

May 26, 2021

The Honorable
Board of Directors
Great Lakes Water Authority

Dear Chairperson Zech and Directors:

Regarding: CEO's Report – May, 2021

As we continue our celebration of GLWA's five-year operating anniversary, I am proud to announce the publication of the 2020 Year in Review booklet. Our 2020 booklet tells the story of how we continue living up to our vision of being the provider of choice for water and wastewater services in the region and how we are the example of regional collaboration that we envisioned when GLWA was launched on January 1, 2016.

In recognition of these first five years of operations, we are telling our story this year in a special five-section format that details accomplishments in the following categories: Financial Stewardship, Environmental Stewardship, Innovation, Quality and Partnership and Collaboration. Readers will find a special five-year timeline in the booklet's centerfold that lays out the amazing accomplishments the GLWA team has achieved in such a short time. The booklet has been published in both print and digital editions and is being shared with our member partners, stakeholders and the public via our website and social media.



On May 24, 2021, GLWA had a productive meeting with several of its member partners to discuss various types of federal funding for water systems that is, and may shortly become available. GLWA is seeking funding for regional projects however it appears that most of the funding is targeted to City, Counties and other municipal entities. In the meeting GLWA recognized that many "local" projects will help to support our regional masterplan and offered to assist local communities with those efforts and partner on the projects when appropriate for the region.

The Planning Services update section of this report notes that our Asset Management Strategic Organization (AMSO) recently held its fourth annual All AMSO Team Meeting, which was organized around the theme, *The Power of One Team*. I thought it was important to call out that during the meeting there were several GLWA team members who were recognized for their notable contributions to asset management best practices.

I want to highlight two specific recognitions: Shondell Daniel, an engineer in our Systems Control Center, who was named AMSO's Most Valuable Team Member, and Ed Merriweather, a Team Leader at Water Works Park, who had the highest attendance throughout the year at AMSO meetings. Their commitment, as well as the efforts of all those honored, is helping GLWA to "*walk the talk*" where our asset management efforts are concerned!

Finally, in keeping with our asset management efforts, I would like to point out that the WRRF Central Maintenance Team has successfully completed in-house lighting improvements that switch to more efficient fixtures that qualified GLWA for DTE rebates and which will provide savings for us well into the future.

PLANNING SERVICES

Asset Management (AMG)

GLWA's Asset Management Strategic Organization (AMSO) held its 4th Annual All AMSO Team meeting on May 13, 2021. AMSO is GLWA's internal governance structure allowing cross-functional collaboration and strategic direction for asset management activities. The meeting was attended by over 75 team members from all business units across the organization including Executive Leadership Team members who serve on AMSO's Asset Management Leadership Team. The meeting was themed "The Power of One Team" which truly exhibited the commitment to asset management best practices as the team came together to celebrate successes of the past year and prepare for future asset management challenges.

As the excitement of past year's accomplishments came to light, the challenges for the future became more evident. Recognition that we have a busy year ahead of us with the continuation of the SAMP improvement initiatives, the CIP update and program improvements, initiating the Linear System Integrity Program and the implementation of the Enterprise Asset Management system upgrade. However, with the "The Power of One Team", team members left the meeting energized and ready to meet the challenge.

Many team members across GLWA work every day performing critical asset management functions. As we continue our Asset Management journey, we paused to recognize our fellow team members who make notable contributions to asset management best practices. We provided team members the opportunity to nominate an "Asset Management Hero" who displayed key asset management characteristics over the past year. This was a great opportunity for peers to acknowledge one another for the great work performed every day. Please join us in congratulating these valuable team members for their dedication to asset management!

PLANNING SERVICES (continued)



Capital Improvement Planning Group (CIP)

Our new CIP Director, Dima El-Gamal, has hit the ground running. Our team has rallied around her to bring her up to speed on the various aspects of the CIP. When asked for her reflections on her first month in the new role, she said “I can sense that the CIP Team will spare no effort to making this program a success.” We want to give a special thanks to Jody Coldwell, Asset Management Director who has been providing the CIP Group with sound leadership and guidance in the past few months during the transition.

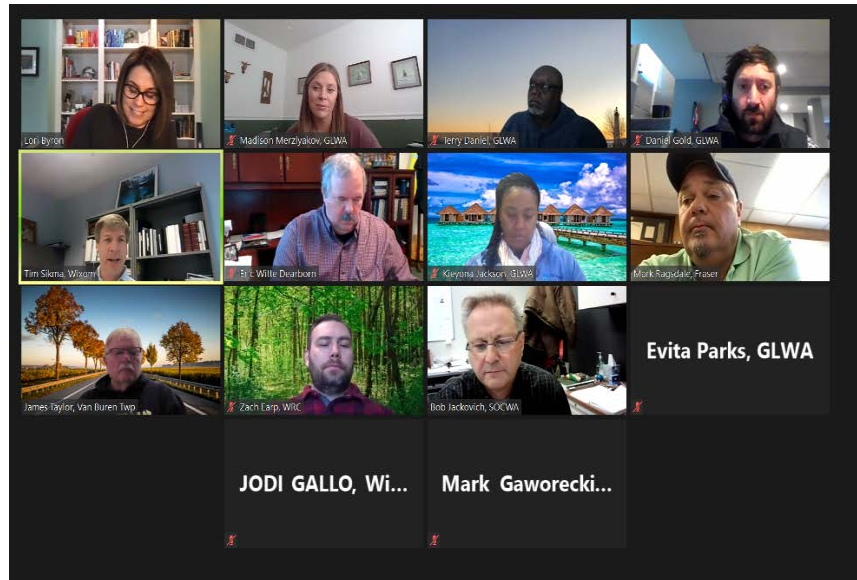
The CIP Group has begun preparation of the 2023 through 2027 CIP Plan update and has initiated, among many other tasks, a portal enhancement process. The portal is our interim IT solution to what will be a Program Management Information System (PMIS). The Group is gearing up to provide project manager training on the updated portal next month. Multiple meetings have taken place to further the progress on our new business process roadmap, called the Program Management Plan (PMP). AECOM and GLWA Teams are in the final stages of concluding Chapter 6 of the PMP which is focused on contract change management.

Exceptional progress on the Request for Proposal for the PMIS project has been accomplished. This required extensive effort from the CIP, IT, and AECOM staff along with feedback from the water and wastewater engineering Groups. The document is now in the good hands of the Procurement Group and the solicitation is anticipated to take place in June.

PLANNING SERVICES (continued)

Systems Planning Group

Planning is well underway for the June 3, 2021 One Water Partnership meeting. The One Water Co-Chairs met in late April to discuss current initiatives and to plan for the quarterly meeting. The meeting will be hosted via Zoom from 10:00 a.m. – 12:00 p.m., and members can expect to see a Member Partner Spotlight featuring the Detroit Water and Sewerage Department's Lead Service Line Replacement Program, as well as various other updates. The Water Management Best Practices Work Group met on April 20, 2021 (pictured) where the group discussed next steps regarding an Emergency Response Workshop and the idea of GLWA hosting a repository on the Member Outreach Portal for Member Partners to share example documents with each other.



The group also discussed Consumer Confidence Report (CCR) changes, Emergency Response Plan submissions, EGLE engagement and the value of education and outreach in gaining support for infrastructure investments.

The April 13, 2021 Watershed Hub Work Group meeting featured three presentations from groups who are working to improve watershed health in southeast Michigan.

- Ned Willig of the Great Lakes Commission spoke about Conservation Kick, a water quality crediting program that connects upstream farmers with downstream communities to reduce nutrient runoff from agricultural land that can impact regional drinking water quality.
- Bob Burns of Friends of the Detroit River presented on several Detroit River area of concern habitat restoration projects.
- Chris Bobryk of the Clinton River Watershed Council spoke about [WaterTowns](#), which is a placemaking initiative designed to help local governments improve water quality by implementing green stormwater infrastructure.

The next Watershed Hub Work Group meeting is scheduled for May 25th.

PLANNING SERVICES (continued)

The Wastewater Analytics Task Force (WATF) met on April 15, 2021 and began with announcements from Dan Gold of GLWA on the upcoming Technology Approval Group workshop and an opportunity for Members to add their rain gauge data into a regional radar rainfall analysis. Next came three presentations from GLWA team members that focused on activities at GLWA's Water Resource Recovery Facility (WRRF). Annette Vines, Operations Team Leader at the WRRF, gave an overview of a pilot monthly valve exercising program at the WRRF's Complex B, which houses the process area for thickening waste activated sludge. Next, Chris Wilson, Special Projects Manager at the WRRF, presented highlights of upcoming CIP projects at the WRRF. Then Keiano Vanzant, Safety Management Professional in our Enterprise Risk Management Group gave an overview of GLWA's Wastewater Operations Emergency Preparedness plan, a joint effort to protect health and safety in the event of an emergency at the WRRF or the nine CSO facilities. The next WATF meeting is scheduled for June 10, 2021.



In April, GLWA continued to meet with members as a group as well as one-on-one to discuss proposed language related to a new wastewater model contract. The project team, led by GLWA General Counsel, Randal Brown, and Chief Planning Officer, Suzanne Coffey, used the feedback to produce updated drafts of both the model contract and a new document called, "The Charge Methodology," which describes how wastewater charges are set.

This iterative process of collecting and responding to member perspectives on the drafts will continue until we have reached a successful outcome on this initiative.

Did you know you can find all meeting materials from Member Outreach Meetings and see upcoming meetings via our Member Outreach Portal?

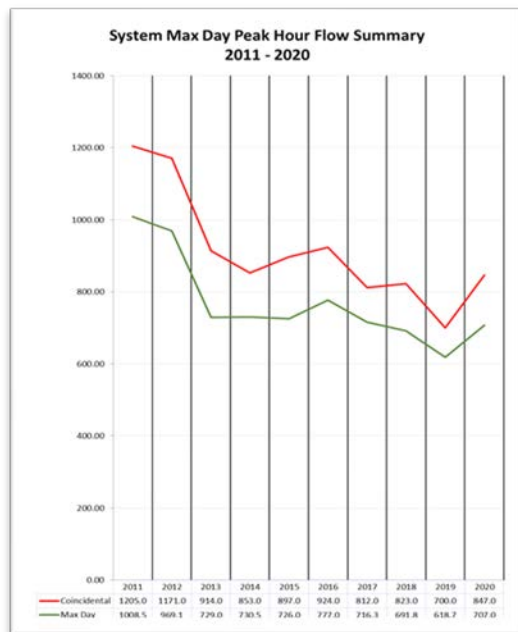
Be sure to request access at <https://outreach.glwater.org/login>. Need help? Be sure to check out [this guide](#), or email outreach@glwater.org.

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

PLANNING SERVICES (continued)

April 2021 Member Outreach Meeting Attendance	
Meeting	# Attended
Wastewater Model Contract Meeting (4/6)	38
Watershed Hub Work Group (4/13)	15
Wastewater Analytics Task Force (4/15)	41
Wastewater Model Contract Meeting (4/20)	42
Water Management Best Practices (4/20)	16
Technology Approval Group Workshop (4/29)	52

Systems Analytics and Meter Operations Group (SAMO)



At the May 18, 2021, Analytical Work Group meeting, the System Analytics and Meter Operations Group (SAMO) presented the following topics: GLWA’s water usage and pumpage update for fiscal year 2021; wholesale water meter pit rehabilitation and meter replacement program; significant water loss circumstances for wholesale member partners and SAMO’s assistance with resolving the issues; and system max day and peak hour flow summary.

The Group continues its progress working on the sewer meter upgrade/replacement program. Currently the group is working on Wayne County Rouge Valley Sewage Disposal District meters WC-S-1, WC-S-2, and WC-S-3. The design engineering work has been completed, a Part 41 permit from EGLE has been obtained and the construction work has started. The construction work is scheduled to be completed in July 2021.

The Group continues its progress working on wholesale water meter pit rehabilitation and meter replacement program. The scope of work includes construction work at 58-meter pits with metering and/or meter pit condition concerns. Although this is a program that will continue in perpetuity, the target substantial completion date of this particular contract is November 2021. Last month coordination meetings were held with the City of Eastpointe, City of Inkster, City of Romulus, Saint Clair County, City of Saint Clair Shores, and City of Sterling Heights. The planned work has been completed at 42 of the meter pit locations and is underway at another three locations.

WASTEWATER OPERATING SERVICES

Wastewater Operations

Water Resource Recovery Facility (WRRF) operations were in compliance with the Water Quality Standards for April 2021.

Maintenance

The integrity of a temporary ferric chloride tank containment enclosure at Pump Station 2 was compromised creating a potential for ferric chloride leakage. The primary team overcame numerous hurdles to install a spill containment and plumb a working system to utilize a temporary tanker for dosing ferric chloride at Pump Station 2. This continuation of ferric chloride dosing allowed for keeping total phosphorus levels for April within operational limits while also minimizing the chances of ferric spills to the environment. This temporary tanker will be in use until new permanent tanks are installed and tested at Pump Station 2.



Temporary Chemical Tanker with Spill Containment



Ferric Chloride feed into PS#2 discharge

The efforts of the Facilities Team and permitted contractors to remove seagull nests continue and reports have been received that the seagull population appears to be lower this year than last. To better track the seagull population, a weekly counting process was developed to collect data so that the seagull nesting and habitation patterns can be determined. This counting process will track new seagull nesting areas to see if the seagull habits are changing on site.



Seagulls on WRRF building roof

This will help guide future data-driven efforts in mitigating this nuisance at the WRRF.

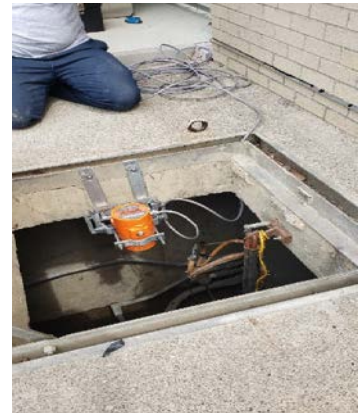
WASTEWATER OPERATING SERVICES (continued)

The data, although limited at the time, has already shown that there are benefits to the wiring grids that are installed on the rooftops and that some of the grids need to be repaired or replaced. The wiring on the roof of Pump Station 1 will be replaced with wiring of a size and material that has been demonstrated to preclude seagull nesting.

Process Control Center (PCC)

The Process Automation and Control System (PACS) Team monitors the health of the Operational Technology (OT) Network to ensure reliable performance of the control systems within GLWA. The team upgraded the network monitoring system by installing the latest software on a new server as well as adding additional software modules. The new modules allow team members to easily create and update network maps, automate network inventory management, and readily track users and devices.

A request was made to the PACS Team to solve an issue at the St. Aubin CSO Facility. The existing ultrasonic level instrument was mounted at too low of an elevation and would become submerged and nonfunctional. The team determined that the existing instrument could not be raised since there were obstructions that would block the wide beam angle associated with it. The team researched and found a laser instrument (alternative technology) that would be able to be used in the congested area. The new instrument was installed and integrated into the control system so that the new and existing level instruments can be evaluated side by side. The picture (shown right) shows the new laser level instrument install.



Laboratory

The Lab is working with the IT team on LIMS enhancements. Parsers for instrumentation data uploads have been given top priority.

5S training has been completed in five out of nine identified areas in the laboratory.

Chemists completed training on Total Residual Chlorine Analyzers this month.

Industrial Waste Control (IWC)

Modifications of the legal authority used for enforcement of the approved Industrial Pretreatment Program (IPP) were approved by the GLWA Board on November 13th, 2019. Before we could submit this change in legal authority to EGLE, we needed to obtain a concurring resolution from our 78 constituent municipalities. As of April 30, 2021, we have received 77 of 78 completed resolutions with the City of Highland Park being the only remaining community. GLWA will be submitting the rules to the Michigan EGLE as a non-substantial NPDES Program modification and request final action by the State of Michigan.

WASTEWATER OPERATING SERVICES (continued)

GLWA submitted our compliance report regarding the EPA-created Dental Discharge Category to Michigan EGLE in our Annual IPP Report (filing date April 1, 2021). However, EGLE has recently requested additional information from all Michigan communities for submission by June 30, 2021. We are preparing this information and will submit the information through the MiWaters program.

The second annual PFAS Program report was submitted to Michigan EGLE on April 30, 2021. To date, seventeen industrial users have installed treatment for PFAS compounds, we have observed a reduction in the concentration of PFOS discharged from the WRRF since June 2020, and the forty-nine significant sources of PFAS compounds are implementing their respective Best Management Plans (BMP).



Engineering & Construction

Design Engineering

Damage to and repair on Complex II Incinerator breach has been very frequent. The reason has been mainly due to insufficient steel thickness and stiffening and stack expansion and contraction induced cracks. Design on steel plate reinforcing and revised refractory lining was presented to the contractor, and the work can be carried out as part of the Refractory Inspection and Repair contract. The upcoming Pop-Top Damper JOC will install an expansion joint at the location where the current damper is, and this should eliminate cracks on the breach refractory lining.

Construction Engineering

Rehabilitation of various sampling sites and Pump Station No.2 Ferric Chloride system project at GLWA Water Resource Recovery Facility (Contract No. 1802410) was awarded to Commercial Contracting Corporation with a start work date of February 18, 2019. The original substantial completion date of the project was August 11, 2020, and the original final completion date was February 7, 2021. The contract amount was \$4,756,000.00. In April 2020, GLWA issued Change Order No.1 (Redesign of Pump Station No.2 Ferric Chloride system) to the Contract at an increased amount of \$806,137.00 for a total cost of \$5,562,137.00. In March 2021, GLWA issued Change Order No.2 (Redesign of sampling sites rehabilitation) to the Contract at an increased amount of \$776,165.00 for a total cost of NTE \$6,338,302.00 and extension of substantial and final completion dates by 365 calendar days to August 11, 2021, and February 7, 2022, respectively. This Contract is composed of two packages: A and B as follows.

WASTEWATER OPERATING SERVICES (continued)

Package “A” includes:

- The rehabilitation of 12 sampling stations at the Water Resource Recovery Facility.
- The installation of two new phosphorus analyzers; one to determine the level of soluble phosphorus at the primary effluent before entering the aeration tanks, and another analyzer to check the total phosphorus before discharging to the Detroit River Outfall (DRO) and Rouge River Outfall (RRO).

Package “B” includes:

- The replacement of existing Ferric Chloride Tanks and associated transfer and feed pumps at Pump Station No.2.

Shortly after the GLWA-1802410 contract was awarded, GLWA determined that the scope of package A and package B needed to be reviewed by Wastewater Operations leadership to optimize the future facilities. On April 12, 2019, GLWA notified the Contractor of the intent to make changes to GLWA-1802410 scope of work. The changes included the modification of existing facilities and deleting a portion of the base contract scope of work.

Package B redesign was completed, and Change Order No.1 was issued to the Contractor on April 30, 2020, for the revised packaged B scope of work. The Contractor is currently working on installing two Ferric Chloride Tanks and associated piping, finishing the FRP platform, and railing system and working on a submittal for the feed pump skid.

Package A redesign has been completed and Change Order No.2 was issued to the Contractor on March 17, 2021. The Contractor has started the submittal process for the revised Package A work. Both Packages A and B are expected to be completed by February 2022.

Currently, the WRRF Construction Engineering Team manages about 25 active construction projects/tasks. Construction of the Sludge conveyance improvements project (CON-197), Chlorination/Dechlorination Improvements at WRRF (CON-238), Pump Station No.2 Pumping Improvements Phase 1 (PC-795), and DTE *Installation of new Ferric Chloride tanks and on O&M platform within the containment area* 120 KV Primary third feeder projects are all progressing. Several Job Order Contract Tasks are also under construction now.

CSO Control Program

The CSO Team is working on the following projects:

- CIP 260618, Contract Number 2003330 – Oakwood CSO Facility HVAC Improvements. Project bids were received in late April 2021. This project is currently in the award phase to Commercial Contracting Corporation, pending May 2021 board approval. We anticipate notice to proceed in June 2021.

WASTEWATER OPERATING SERVICES (continued)

- CIP 260621, Contract Number 2004666 – Conner Creek Canal Dike Improvements. Projects were received the first week of May 2021 for construction. This project, given its urgent nature, will be on the May board for approval. We anticipate notice to proceed in June 2021.
- CIP 260622, Contract Number 2100575, I&C JOC Task C-04 – CSO Facilities Generator Improvements project. This will be provided to procurement in June 2021 for bids through the Instrumentation and Control (I&C) Job Order Contract, Task C-04. This project is aimed at providing generator outputs into Ovation for SCADA historizing and feedback on the generator and automatic transfer switch (ATS) status. The other goal of this project is to standardize, to the extent possible, generator outputs and ATS configurations.
- CIP 274001, CIP 278001, Contract Number 2101475 – CSO Facility Improvements Project for Oakwood and Lieb CSO Facilities. We continue to work with the CIP Group to provide a singular CIP number for this project. This work is going to be within a singular RFP that we anticipate providing to Procurement in the first part of July 2021 for advertisement.
- JOC Task 29 – Baby Creek Chemical Tank Relining. Tank relining work is currently in progress for the first tank.
- JOC Task C-03 – Baby Creek Bypass Gate Automation. This project will establish SCADA communication and remote-control ability to the bypass gate at Baby Creek. This project was provided to Procurement at the end of April 2021 for advertisement in the Instrument and Control JOC.
- Task Order Engineering Services (TOES) Task 11T. This task is for the 2022 Consolidated Annual Report. The Task was awarded to Wade Trim Associates and has begun.
- (TOES) Task 5T, CIP 260614 – Oakwood HVAC Improvements. A pre-bid walkthrough was held in March 2021, bids due in April, and we are anticipating a May Board approval with notice to proceed in June 2021.
- (TOES) Task 12T – Engineering and CAD Standards. Invitation to quote (ITQ) responses was received in mid-April 2021 and are currently being evaluated by Water and Wastewater Engineering Teams.
- (TOES) Task 14T – St. Aubin Hydraulic Modeling. ITQ responses were received, and this Task was awarded to Wade Trim Associates. A kick-off meeting is being scheduled to begin work on this Task.
- RFP – JOC Version 2.0. After the success of the first JOC contract at GLWA and its broad and effective use throughout all departments at GLWA, a new JOC Contract RFP will be provided to Procurement in early June 2021 for advertisement and qualification of new JOC V2.0 Contractors.

WASTEWATER OPERATING SERVICES (continued)

The Current JOC currently has 60 tasks that have been created, and over \$15 million awarded. We anticipate by the time the new JOC V2.0 Contract is awarded that the current JOC V1.0 Contract funds will have been exhausted.

WATER OPERATIONS

Springwells Water Treatment Plant

Plant Gets Look at Basin Improvements

Contract No. 1802774 “Springwells Water Treatment Plant 1930 Sedimentation Basin, Sluice Gate, Guides, and Hoist Improvements” is approaching the end of construction with the turnover of all four 1930 treatment train basins back to the plant for service. Team members are taking the opportunity to view areas of the plant normally underwater.

Walkthroughs of the 1930 basins and associated conduits and gatehouses have been occurring. These walkthroughs service a dual purpose, to familiarize the team with the process areas (especially newer team members), as well as to inspect the project work and identify any issues prior to return to service.



Plant staff inspecting settled water conduit in 1930 Filter Plant

The walkthroughs included team member participation from operations, maintenance, and the lab. In the coming weeks, the final cleaning and inspection of the work areas will occur, as well as training on the new sluice gates and electric actuators. The completion of this contract will leave Springwells with the ability to isolate the 1930 Sedimentation Basins more efficiently and safer.



Lab Team Leader Andrew Ross standing in front of a new basin influent gate

WATER OPERATIONS (continued)

Water Quality

Pump Chlorination

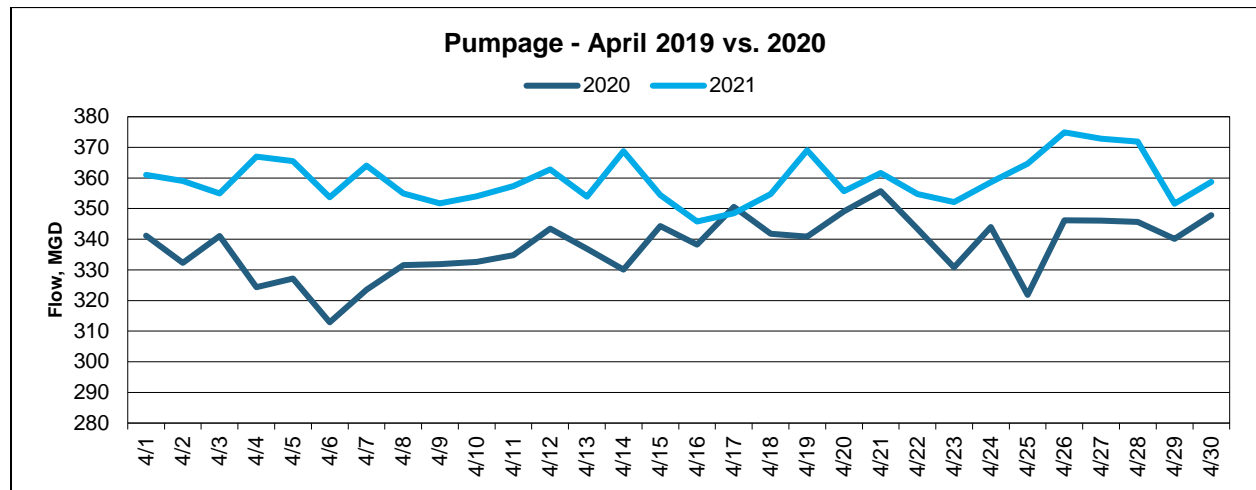
Whenever a potable water pump is taken out of service for repairs, it must be disinfected before it can be returned for service. This type of effort is how we ensure water of unquestionable quality. At the completion of the repair of pump L3 in the Franklin Pump Station, preparations were made for chlorination. This provided our three new investigators the opportunity to observe the disinfection process. One important lesson highlighted was the intervals at which to monitor the chlorinated water. The new investigators were instructed on how and when to test for chlorine residuals, as well as the ranges the residuals should reside in.



The chlorinated water was flushed, and the next day samples were collected. Those samples were sent to the Water Quality Lab where they were tested, and all results passed. The pump was released for service.

Systems Control Center (SCC)

April 2021 pumpage was 6% higher than April 2020



WATER OPERATIONS (continued)

Energy, Research & Innovation

Power Metering

Analysis of the Wick Booster Station metering showed that the meter for reservoir pump #1 was not measuring power demand when the pump was running. Voltage and amperage were being measured, but real and reactive power were not. Analysis of the meter phasor concluded that the meter current transformers (CTs) were not wired properly. We conducted a site visit with the electric shop to correct the issue. The CT wiring was changed but the demand energy still appeared inaccurate. The contractor is scheduling a site visit to debug and commission the pump meters and investigate the discrepancy between the DTE meters and our meters on the mains.

Electrical Costs vs. Budget Tracking

A report was developed for the water treatment plants and the treated water transmission system facilities electrical costs vs. the electrical budget. This report will help accurately establish future budgets and track our performance compared to the current budget and show the impact of production.

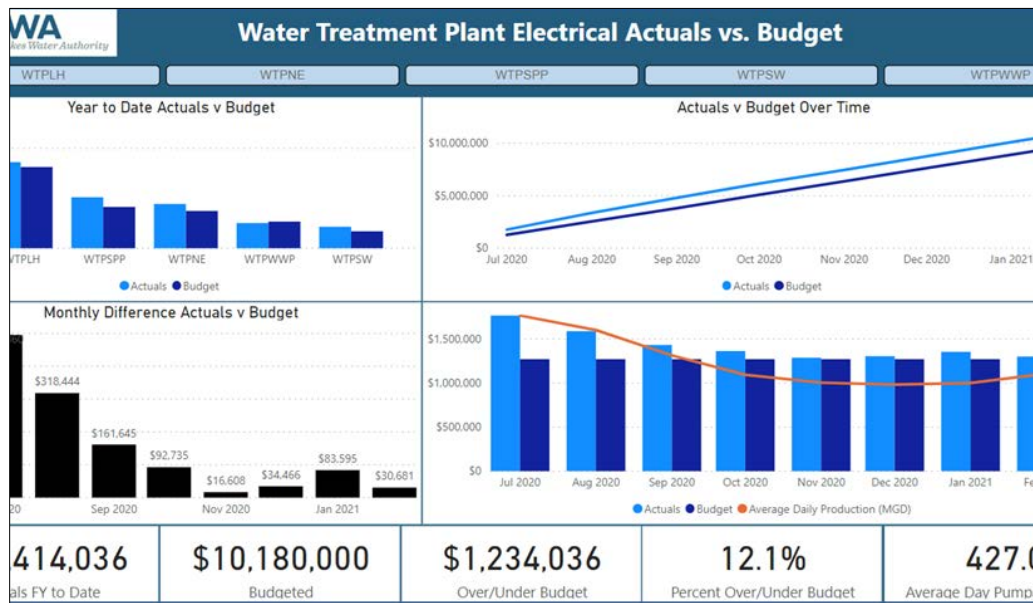


Figure 1 – Franklin water and energy demand

Transmission Main Asset Management

GLWA team members have been heavily involved with the Water Research Foundation (WRF) prestressed concrete cylinder pipe (PCCP) asset management project.

WATER OPERATIONS (continued)

Team member involvement includes attending weekly project team meetings, periodic meetings with subconsultants, meetings to coordinate this research effort with other GLWA linear asset management research efforts, meetings with other relevant technology providers, as well as numerous meetings with other utilities to gather information, learn from their internal best practices, and to align and coordinate deeper understanding of different approaches and methods.

GLWA team member involvement has also included the development, support, and or review of a multitude of research and professional papers stemming from this project.

These papers include the following:

1. *GLWA WRF Tailored Collaboration Project 5069: Management of PCCP to Extend Asset Life*
2. *In Situ Structural Health Monitoring of Structurally Renewed Water Transmission Pipes*
3. [*Piloting Innovative Approaches to Pipe Structural Renewal and Monitoring Methods*](#)

Engineering

Contract No. 2000610 “Yard Piping, Valves and Venturi Meters Replacement at Water Works Park”

The contractor has been advancing the site work for the new plant entrance, new security station and associated drives for Water Works Park (WWP). This has included selective demolition of existing driveways on the west side of the property as well as excavation for the new roads. Since WWP has been in use for over 150 years, construction crews have uncovered a variety of abandoned utility lines that were not shown on available record documents. They have removed and/or relocated these, as well as existing utilities that conflict with the new entrance road alignments. This work has also included the installation of new catch basins and drains to convey stormwater. In the next few weeks, crews will begin pouring curbs and pavement that connect the new entrance east to the Water Quality Building and south to the plant. Electrical crews have also begun running conduit from the plant that will provide power and IT connection to the new security station and site entrance.

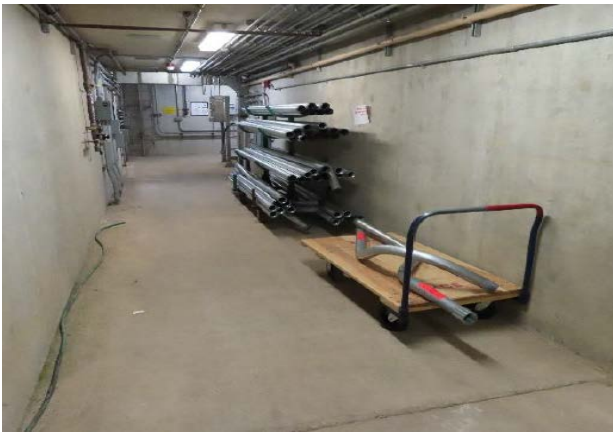
In preparation for work that will begin later this year to replace the eastern half of the yard piping, the contractor has been doing investigative excavations on the water mains that leave WWP. This work is required to order the necessary materials and equipment for line stops that will be needed to isolate the mains that will be replaced.

WATER OPERATIONS (continued)



Pictured left to right:

- 1. Unmarked abandoned pipe found during excavation for the new road connecting to the Water Quality Building*
- 2. Installation of sub-base for road connecting to the plant.*



Pictured left to right:

- 3. Running conduit in the utility tunnel to provide power and IT connection to the new security station.*
- 4. Exploratory excavation of the Bewick-Kercheval water main to collect existing conditions of the pipe.*

Facility Operations

Overhead Door Repairs

Training around Asset Management has focused our team on all assets especially in their area of responsibility in our system, including assets like overhead doors. Focus has been given to the scheduled repairs of ten doors at Water Works Park. Broken or worn-out safety edges, controls, seals, and slats are being replaced.

WATER OPERATIONS (continued)

The team has also visited other facilities, verifying and numbering overhead doors.

Doors #1 and #2 at Water Works Park



Bottom Slats and Safety Deeteriorated



Bottom Slats and Safety Edge Replaced

INFORMATION TECHNOLOGY

In the past month, the IT Security team has proactively blocked or thwarted 11,110 spam messages, 4,173 spoofed messages and 99 viruses. Additionally, 1,214 phishing attempts have been caught and 100 malware attempts have been blocked.

The IT Security team along with the IT Customer Service Delivery team continues to develop a strategy for deploying multi-factor authentication for Office 365. The IT security team has also identified a vendor for a third-party vulnerability assessment on the business and security networks. The purchase requisition has been completed and we have begun configuring the replacement for our anti-virus solution.

The IT Business Productivity Team's ongoing efforts to implement and streamline systems to strengthen GLWA's processes included:

- Reformatting training materials for GLWA's Fleet team members to be incorporated into GLWA's Learning Management System (Cornerstone).
- Improving the interface between GLWA's Human Resources Information System (Ceridian Dayforce) and Cornerstone in order to reduce manual maintenance needs and team member issues with signing onto Cornerstone.
- Improving GLWA's Asset Management team members' search capabilities with GLWA's record management system, OnBase.
- Contributing to a 1-hour advanced Smartsheet training led by a Smartsheet representative that was attended by 59 GLWA team members.
- Participating in three of four rounds of vendor demonstrations for GLWA's future Enterprise Resource Planning (ERP) software system.
- Testing for GLWA's semi-annual upgrade of Ceridian Dayforce.

INFORMATION TECHNOLOGY (continued)

The IT Infrastructure team has begun the final steps of the VOIP project and cutting over CSO's and Pump Stations. Progress continues in the effort to draft the business case and Statement of Work (SOW) for Phase 2 of the Datacenter Modernization Program. Phase 2 consists of multiple projects that include cloud migration, file share appliance replacement and backup platform replacement. A new backup platform has been submitted for purchase that will enhance our ability to back critical data on the business and security networks to a cloud solution.

The IT Customer Service Delivery Team, IT PMO, IT Infrastructure, IT Business Productivity Systems, and IT Enterprise Asset Management Systems teams in collaboration with the Financial Services Logistics and Materials and Plante Moran consulting teams completed the initial assessment and project kick-off to relocate GLWA assets, resources, and team members from the McKinstry Street and Northeast warehouses to the new Rialto facility located in Melvindale. Once completed, this project will resolve safety, security, operational and infrastructure concerns by consolidating two GLWA warehouses into one.

The IT Enterprise Asset Management Systems Team along with Enterprise Asset Management Group and Procurement continue the 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 project to the Board for approval during the later summer/early fall, start of implementation soon thereafter.

The IT Enterprise Asset Management Systems Team along with CIP Group and AECOM have finalized the draft RFP for a new Project Management Information System (PMIS) and with a plan to make it available on Bonfire on June 1st after Procurement's review and finalization.

Currently, the IT PMO is managing 30 active projects and is processing 13 project requests.

PUBLIC AFFAIRS

Drinking Water Week

For GLWA's Fifth Annual Drinking Water Week (DWW) Photo Contest, Public Affairs made a few special changes to engage more team members. This year, the contest theme was WATERful Landscape Photos. Another new – and fun – change included inviting all GLWA team members the opportunity to cast votes for the best landscape photo!

There were 32 submissions of beautiful scenic photos featuring water. Participants included team members from Water Operations, Wastewater Operations, Water and Field Services, Financial Services, System Analytics and Metered Operations, Information Technology, Industrial Waste Control, Security and Integrity and Systems Control Center.

PUBLIC AFFAIRS (continued)

Team members viewed the photos via One Water Connect and cast their vote using Survey Monkey during Drinking Water Week (DWW). A total of 203 votes were cast and it was a very close contest. The winner, CSO Control Program Engineer Kashmira Patel, was surprised by CEO Sue McCormick on Thursday, May 20, 2021. (See Kashmira's winning photo shown right). Kashmira's photo titled, *Music from God*, will be hung in the lobby of the Executive Office in the Water Board Building and featured on the cover of the WaterWorks Magazine's summer edition. Thank you to everyone who participated!



The Public Affairs team dedicated an entire week of social media content to DWW. Our content included public education links, GLWA's Thank You video highlighting our various team members and also the announcement of WWP receiving the Partnership for Safe Water's Presidents Award.

SECURITY AND INTEGRITY

The Hazmat Unit coordinated and completed a total of 207 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 "Security Threats Facing Today's Clean Water Utilities" virtual webinar. Updating the 2021 Emergency Response Plan for GLWA continues.

Security and Integrity completed GLWA's annual validation for the organization's participation in the GETS (Governmental Emergency Telecommunications Service) program.

ORGANIZATIONAL DEVELOPMENT

Apprenticeships

EICT-E: Apprentices continued their Related Training Instruction through Detroit Electrical Industry Training Center. Several apprentices worked on a special project at GLWA's Northeast Plant. The apprentices received high marks from the Northeast Plant Team Leader.

Maintenance Technicians: Apprentices continued their Related Training Instruction through Henry Ford College and are progressing well.

ORGANIZATIONAL DEVELOPMENT (continued)

Talent Management

Staffing

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

Number of New Hires	7
Number of Separations	18
Total Staffing - Regular FTEs (YTD)	1006

Benefits/Wellness

The American Rescue Plan Act of 2021 (ARPA) has modified eligibility for changes to flexible spending accounts (FSA) and added a COBRA subsidy to assist current and former GLWA team members and their families during the COVID pandemic. GLWA has implemented both provisions.

Training

During the month of **April**, **332** GLWA team members completed safety and non-safety courses. **25** GLWA team members and **2** member partners completed **31** online 360Water courses.

FINANCIAL SERVICES AREA

May 2021 Audit Committee Recap

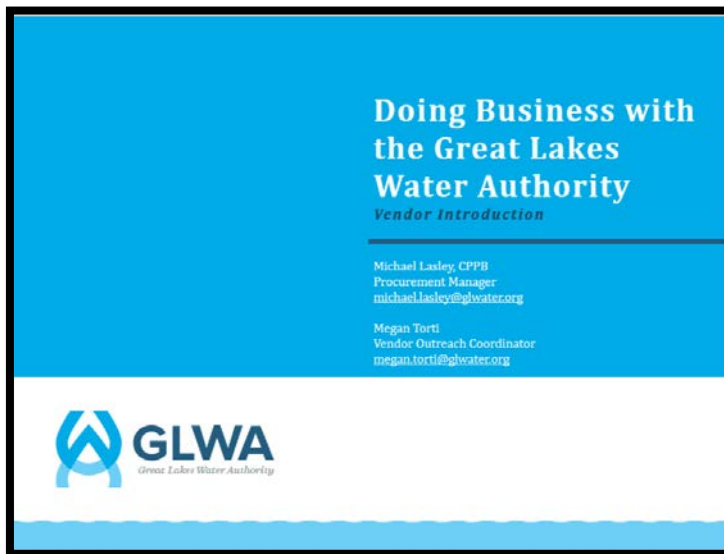
The March Audit Committee meeting was held on Friday, May 21, 2021. The GLWA Audit Committee binders are publicly available at www.glwater.org. The meeting included the following discussion topics.

- ✓ Presentation of the proposed FY 2021 3rd Quarter Budget Amendments.
- ✓ Request to submit to the GLWA Board of Directors three resolutions for approval of project plans related to submission of new SRF bond applications.
- ✓ Request to submit to the GLWA Board of Directors approval to schedule public hearings related to three, new projects for upcoming SRF loan application submissions.
- ✓ The CFO Report including an update on the Water Residential Assistance Program Redesign Implementation.
- ✓ Presentation of the February 2021 Monthly Financial Report (Executive Summary attached).
- ✓ A monthly update on the Business Inclusion and Diversity program – including finalization of the Benchmarking Study by Public Sector Consultants.

FINANCIAL SERVICES AREA (continued)

- ✓ Review of the Quarterly Investment Report and Quarterly Debt Report for the period ending March 31, 2021.
- ✓ Introduction of a new, bi-annual Transformation report highlighting key projects underway within GLWA or completed over the past six months.
- ✓ A Shared Services update outlining the current balances outstanding between GLWA and DWSD as well as a status on balance confirmations by year.

Vendor Outreach Update: Virtual Introduction Meetings



Though the COVID-19 pandemic continues to make attending, as well as hosting, in-person vendor outreach events a safety challenge, GLWA has remained as committed as ever to meeting with the vendor community virtually. To adapt to our new circumstances, GLWA began hosting one-on-one virtual introduction meetings with vendors who are interested in learning more about doing business with GLWA.

Since October 2020, Mike Lasley and Megan Torti have hosted over five virtual vendor introduction meetings

with a variety of vendors in construction, engineering, and other professional services. These introduction meetings provide vendors with an opportunity to tell GLWA about the goods and/or services that their business provides and enables GLWA to provide information, and to answer questions, on the ins and outs of doing business with GLWA. Topics include helpful information on navigating GLWA's Bonfire Procurement Portal, submitting a competitive bid or proposal to a GLWA solicitation, and the requirements for GLWA's new Business Inclusion and Diversity (B.I.D.) Program. Based on the success of these meetings to date, the Vendor Outreach Team looks forward to hosting many more of these virtual events in the future!

Procurement Pipeline

The May 2021 Procurement Pipeline edition is attached. This month features tips on navigating GLWA's Bonfire Procurement Portal, badged access requirements for the new COVID testing cycle beginning July 1, 2021, guidance on requesting virtual introductions on GLWA's Business Inclusion and Diversity Program, and information on current and upcoming solicitations.

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

Respectfully submitted,



Sue F. McCormick
Chief Executive Officer

SFM/dlr

Attachments (3)

- May Financial Report (Executive Summary)
- May 2021 Procurement Pipeline
- General Counsel's May Report



Key Financial Metrics

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

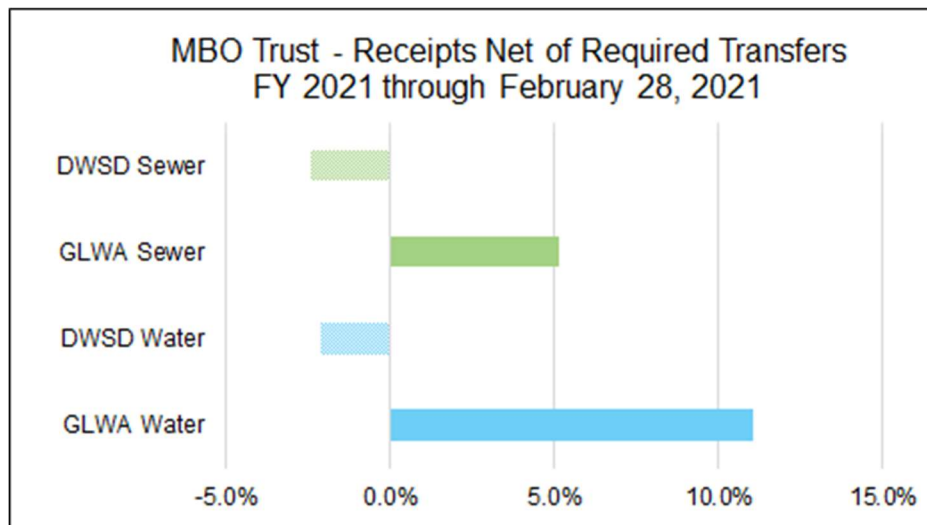
No Risk (green) - Potential (yellow) - Likely (red)

Each variance is monitored by the Great Lakes Water Authority (GLWA) management and, where appropriate, operating and/or budget priorities are re-evaluated. Budget amendments are prepared and presented quarterly based on most current information.

As of February 28, 2021				
Metric	FY 2021 Budget	FY 2021 Actual	Variance from Financial Plan	Report Page Reference
Wholesale Water Billed Revenue (\$M)	\$212.0	\$217.1	2%	45
Wholesale Water Billed Usage (mcf)	9,250,000	9,697,000	5%	
Wholesale Sewer Billed Revenue (\$M)	\$179.2	\$179.2	0%	47
Wholesale Water Operations & Maintenance (\$M)	\$89.4	\$81.3	-9%	6
Wholesale Sewer Operations & Maintenance (\$M)	\$121.5	\$108.9	-10%	
Investment Income (\$M)	\$4.6	\$5.2	13%	35
Water Prorated Capital Spend w/SRA* (\$M)	\$74.0	\$83.0	12%	27
Sewer Prorated Capital Spend w/SRA* (\$M)	\$54.0	\$55.0	2%	28

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

Master Bond Ordinance (MBO) Trust Net Receipts (page 52)



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

DWSD Water and Sewer report shortfalls of \$1.4 million and \$4.7 million respectively through February 2021. DWSD management is reviewing plans to resolve the current year shortfalls and will be proposing a formal plan to end the FY 2021 fiscal year with positive net cash flows.

The current DWSD loan receivable balance for fiscal years 2017 and 2018 is \$14.4 million.

Budget to Actual Analysis (page 3)

- The second quarter budget amendment which was approved by the GLWA Board on April 28, 2021 is reflected in the FY 2021 Amended Budget columns on the tables in the February 2021 Budget to Actual report.
- The total Revenue Requirements are on target through February 2021.
- The total Operations & Maintenance expenses are at 60.1% of budget through February 2021 which is reasonably within the pro-rata benchmark of 66.7%.

Basic Financial Statements (page 10)

- The Basic Financial Statements are prepared on a full accrual basis and reflect preliminary, unaudited results.
- Operating income for February 2021 is \$68.7 million for the Water fund (29.6% of total revenues) and \$103.8 million for the Sewer fund (32.9% of total revenues).
- Water Net Position decreased by \$4.5 million, and Sewage Disposal Net Position increased by \$21.5 million for the year to date through February 2021.

Capital Improvement Plan Financial Summary (page 26)

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

Master Bond Ordinance Transfers (page 29)

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

Cash Balances & Investment Income (page 35)

- Total cash & investments are \$499 million in the Water fund and \$445 million in the Sewer fund.
- The total combined cumulative investment income for FY 2021 through February is \$5.2 million.

DWSD Retail Revenues, Receivables & Collections (page 40)

- Water usage through February 28, 2021 is at 92.32% and revenues at 93.65% of budget.
- Sewer usage through February 28, 2021 is at 93.04% and revenues at 98.33% of budget.
- Combined accounts receivable balances for the water and sewer funds report an increase of \$27.6 million over the prior year.
- Past dues over 180 days make up 64.5% of the total accounts receivable balance. The current bad debt allowance covers 100% of past dues over 180 days.

GLWA Wholesale Billing, Receivables & Collections (page 45)

- GLWA accounts receivable past due balance net of Highland Park is 4.0% of the total accounts receivable balance.
- The Highland Park past due balance is \$46.7 million. It includes \$35.6 million for wastewater treatment services, \$1.8 million for industrial waste control services, and \$9.3 million for water supply services. In FY 2021, Highland Park has made five payments totaling \$2.3 million through February 2021.

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

Welcome to the May 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: Navigating GLWA's Bonfire Procurement Portal

Navigating GLWA's e-procurement software Bonfire, our centralized portal for all Requests for Proposal (RFPs) and Requests for Bid (RFBs), is key to doing business with GLWA. Below are some tips on making the most of Bonfire's features.

1. All open GLWA solicitations, as well as past public opportunities and public contracts, are viewable in the GLWA Bonfire [Procurement Portal](#). Please note that if an upcoming solicitation listed in the monthly *Procurement Pipeline* is not viewable in the Procurement Portal, this means that it has not yet been advertised in Bonfire.
2. Select the commodity codes that best reflect the goods and/or services that your business provides to receive automatic solicitation notifications tailored to you. (For information on selecting your commodity codes, and on the [NIGP commodity codes](#) GLWA uses, please see the [September 2020 Procurement Pipeline](#)).
3. When registering in Bonfire or updating your profile, provide the full and unabbreviated name of your company. Additionally, always maintain recent and up-to-date contact information to ensure that you receive all GLWA Vendor communications. Consider using a distribution-style email address to account for any employee turnover.
4. Lastly, if you experience technical difficulties while navigating Bonfire, contact Bonfire [Technical Support](#). This feature provides multiple means of support to vendors, including a search function for articles and video tutorials as well as an email contact form to communicate directly with the Bonfire technical support team.

Please remember that the GLWA Buyer of Record, always noted in the advertised solicitation in

Bonfire, is the **only** GLWA point of contact throughout the solicitation process. This helps to ensure that the procurement process remains fair and transparent for all vendors.

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

The new COVID-19 testing cycle for Badged Access visitors will begin on July 1, 2021. Periodic testing may be required after this date on the same cadence with GLWA team members. In addition, GLWA will waive the COVID-19 testing requirement for all Badged Access visitors who provide documentation that they have received a full COVID-19 vaccine. For more information on these protocols, please see [Coronavirus Update #112](#), available on the [vendor webpage](#). 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.

Where to Meet GLWA

We welcome you to join us at the "Real Talk Wednesday" virtual webinar, hosted by the Michigan Department of Transportation (MDOT), on May 19, 2021 from 10am-12pm. Please contact [Kathleen Jones](#) and [Ann Williams](#) for the event link. All businesses are welcome to join!

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 May 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
Wastewater System (next three months)		
Construction	Rehabilitation of Outfalls – Phase III (B-39) (CIP #260508)	\$7,000,000
Design Build	Control System Upgrade – St. Aubin, Leib, and 7 Mile CSO Facilities (CIP #360619)	\$7,000,000
Design	WRRF Rehabilitation of the Circular Primary Clarifier Scum Removal System (CIP #211009)	\$2,000,000
Design Build	Baby Creek Outfall Improvements (CIP #260521) (CSO)	\$10,000,000
Design	St. Aubin Disinfection and Screening Improvements (CIP #260617) (CSO)	\$1,000,000
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
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
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	TBD
Construction	Pump Station #1 Screenings Building HVAC Improvements (CIP #211006)	\$1,000,000
Construction	Connor Creek Sewer System Rehabilitation (CIP #260208)	\$24,000,000
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 S #1 Improvements (CIP #211006)	\$55,000,000
Design Build	WRRF Structural Improvements (CIP # 216011)	\$12,000,000
Enterprise (next four to nine 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



Office of the General Counsel

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Detroit, Michigan 48226

Office of the General Counsel – May, 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 as 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 one of the communities 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.
- **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. In the past month, GLWA was named in a lawsuit claiming various employment related claims.
- **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:	39
Contracts drafted or revised:	95
Subpoenas/Information requests received:	4
Subpoenas/Information responded to:	3