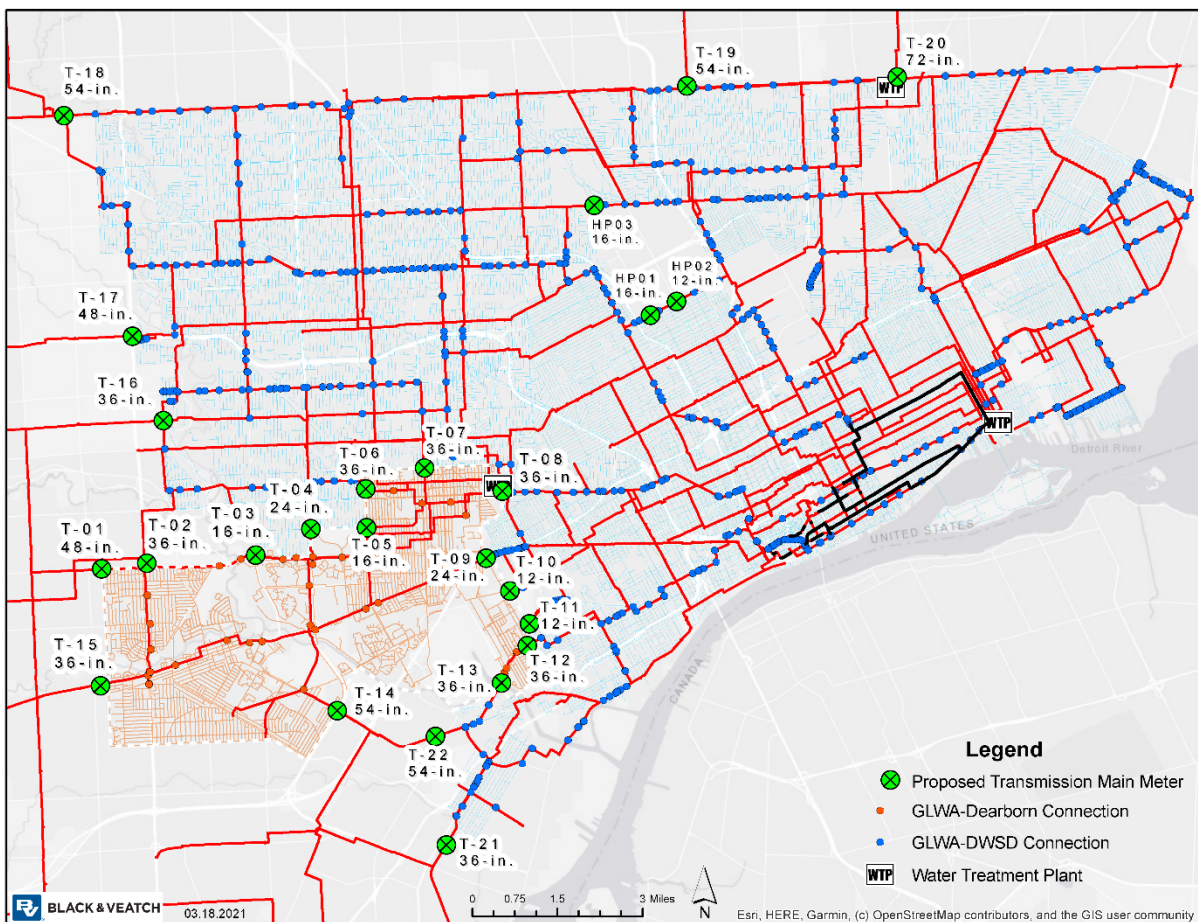


Figure: Transmission Main Metering Concept – Meter Locations

If the technical team meetings end with the concept being viable, GLWA will present it at an AWG meeting to receive feedback from other GLWA member partners. Once the technical feasibility is fully vetted, separate teams will meet to discuss cost allocation and other agreements necessary to move forward.

WASTEWATER OPERATING SERVICES

Wastewater Operations

On May 21, 2021, staff of the Department of Environment, Great Lakes, and Energy (EGLE), Water Resources Division (WRD), conducted a National Pollutant Discharge Elimination System (NPDES) Compliance Sampling Inspection (CSI) at the Water Resource Recovery Facility (WRRF). The purpose of the inspection was to evaluate the facility's compliance with our NPDES Permit No. MI0022802. The CSI included collecting representative samples of three influent sampling points, and solids samples from the BDF.

WASTEWATER OPERATING SERVICES (continued)

Additionally, a physical site inspection occurred for the sampling locations, the dewatering and incineration buildings, the central offload facility, the sludge thickening, and sludge storage tanks, the BDF, the WRRF analytical laboratory, and the secondary clarifiers. The sample procedure, facility housekeeping, process equipment condition was found in compliance with our permit.

Water Resource Recovery Facility (WRRF) operations were in-compliance with the Water Quality Standards for the month of May 2021 with one exception. Primary effluent CBOD (carbonaceous biochemical oxygen demand) exceeded the limit (41 milligrams per liter in excess of the limit of 40). Two of the three events during the month were extremely short and those tend to have higher concentrations of contaminants because of “first flush” conditions.

Maintenance

The Dewatering Maintenance Team completed a project, spearheaded by Team Leader John Clark, to replace secondary water lines in the Dewatering Complex 1 basement. The replacement of this piping was done preemptively to avoid a failure of the existing secondary water lines due to corrosion. This project was well-planned, contributing to minimal operational downtime and succeeded in improving the integrity of the secondary water lines and in improving the overall aesthetics of Dewatering Complex 1. The old secondary water lines will be removed to further declutter the space and aid in the overall goal of right-sizing the WRRF campus.



*The new secondary water lines installed in the Dewatering Complex 1 basement
Also pictured are the old lines that will be removed*

With the arrival of the new permanent ferric chloride tanks at Pump Station 2, the Primary Team rose to the challenge of switching from a temporary ferric tank. The team worked tirelessly to route new PVC pipe from the permanent storage tanks to the discharge area at aerated grit. This strategy minimized the downtime of ferric dosing to prevent the plant from exceeding regulatory phosphorus limits at a time where phosphorus levels were rising.

WASTEWATER OPERATING SERVICES (continued)

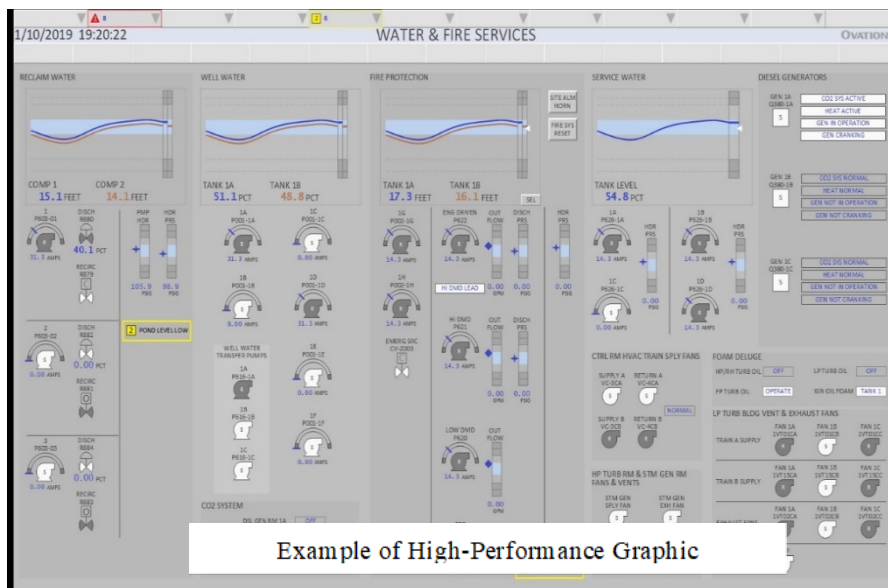


The temporary ferric line routed to the new permanent ferric chloride tanks at Pump Station 2 being tested. These lines will be removed after the completion of the permanent ferric line.

Process Control Center (PCC)

The Process Automation Control System (PACS) Team has begun the process of building new high-performance graphics (HPG) to replace the existing process graphics on the Ovation Control System. HPG goals include enhanced situational awareness and less stress for operators. This project will analyze the over 1,600 process graphics screens, identify opportunities to delete poorly functioning graphics, consolidate graphics, and establish new graphic standards. A series of four training workshops have been held with Operational staff along with PACS staff and the vendor. Additional storyboarding workshops will be performed to develop standards and the new HPG.

The new graphics will limit the use of color, will be more functional and easier to understand, and are information driven. Instead of providing raw data, the new graphics will place the data within a context that will provide the operator better information to make process control decisions.



Example of High-Performance Graphic

WASTEWATER OPERATING SERVICES (continued)

Laboratory

A third chemist was added to the Off Shift process area to create more flexibility on these crews for wet weather events and unscheduled time off requests. A chemist role was also added to support testing and sampling processes for Research and Innovation.

5S training has now been completed in six out of nine identified areas in the laboratory. Zone captains were selected, and they received additional 5S training for the sustain phase.

Industrial Waste Control (IWC)

The Local Limits Re-evaluation Study was finalized in May 2021 and submitted through the MiWaters Reporting System on June 1, 2021. Site specific data from the WRRF influent and effluent and representative domestic and background sites were collected in 2020 and used in the mass loading and proposed limit calculations specified by the US EPA and the State of Michigan.

Engineering & Construction

Construction Engineering

Weiss Construction Co., LLC has completed the base contract scope of work associated with the replacement of ten chlorinators, eight sulfonators, and eighteen liquid chlorine/sulfur dioxide gas evaporators at the WRRF Chlorination/Dechlorination facility (GLWA Contract CON-238). A major objective of this project was to right-size the quantity of equipment located at this site since it was originally designed to provide chlorination/dichlorination for all WRRF flows. Now that the Hypo Building provides wet weather disinfection services, ***about 40% of the chlorination/dichlorination equipment was removed and not replaced.***

All existing lighting replacement work, process water booster pump rehabilitation, and gas flow monitoring and instrumentation equipment upgrades have been completed as of May 2021.

Selective demolition of the unused concrete housekeeping pads, electrical wiring, controls wiring, process water lines, and solution water lines for the gas feed trains which were permanently removed have been completed.

Minor modifications to the chlorine and sulfur dioxide gas scrubber manifolds have been completed at the request of Operations and Maintenance teams.

The contractor has provided on-site gas detection panel system training to the maintenance technicians and operations personnel at the Chlorination/Dechlorination facility in late-May 2021.

WASTEWATER OPERATING SERVICES (continued)

The contractor is expected to meet the original final completion milestone on June 21, 2021. The original contract value is \$5,282,339, with an anticipated credit of \$130,000 to GLWA associated with the unused provisional allowance. GLWA Construction Engineering will process the final change order to closeout this project by the final completion date of June 21, 2021.



Existing housekeeping pads and wiring removed as a component of selective demolition



New condensates drain and sight glass on sulfur dioxide scrubber manifold

Currently WRRF-Construction Engineering manages about 25 active construction projects and tasks. Construction of the Sludge Conveyance Improvements Project (CON-197), Rehabilitation of Various Sampling Stations and Pump Station No.2 Ferric Chloride system (CON-222A), Pump Station No.2 Pumping Improvements Phase 1 (PC-795), Rehabilitation of Ferric Chloride system at Pump Station No.1 and Complex B Sludge Lines (Contract 2002190), and the DTE 120 KV Primary Third Feeder projects are all progressing at site.

Several Job Order Contract Tasks are also under construction now.

CSO Control Program

The CSO Team is working on the following projects:

- CIP 260617, Contract Number 2002058 – St. Aubin Chemical System and Screening Improvements Design. The RFP was provided to Procurement at the end of May. This project includes replacement of the chemical feed system, improvements of the existing screens, updating the facility for NFPA 820 codes, and miscellaneous improvements from the CS-299 Facilities Assessment and as identified by the CSO O&M Team. We anticipate advertisement in early July 2021.

WASTEWATER OPERATING SERVICES (continued)

- CIP 277001, Contract Number 1902908 – Baby Creek Outfall Improvements Design/Build Project. This project will go to Procurement in early June 2021. The project includes creating an access to the Baby Creek Outfall, a partial cleaning of major sedimentation of debris from the three-barrel outfall, adding an automatic gate and operations to an emergency bypass, miscellaneous improvements to the outfall backwater gates, and structural repairs to the triple barrel outfall pipes. We anticipate advertisement in late July or early August 2021.
- JOC Task 29 – Baby Creek Chemical Tank Relining. Tank relining work is currently in progress for the third tank. Two tanks have been relined completely and put back into service.
- Contract 2001498 – Leib Chemical Tank Relining. This contract was completed last month, with both tanks being completely relined and placed back into service successfully.
- (TOES) Task 12T – Engineering and CAD Standards. This Task was awarded to Arcadis, and a kick-off meeting with Water, Wastewater, and Arcadis is scheduled for the beginning of June.

WATER OPERATIONS

Water Quality

Drinking Water Laboratory Certification

The Water Quality team works with GLWA member partners and GLWA facilities on an ongoing basis providing disinfection, sample collection, sample analyses, technical advice, and other services. The Water Quality team provides compliance monitoring throughout the GLWA distribution system, member partner distribution systems, and GLWA water treatment plants (WTPs). Compliance monitoring includes collecting and/or making sure samples are analyzed by certified drinking water laboratories in accordance with the state and federal drinking water regulations.

GLWA has six certified drinking water locations and seven laboratories that perform drinking water analyses to ensure that the drinking water that GLWA provides is of unquestionable quality. The seven laboratories that perform these analyses are located in each of the five GLWA WTPs and at the Water Resource Recovery Facility (WRRF) laboratory. The WRRF laboratory is certified for volatile organic compounds (VOCs) and trihalomethanes (TTHMs).

Each of the five WTPs operations laboratories need to be certified for Total coliform and *E. coli* testing; however, some are certified for additional parameters. The Water Quality laboratory is located at the Water Works Park WTP and has certifications for Total coliform and *E. coli*, enumeration of *E. coli*, heterotrophic bacteria, nitrate, nitrite, sodium, fluoride, lead and copper. All locations can perform limited wet chemistry in accordance with U.S. EPA and Michigan Department of Environment, Great Lakes, and Energy (EGLE) regulations.

WATER OPERATIONS (continued)

GLWA Water Quality also performs limited wet chemistry for pH, turbidity, specific conductivity, phenolphthalein alkalinity, total alkalinity, carbonate alkalinity, bicarbonate alkalinity, total hardness, non-carbonate hardness, free carbon dioxide, calcium, total dissolved solids, total solids, total suspended solids, sulfate, chloride, silica, *ortho*-phosphate, total phosphorus, chemical oxygen demand, dissolved oxygen, temperature, color, odor, and taste. Water quality also analyzes for aluminum, iron, magnesium, potassium, manganese, and zinc as part of GLWA's monthly mineral testing.



Water Works Park

Water Works Park Operations Laboratory Certificate of Excellence

WWP Operations Laboratory is a certified laboratory which complements the water plant in producing water with high quality. Part of maintaining the laboratory certification is to analyze Performance Evaluation (PE) or Proficiency Testing (PT) samples at least once a year. The concentration of the analyte, in the sample obtained from an approved provider, is unknown to the laboratory at the time of analysis.



All PT samples must be part of an accredited Water Supply (WS) study and provided by an accredited PT provider meeting the National Environmental Laboratory Accreditation Program (NELAP) requirements. WWP participated in the Environmental Resource Associate (ERA) WS-297 and obtained a certificate of excellence for passing the following two studies: UV 254 Absorbance and WS SourceWatR™ MicroBE™ using the MPN (Most Probable Number) - Multiple Well method.

In addition, WWP participated in ERA's WS-296 study in the previous month and obtained a 94% passing rate. The results of the two studies indicate the operations laboratory produces reliable data with superior quality.

WATER OPERATIONS (continued)

Detroit River Water Quality Monitoring at Water Works Park

In 2006, WWP was among 13 (now 14) water intake facilities along the 80-mile Huron to Erie Corridor to create the Detroit River Drinking Water Protection Network for spill notifications. Although the primary goal of the notification was to detect any spill in the corridor, water quality changes naturally during a storm or river turnover that can affect water treatment and public health. The data is collected in real time (every 15 minutes) goes to a common datalogger that can be accessed by the plants with a password. A common alarm system was set to contact all the plants involved in the network.

At WWP, the following water quality parameters are monitored at the pilot plant: hydrocarbons; multiparameter sondes that include, pH, oxidation reduction potential (ORP), conductivity, temperature, dissolved oxygen (DO), blue green algae (BGA), and chlorophyll. Data from the turbidimeter and the Total Organic Carbon (TOC) analyzer have just been reconnected to the datalogger.

The TOC analyzer data is critical because of the U.S. Environmental Protection Agency rule for disinfectants and disinfection by-products requiring the removal of TOC, by surface water facilities using conventional water treatment, with levels above 2 mg/L in their source water.

Screen House Right Sizing

The Screen House at WWP was constructed in 1931. The primary function of the building is to screen the raw water that travels to the Springwells (SPW) and Northeast (NE) Water Treatment Plants through the raw water tunnel. The Screen House contains nine raw water traveling screens, Nos. 2 through 10. The screens are arranged in a circular pattern with flow traveling from the outside of the circle to the center. The screened water then enters the raw water tunnel at the invert elevation of the Screen House. At the point that the water enters the raw water tunnel, chlorine and fluoride are added to the water. The screens are periodically cleaned to remove the accumulation of debris from the screens. The periodic cleaning is key to keeping the head loss through the screens to a minimum. To facilitate cleaning, the screens are rotated with a chain and sprocket system.

Without the ability of the screens to rotate, the screens will not be able to be cleaned and will eventually clog due to a buildup of debris, that eventually causes a flow reduction of source water to Springwells and Northeast.

Over the past few years, three screens in the Screen House have become inoperable. WWP contracted with a vendor to conduct an underwater inspection of the underwater components of the screens. The screens were generally found to be in poor condition. Upon learning of the condition, the plant engineers at WWP, SPW, and NE water treatment plants began working on a project to replace any equipment that has failed or is likely to fail in the near future.

WATER OPERATIONS (continued)

During the preliminary work involving construction sequencing, initial head loss calculations were made. These calculations revealed that a significant number of screens can be removed without negatively impacting the SPW and NE plants. Realizing the opportunity to take advantage of right-sizing the Screen House, the plant engineers engaged with the Water Engineering team to conduct a thorough hydraulic analysis of the raw water tunnel. The hydraulic analysis will allow the Engineering team to have a thorough understanding of the impacts of right-sizing the Screen House on raw water flows to SPW and NE and adequately communicate the recommendation to GLWA decision makers.

Lake Huron Water Treatment Plant

Lake Huron's Level A Suit Drill

On May 24, the Lake Huron Plant conducted a Chlorine Level A Suit Drill. The drill was a great learning opportunity that allowed everyone to participate. The drill allowed team members to help each other, share knowledge, and new ideas to better our program. This was the first time for a lot of the new team members to participate in this kind of drill.



Field Services

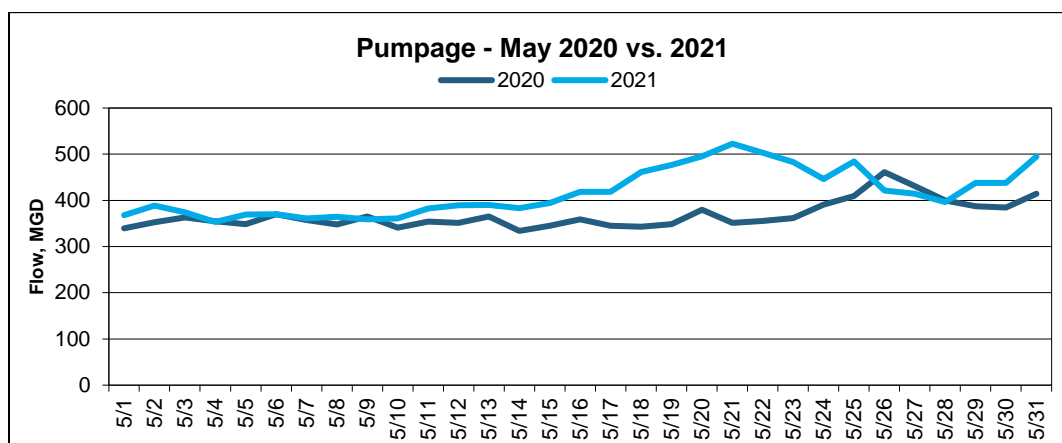
Maintenance and repair crews conducted their usual line of work completing hydrant repairs, inspections, investigations, repairs, and valve operations.

Joint leak repair on the 48" valve at 8366 Wisconsin



Systems Control Center (SCC)

May 2021 pumpage was 13% higher than May 2020



WATER OPERATIONS (continued)

B065 Stair Installation

During annual inspections of the outfalls, EGLE recommended that GLWA provide easier access to the B065. GLWA initiated a task to install staircase at B065 (Burt & Capital) outfall on the Rouge River.



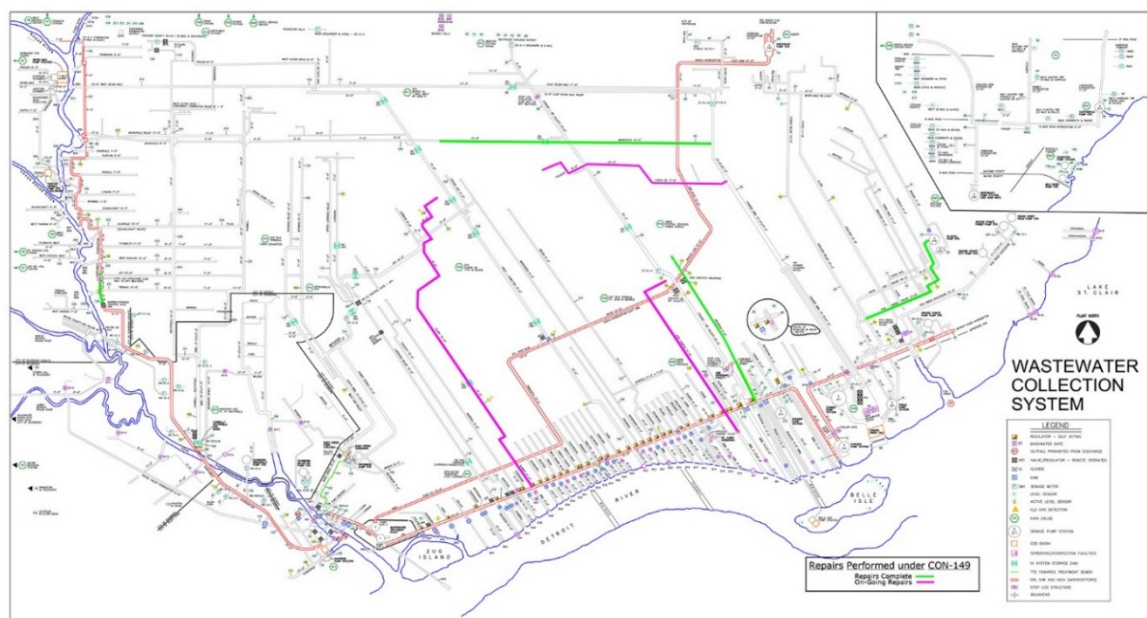
CON-149 Task 23: Installation of staircase at B065



CON-149 Task 23: Installed staircase at B065

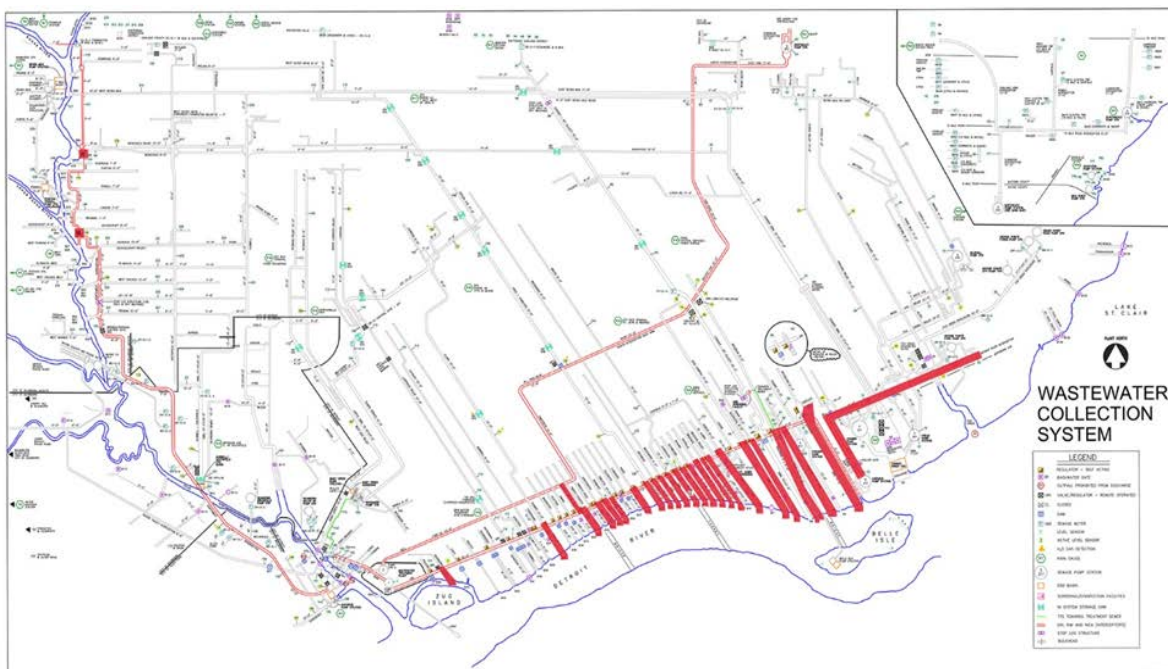
Sewer System Construction Work Completed and Work under way

The maps of the sewer collection system pictured below shows the construction work completed in last past five years and the sewer work that is ongoing. The maps will be updated as we move along with the CIP program.



Sewer Collection System

WATER OPERATIONS (continued)



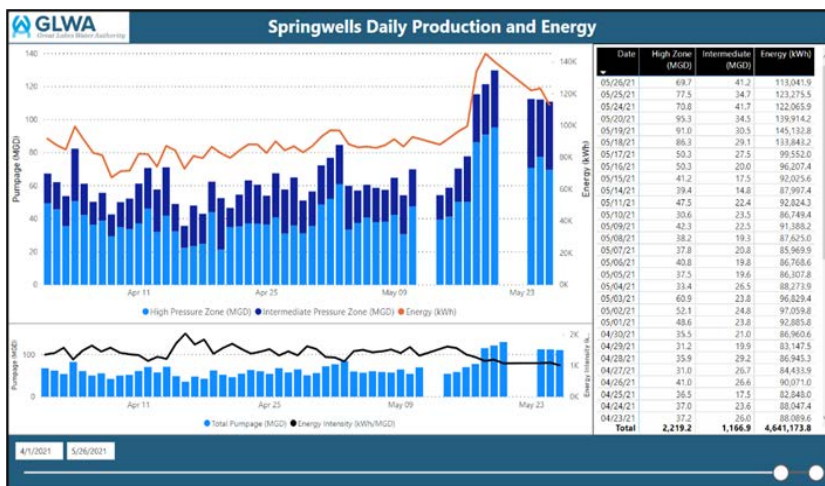
Collection System completed rehabilitation

Energy, Research & Innovation

Energy

Springwells Water Treatment Plant

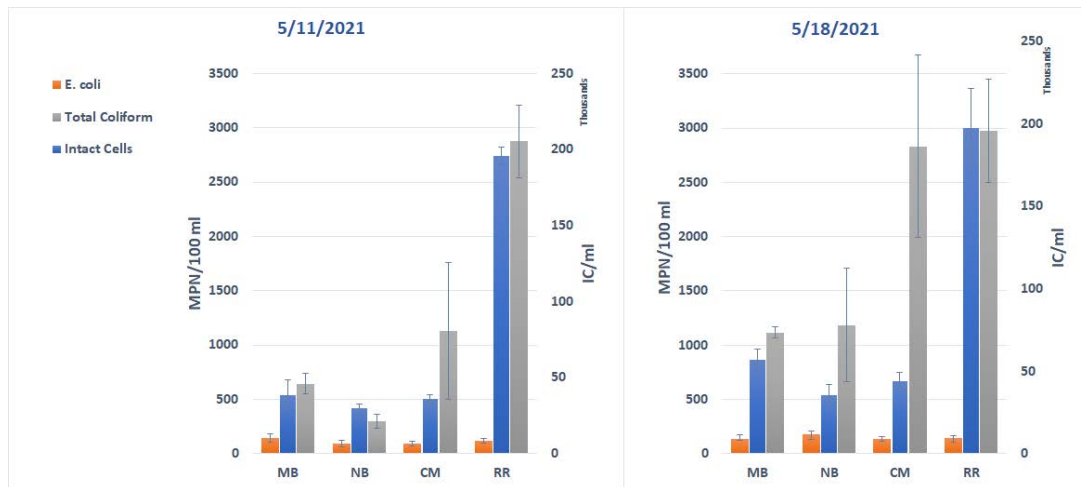
Developed and published a PowerBI report for the energy usage and production at Springwells Water Treatment Plant by request of plant staff. The report will summarize daily and monthly power demands and finished water production by intermediate and high pressure zones. The report will be updated on a daily basis and available enterprise wide. Reports are being developed for individual water treatment plants and water booster stations.



WATER OPERATIONS (continued)

Research

Near Real-Time Quantitation of Microorganisms



The Energy, Research and Innovation Team is currently evaluating Flow Impedance Cytometry for its use as an early warning system for microbial contamination and removal efficiency in water and wastewater treatment. To evaluate the technology, samples from a variety of locations and processes are needed to establish a baseline. The evaluation also includes comparative analysis with established microbial indicators such as ‘Total Coliforms’ and ‘*E. coli*’. A current study by the University of Michigan is supported by WRRF staff performing the analysis. The study provides samples on site as well as microbial indicator analyses for correlation studies. So far two sample sets have been analyzed (*Figure*). The comparison shows the potential for Impedance Flow Cytometry as an indicator. The study will help to further evaluate the technology.

Engineering

Contract No. 2001456 - “Springwells 1958 Settled Water Conduit and Loading Dock Concrete Replacement”

The Springwells 1958 Settled Water Conduit and Loading Dock Concrete Replacement project broke ground earlier this month. The contractor started with the loading dock replacement with their subcontractor performing the demo work. The contractor has started to get deliveries of the rebar and concrete formwork for the loading dock. By mid-July 2021, they should have phase 1 of 2 of the loading dock mostly complete. The contractor is also in the planning phase for the 1958 Settled Water Conduit Topping Slab Replacement with removing a few areas to finish their Quality Control plan on removal and placement.

This project was designed in-house by Water Engineering team member John McCallum, structural engineer. GLWA is handling the Construction Administration and Resident Project Representative (RPR) during the construction phase of the project.

WATER OPERATIONS (continued)

John has been providing submittal (average 7 days) and RFI (average 2 days) responses in a timely manner. GLWA Water Engineering inspector, Pete Bommarito, has been providing daily construction site inspection and oversight (RPR) to ensure that the contractor and their subcontractors are following the contract documents and their Quality Control plans. We have a contractor that has been handling the documentation tracking for all submittals, RFIs, daily reports, pay applications, monthly reports etc. Also, there has been coordination and communication with the Springwells Plant staff on areas that are, or will need to be, closed off for this project.



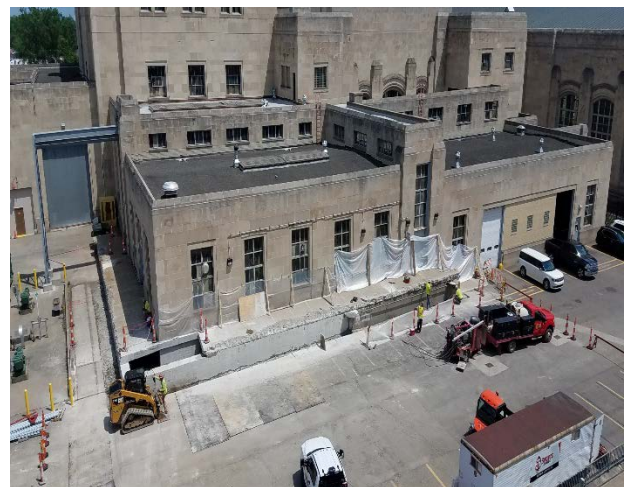
Springwells WTP Loading Dock Work Area



Demolition of Loading Dock



Demolition of existing Loading Dock



Aerial View of Loading Dock Demolition

INFORMATION TECHNOLOGY

In the past month, the IT Security team has proactively blocked or thwarted 7,902 spam messages, 7,214 spoofed messages and 124 viruses. Additionally, 1,216 phishing attempts have been caught and 84 malware attempts have been blocked.

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

- Providing OnBase training to 30 team members from GLWA's Water and Wastewater Engineering Groups.

INFORMATION TECHNOLOGY (continued)

- Rolling out DocuSign for GLWA's Procurement Group and IT PMO Team
- Participating in the third and final round of vendor demonstrations for GLWA's future Enterprise Resource Planning (ERP) software system.
- Developing a plan to improve the technology infrastructure supporting GLWA's Member Outreach Portal
- Developing interactive training materials for users of GLWA's asset management system, WAM, and additional training materials for GLWA's Fleet team members

The IT Infrastructure and IT Telecom teams along with the IT Customer Service Delivery team completed the replacement of the Security & Integrity's team console in the Fusion Center. The previous console was not functional as a proper Dispatch console and was over 15 years old. Some of the improvements and benefits of the new console include:

- The enclosures for the PCs were not properly ventilated; PCs were often overheating and shutting down, sometimes failing to reboot. The new enclosures have programmable cooling units to provide proper ventilation.

The new console provides for separate compartments for oversized PCs necessary for the Radio Console and Video Wall.

- The previous console was damaged from age and use, with chipped wood and delamination. The new console is constructed with superior materials to withstand normal wear and tear.
- The new console accommodates a standing position.

The IT Customer Service Delivery Team along with the IT Business Productivity Systems and IT Security Teams completed the rollout of a new Cyber Security tool replacing Security Mentor with KnowBe4. KnowBe4 provides Security Awareness Training that helps to manage the IT security problems of social engineering, spear phishing and ransomware attacks.

The IT Enterprise Asset Management Systems Team, along with the Enterprise Asset Management Group and Procurement, continues negotiations with the selected vendor, NEXGEN, for the new Enterprise Asset Management (EAM) system. Negotiations will be conducted over the next few months with plans to bring the project to the Board for approval during the later summer/early fall. The EAM system implementation kickoff will be soon thereafter.

The IT Enterprise Asset Management Systems Team, along with Procurement, the CIP Group and AECOM, finalized the RFP for a new Project Management Information System (PMIS).

Currently, the IT PMO is managing 29 active projects and is processing 13 project requests.

PUBLIC AFFAIRS

WaterWorks Magazine Issue 20

Issue 20 of WaterWorks Magazine is being released on Friday, June 25, 2021. This special issue focuses on GLWA's five-year operating anniversary and all the amazing change and accomplishments that have happened since January 1, 2016. A Q&A with CEO Sue McCormick gives a glimpse inside the standup of GLWA, including the worries, struggles and successes, and also a sneak peek at the future of the Authority. There is also a feature that updates everyone on the transformation of the Wastewater Treatment Plant into a true Water Resource Recovery Facility. And, we highlight team members who are doing extraordinary work and hear from them on how they are making a difference for GLWA.

National Safety Month

Public Affairs partnered with Enterprise Risk Management to promote National Safety Month throughout June. A new "Safety" version of GLWA's Splash mascot is being used on all monthly safety messages and safety recognition communications moving forward. In addition to designing *Safety Splash*, Public Affairs assisted in securing small igloo coolers with a GLWA logo and personalized 'Thank You for Working Safe' note from CEO Sue McCormick, which were given to team members who have been *Caught Working Safe* by their Safety Rep. Team and group photos are also being published with their facility's safety banners.

MI-AWWA Media Workshop

As a part of their participation in the AWWA-Michigan Section (MI-AWWA) Communications Council, Public Affairs' Aftab Borka and Curtis Burris-White presented at the Council's second quarterly media training workshop. Their topics included sessions on using your cellphone camera to take high quality photos, as well as on social media and digital content. The workshop is designed to train Section members for effective messaging on various water-related topics and also how to use the best tools available to tell their stories.



PUBLIC AFFAIRS (continued)

Social Media Kit

At the last Communications and Education Workgroup meeting, Public Affairs team member Aftab Borka, along with the Bridgeport team, presented a ‘social media kit’ idea to our member partners. The goal of this initiative is to have a social media content repository available to our regional partners for consistent messaging on different topics of common interest, such as water quality, environmental issues and infrastructure. The first kit focused on outdoor water usage and has already been shared with our member partners.

SECURITY AND INTEGRITY

The Hazmat Unit coordinated and completed a total of 193 hours of training during the month.

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

Security and Integrity participated in the “Surface Water Intake Protection Program” presentation. Updating the 2021 Emergency Response Plan for GLWA continues.

ORGANIZATIONAL DEVELOPMENT

Apprenticeships

EICT-E: Apprentices continued their Related Training Instruction through Detroit Electrical Industry Training Center. Apprentices are learning theory and practical concepts such as DC theory, NEC 2020 Code, vectors, and instantaneous voltages and current.

Maintenance Technicians: Apprentices continued their Related Training Instruction through Henry Ford College and are preparing for their next rotation.

Performance and Progression

The Final Review Performance Evaluations were launched at the end of May for FY21 for union and non-union team members.

The 2020 Progression Cycle closed with 18 team members progressing.

Talent Management

Staffing

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

ORGANIZATIONAL DEVELOPMENT (continued)

Number of New Hires	6
Number of Separations	15
Total Staffing - Regular FTEs (YTD)	998

Benefits/Wellness

GLWA's Financial Literacy series began this month. The virtual sessions are recorded and accessible 24 hours a day to team members using Cornerstone. This month's topics include financial planning, investment basics, spending habits and managing debt.

The Fostering Futures Scholarship (FFS) provides awards designed to assist former foster care students with college expenses. Eligible students include young adults who have experienced foster care on or after their 13th birthday and are enrolled at a Michigan degree-granting college or university. The FFS can be used for tuition, fees, room, board, books and supplies. There is no maximum age restriction for the student. The application period for academic year 2021-22 has been extended until June 30, 2021.

Training

During the month of **May**, **256** GLWA team members and **8** member partners completed **93** safety and non-safety courses. **23** GLWA team members and **1** member partner completed **33** online 360Water courses.

GENERAL COUNSEL

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

Respectfully submitted,

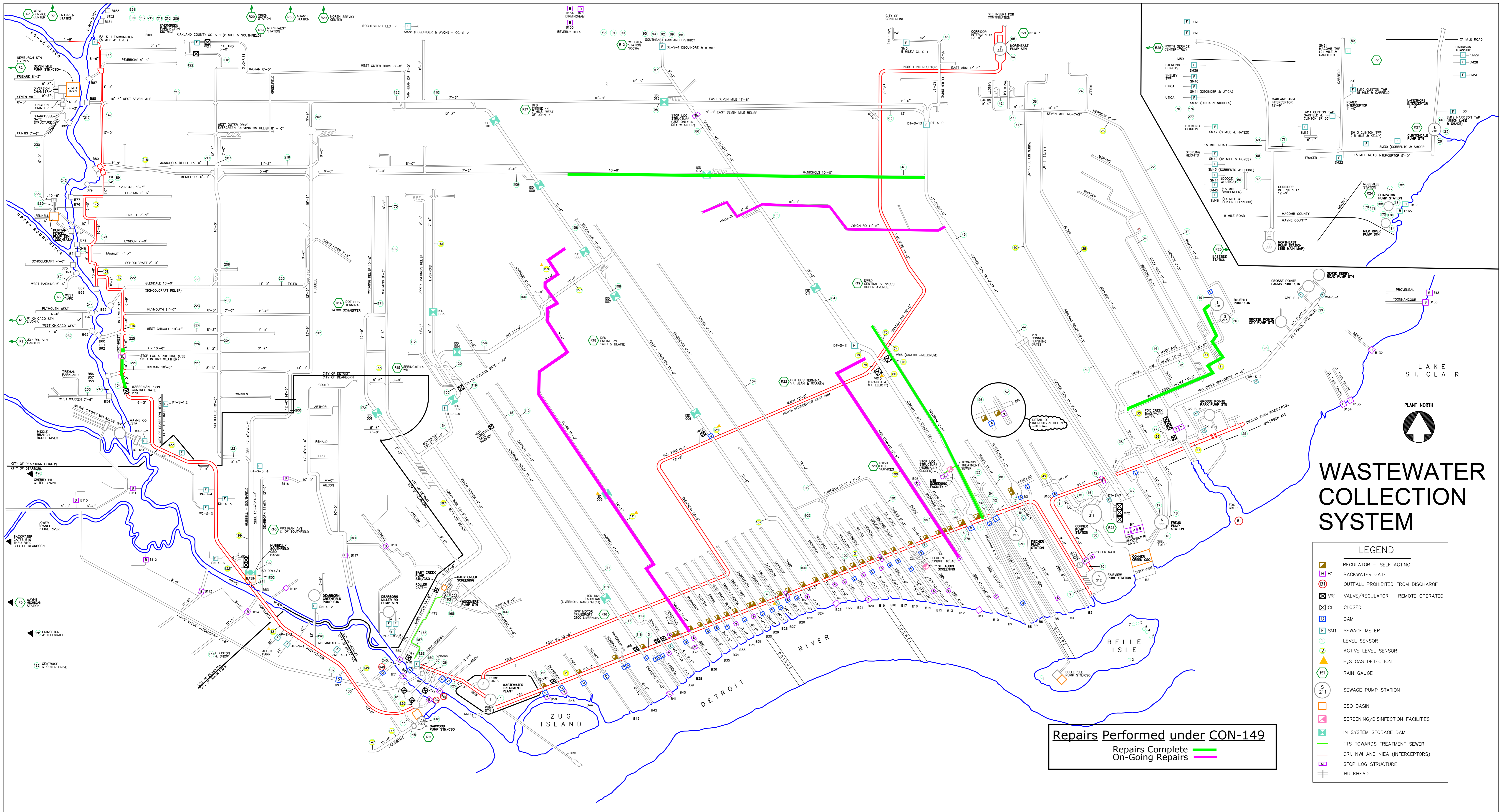


Sue F. McCormick
Chief Executive Officer

SFM/dlr

Attachments (2)

- Sewer Collection Diagrams (2)
- General Counsel's June Report
- Financial Services Area - Addendum



Office of the General Counsel – June, 2021

- ***COVID-19:*** The Office supports GLWA's response to the COVID-19 pandemic, including participating in GLWA's COVID-19 Task Force, review of COVID-19 related laws, rules and public health orders.
- ***NPDES ACO Dismissal:*** The Office assisted in preparing documents to have the ACO dismissed.
- ***Legislative Updates:*** GLWA continues to cooperate with member partners on the Lead and Copper Rules as well and attend webinars on the subject. The Office is also monitoring a bio-solids bill and water assistance bills at the federal and state level.
- ***Gordie Howe International Bridge:*** GLWA submitted its relocation reimbursement request to MDOT and received MDOT's response. GLWA is appealing MDOT's decision.
- ***Trenton Water Main:*** The Office is negotiating the transfer of the 24-inch water main to GLWA.
- ***Contract Negotiations:*** GLWA will attempt to secure long term contracts with all communities that are not on the model contract. The Office is working with member partners to draft a new model sewer contract.
- ***Environmental and Workplace Safety Compliance:*** The Office continues to work with the COO and team leaders from both the water and sewer systems to comply with regulations and to respond to any alleged violations.
- ***Record Retention Policy:*** The Office is drafting a record retention policy for GLWA.
- ***Industrial Pretreatment Program:*** The Office continues to work with the Industrial Waste Control ("IWC") Group and external stakeholders on finalizing and implementing an updated IPP. To date, 99% of the communities have passed a concurring resolution and GLWA made a presentation to the City of Highland Park's City Council, which is the only community that has not passed a concurring resolution. The Office is also providing assistance on PFAS and PFOS matters.
- ***Real Estate:*** The Office is negotiating easements related to support the 14 Mile Road redundancy project, Baby Creek CSO infrastructure improvement project. The Office is negotiating the acquisition of property for the Newburgh pump station. The office is negotiating easements related to 96" watermain relocation and the Woodward Sewer Project.
- ***Member Outreach:*** The Office continues to be an active participant in Member Outreach sessions.
- ***Main Relocations:*** The Office continues to support water operations in its discussions with community stakeholders regarding water main relocations.

- ***Civil Litigation and Arbitrations:*** The Office continues to vigorously defend actions against GLWA, including a class action lawsuit regarding IWC charges.
- ***Labor Relations:*** The Office continues to provide legal advice to Organizational Development on labor relations and employment matters.
- ***Procurement:*** The Office continues to assist GLWA's Procurement Team negotiate contracts, change orders and amendments and interpret contractual provisions. The Office is also assisting with the Procurement Policy's Procedures and updating GLWA's template contracts. The Office is part of a cross-functional team working to complete significant revisions to the GLWA construction contract, including consideration of using an entirely new contract format.
- ***Statistics:***

Contracts approved as to form:	37
Contracts drafted or revised:	118
Subpoenas/Information requests received:	5
Subpoenas/Information responded to:	4

June 23, 2021

The Honorable
Board of Directors
Great Lakes Water Authority

Dear Chairperson Zech and Directors:

**Regarding: CEO's Report – June, 2021
(Financial Services Area - Addendum)**

FINANCIAL SERVICES AREA

Special June 2021 Audit Committee Recap

A special June Audit Committee meeting was held on Monday, June 21, 2021. The GLWA Audit Committee binders are publicly available at www.glwater.org. The meeting included the following discussion topics.

- ✓ Presentation of the proposed FY 2021 4th Quarter Budget Amendments.
- ✓ A request to submit for GLWA Board of Director approval three resolutions for project plans related to new DWRP bond applications.
- ✓ A request to submit for GLWA Board of Director approval two series ordinances authorizing the issuance of Water and Sewer system revenue bonds associated with three, SRF loans scheduled for funding later this summer.
- ✓ Discussion regarding a proposed amendment to Wayne Metro services associated with the Water Residential Assistance Program administration for submission to the GLWA Board of Directors.

FSA 5S Remote Home Space Challenge - Transform an area in your home into a space you enjoy

FSA recently hosted a team member challenge to transform a space in their home using 5S skills.

- Each person who accepted the 5S challenge had to submit one picture to enter
- Each week the challengers were asked to submit in-progress pictures based on



the following phases: sort, set in order, shine, standardize, and sustain

- The Transformation Team hosted weekly 5S virtual meet ups to answer questions and address any concerns
- In the end, all the challengers were asked to submit final/after pictures
- During the judging period, each challenger was given points based the judging criteria
- Based on the final points, the challenger with the highest points was chosen as the winner

And the winner is - Shavarn A. Smith, Professional Administrative Analyst (Logistics & Materials Team). Shavarn selected her kitchen and office. *“I was so excited about this challenge. I had been wanting to organize but I never was motivated. Thanks to our Financial Team, I was finally motivated to sort, set in order, shine, standardize and sustain my kitchen and my office!!”*
-Shavarn A. Smith

The other participants were Liz Duncan, Katlyn Butzin, Phyllis Walsh, Sondra Hunsinger and Alicia Schwartz.

State Revolving Fund (SRF) Loan Activity

GLWA and the city of Detroit Water and Sewerage Department (DWSD) are currently experiencing record activity as it relates to the use of State Revolving Fund loans to fund current water and sewer projects. The state of Michigan Department of Environment, Great Lakes and Energy (EGLE) and Department of Treasury partner to administer these low interest loans. As of March 31, 2021, GLWA and DWSD have twelve open SRF loans, seven for water and five for sewer. The table below highlights these current projects including the loan award date which is also referred to as the Order of Approval date by the state of Michigan.

State Loan #	Description	Order of Approval	Project Total (\$ Millions)
SRF Water - DWSD Projects			
7447-01	Water Main Replacement (WS-707 & 714)	8/9/2019	\$16.5
7460-01	Water Main Replacement (WS-710 & WS-711)	7/15/2020	\$22.6
7483-01	Water Main Replacement (WS-715 & WS-718)	9/9/2020	\$13.4
SRF Water - GLWA Projects			
7445-01	Northeast Transmission Phase 1	8/9/2019	\$30.0
7445-02	Northeast Transmission Main - Phase 2a	8/7/2020	\$15.0
7446-01	Lake Huron Sludge System-Raw Sludge Clarifiers	5/17/2019	\$8.3
7461-01	14 Mile Transmission Main Loop - Phase 1	8/7/2020	\$9.0
Total Water			\$114.7
SRF Sewer - DWSD Projects			
5688-01	Sewer Main Rehabilitation/Replacement - Phase 1	9/9/2020	\$4.0
SRF Sewer - GLWA Projects			
5636-01	Rehab Rectangular Primary Clarifiers, Electrical/Mechanical Buildings and Pipe Gallery	8/24/2016	\$51.3
5655-01	Detroit River Interceptor Segment 1	8/23/2018	\$17.5
5655-02	Detroit River Interceptor Segment 2	2/28/2020	\$28.4
5673-01	PS-1 Ferric Chloride System Rehabilitation	2/26/2021	12.9
Total Sewer			\$114.2

GLWA and DWSD combined are the among the largest recipients of SRF funding in the State and that activity will increase even more this year as GLWA will be closing on four additional loans in over the summer.

These low-interest loans save hundreds of thousands of dollars in interest annually which in turn allows for greater investment in our local and regional water and sewer systems.

Special thanks go out to Francine Duncan-Martin and Jackie Morgan who quarterback the overwhelming administrative tasks associated with GLWA and DWSD involvement in these programs as well as the many FSA, Water and Sewer Operations team members who support these efforts.

Yearend Reporting Deadlines

The Financial Services Teams are working to prepare the books for year end and review and update internal control documents for the audit. The FY 2021 audit is currently scheduled to be performed 100% remotely. Baker Tilly will conduct fieldwork in early September 2021 and early October 2021. The FY 2021 audit has to be completed within six months of GLWA's year-end of June 30.

Procurement Pipeline

The June 2021 Procurement Pipeline edition is attached. This month features tips to utilizing the GLWA Vendor webpage, reminders on visitor badged access requirements beginning July 1, 2021, guidance on how to schedule virtual introduction meetings with GLWA, and a listing of current solicitations.

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

Procurement Tip of the Month: Utilizing the GLWA Vendor Webpage

For vendors doing business with GLWA, or for those interested in doing so in the future, utilizing the [GLWA Vendor Webpage](#) is an important way to stay informed. Below you will find an overview of the information, documents, and links that are available on the GLWA Vendor Webpage:

- ✓ The vision, mission, and goals of the GLWA Procurement Team;
- ✓ GLWA's Annual Procurement Report and information on GLWA's commitment to transparency in all its procurements;
- ✓ Access to GLWA's Bonfire Registration Page and Bonfire Procurement Portal;
- ✓ GLWA's most up-to-date Visitor COVID-19 Access Requirements and Safety Protocols as well as a link to the Visitor COVID-19 electronic Questionnaire;
- ✓ GLWA's Procurement Policy, Terms, Conditions, and Forms;
- ✓ The 2021 editions of the monthly *Procurement Pipeline* newsletter (prior editions are archived and searchable);
- ✓ An overview of GLWA's new Business Inclusion and Diversity (B.I.D) Program and B.I.D. program requirements;
- ✓ The 2021 Vendor Outreach Staff Directory;
- ✓ Contact Information for Procurement, Vendor Outreach, and the B.I.D. Program.

Remember to frequently check the GLWA Vendor Webpage for new information and resources!

Reminder: Visitor COVID-19 Badged Access Requirements Beginning on July 1, 2021

On March 9, 2021, GLWA released [Coronavirus Update #112](#) to the Vendor Community. This memorandum detailed the Visitor COVID-19 Badged Access Requirements that will begin on July 1, 2021. By this date, visitors requesting or

maintaining Badged Access to GLWA facilities or project worksites ***must provide documentation of one of the following*** with their daily completion of the Visitor COVID-19 Questionnaire:

- 1) Documentation of a negative COVID-19 test result dated between April 1, 2021 and July 1, 2021. Periodic testing may be required after July 1 on the same cadence as GLWA team members;
- 2) Documentation of COVID-19 vaccination. All Visitors must provide proof that they have received the appropriate dosage(s) of the vaccine and that they have waited the 14 days recommended by the Centers for Disease Control and Prevention (CDC) for the vaccine to take full effect.

Please note that all visitors, including those that are COVID-19 vaccinated, are still required to follow the Visitor PPE and Safety Protocols outlined in [Coronavirus Update #105](#), including wearing face masks, handwashing, and social distancing. For more information on these protocols, please carefully review [Coronavirus Update #112](#). Any additional questions regarding GLWA's Visitor COVID-19 Access Requirements may be directed to [Michael Lasley](#) and [Megan Torti](#).

Virtual Introduction Meetings with GLWA

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

What's Coming Down the Pipe?

Current Solicitations: Be sure to register in [Bonfire](#) for new solicitations and contract award information. *Upcoming Procurements: Next Three to Nine Months* - See page 2

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

Upcoming Solicitations June 2021

Category	Description	Budget Estimate
Water System (next three months)		
Maintenance Services	Skilled Trades Contract	TBD
Engineering	North Service Center Pumping Station Improvements (CIP #132016)	\$10,000,000
Construction	Northeast WTP Flocculator Improvements (CIP #112006)	\$11,000,000
Construction	Springwells Water Treatment Plant Medium Voltage Electrical System Replacement (CIP #114002 Project B)	\$45,000,000
Design Build	Belle Isle Seawall Rehabilitation (CIP #116005)	\$1,740,000
Design	Reservoir Inspection, Design, Construction Administration, and RPR Services (CIP #170802)	\$5,400,000
Design	Leib Screening & Disinfection Facility Improvements for Meldrum Diversion (CIP #274001) (CSO) & Oakwood CSO Facility Improvements for Northwest Interceptor Diversion (CIP #278001)	\$5,000,000
Progressive Design Build	Water Works Park High Lift Pumping Station Modernization (CIP #115007)	\$89,000,000
Wastewater System (next three months)		
Construction	Rehabilitation of Outfalls – Phase III (B-39) (CIP #260508)	\$7,400,000
Design Build	Control System Upgrade – St. Aubin, Leib, and 7 Mile CSO Facilities (CIP #360619)	\$7,000,000
Construction	Generator Improvements (Controls upgrades, Generator modifications) (JOC) (CIP #260622) (CSO)	\$1,000,000
Construction	Hubbell Southfield CSO Basin Pipe Hanger Replacement	\$1,500,000
Construction	HAZMAT (Hazardous Material) Building Renovation	\$1,500,000
Water System (next four to nine months)		
Progressive Design Build	Lake Huron WTP Instrumentation and Filter Control Improvements (CIP #111006)	\$21,000,000
Construction	Roof Replacement – Lake Huron WTP and Southwest WTP (CIP #171500)	\$3,000,000
Wastewater System (next four to nine months)		
Professional Services	Virtual Tour and Laser Scanning Services	TBD
Design	Pilot Netting Facility Project (CIP #270001) (CSO)	TBD
Construction	Rehabilitation of CSO Outfall Backwater Gates (CIP #260510)	\$5,000,000
Construction	WRRF Administration Building 4 th Floor Renovation	\$2,500,000TBD
Construction	Pump Station #1 Screenings Building HVAC Improvements (CIP #211006)	\$1,000,000
Construction	Connor Creek Sewer System Rehabilitation (CIP #260208)	\$24,400,000
Design Build	WRRF Rehabilitation of Intermediate Lift Pumps (ILPs) 1 & 2 and Modifications to Aeration Decks 1 & 2 to Incorporate Biological Phosphorus Removal and Step Feed (CIP #212008)	\$60,000,000
Construction	WRRF Pump Station #1 Improvements (CIP #211006)	\$55,000,000
Design Build	WRRF Structural Improvements (CIP #216011)	\$12,000,000
Design Build	Sewer Repair Contract (CIP #260209)	\$22,400,000
Construction	Rehabilitation of Northwest Interceptor from 8 Mile Road to Warren Pierson (CIP #260295)	\$7,000,000
Enterprise (next three months)		
Information Technology	Project Management Information System	\$3,000,000
Professional Services	Document Scanning and Management Services (WRRF, Conner Creek, Enterprise)	TBD

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

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