The Honorable
Board of Directors
Great Lakes Water Authority

Dear Chairperson Zech and Directors:

Regarding: CEO's Report – March, 2021

GLWA has now marked the one-year point in its response to the coronavirus (COVID-19) pandemic. I doubt that any of us would have expected that a full 12 months from when we first opened our Emergency Operations Center (EOC) on March 11, 2020, the way we work and live would still be so greatly impacted.

As we reach this important milestone, I want to express my heartfelt thanks to our GLWA team members for their hard work and dedication. Thanks to their steadfast commitment to the region, we have continued to provide uninterrupted access to water of unquestionable quality, as well as safe, sanitary, and environmentally sustainable wastewater treatment.

Throughout the last year, GLWA has done everything within its power to keep our team members safe, including implementing a broad range of critical operational changes, conducted regular testing and provided access to vaccinations through a partnership with the City of Detroit.

Thanks to all of these efforts, as well as our team members’ ongoing commitment to following COVID-19 safety protocols such as social distancing, mask wearing and hand washing, GLWA has not experienced a virus outbreak at any of its facilities. In fact, at no point throughout the last year has GLWA’s positive rate for confirmed COVID-19 cases come near to (or exceeded) the generally accepted three percent positive rate that indicates a successful control of the spread of the disease. GLWA’s highest positive rate for confirmed cases was 1.84 percent in November 2020, which occurred at the height of the second wave of the virus in our country and was still below the 1.89 percent recorded by the state for that month.
In keeping with GLWA’s efforts to coordinate asset management projects for the benefit of the region, we have been working actively with the Michigan Infrastructure Council (MIC), as it develops tools to make this cross-sector collaboration possible throughout the state. I am excited about the opportunities for public and private infrastructure coordination that will be created through the MIC’s new ‘Dig Once’ project portal. Known as “The Portal,” this new tool enables infrastructure owners in both public and private infrastructure sectors to document future construction. Using Geographic Information Systems (GIS) technology, The Portal alerts owners of overlapping projects and provides contact information, enabling the opportunity for a “dig once” approach at a work site. Having access to this tool will assist GLWA and its infrastructure partners throughout the region in continuing to maximize public investment while also minimizing disruptions to public right of way. GLWA is in good company with the other initiating partners on this project and looks forward to many others adding in their planned projects.

Staying on the topic of collaboration, at the March One Water Partnership meeting, I had the honor of presenting Tim Prince, Chief Manager for the Oakland County Water Resources Commissioner (OCWRC) with GLWA’s highest honor, the Fleetham Collaboration Award. As a representative of the OCWRC, Tim has been active in GLWA’s Member Outreach Program for many years, with his collaborative leadership resulting in more than a few breakthrough moments during important initiatives, including our recent Wastewater Master Plan development. Congratulations, Tim, it’s a well-deserved honor!

**PLANNING SERVICES**

*Asset Management (AMG)*

The latest addition to our family of asset management programs, is the Linear System Integrity Program or LSIP. The LSIP is a proactive condition assessment program for our transmission main system. Because the water transmission system is intentionally closed, getting into it to assess the condition of the pipes is challenging. It requires coordination with operations and member partners, and in many cases, the construction of access points to introduce and extract equipment. The risk based LSIP leaves behind the time-driven, cyclical approach that has been used for many years in the water sector and makes way for a data and risk-based approach.
We prioritize condition assessments based on probability and consequence of failure and plan for replacement of only specific lengths of pipe. This “smart” surgical approach saves millions of dollars in capital investment over time. In the coming months, the Asset Management Group will bring a contract for consulting services to take this program from the pilot phase to full execution.

The Asset Management Group along with Systems Control Center team members recently completed training of a new software platform, Trimble Unity, which has a mobile application to allow for data collection in the field. The training was conducted in coordination with the contractor who is currently rehabilitating our wastewater collection system. With the broader implementation now in full swing, the contractor will begin recording scheduled sewer rehabilitation work using the software in the field. We will be using it to track all associated assets being renewed. This allows us to ensure asset management strategies are being optimized, while real-time data is being captured. Data captured through this process will be used to create dashboards and reports that various groups and teams throughout GLWA can utilize in a variety of ways to better understand and address system needs. This data will be used in the upcoming LSIP to assist in prioritizing sewer assets for rehabilitation work as well as tracking existing rehabilitation work.

**Capital Improvement Planning (CIP)**

It is often asked if CIP stands for Capital Improvement Plan or Capital Improvement Program. The answer is “yes”. We have responsibility to both produce the annual update to the CIP Plan and to lead the cross-functional and authority-wide CIP Program.

In February, we achieved the annual milestone of Board adoption of the FY 2022 through FY 2026 Capital Improvement. This is a shared accomplishment of one of our most varied cross-functional teams, including wastewater and water engineering, multiple groups in the Financial Services Area, our operational partners and many others who worked diligently with us to produce this high-quality plan. Thanks to everyone for your efforts.

On the CIP Program side of the work, the CIP Group continues to work diligently with AECOM in making program advancements. The work is multifaceted including concentrated efforts to improve business processes, evaluating potential changes in roles and responsibilities, assisting in the implementation of a Program Management Information System, standing up more robust program budget and schedule controls, including initial dashboards that can be utilized by various team members to “turn on the lights” and see status and statistics related to the complex program and lastly, providing significant staff augmentation resources. These efforts are in full swing with dozens of participants in many cross-functional team meetings living out the fundamental principal of “people support what they create”.

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**Trimble Unity**

Meaningful insights, Better results. Smarter water management.

Trimble Unity software platform offers a suite of applications and tools to support smart water management. Includes advanced workflows to map, manage, measure and improve asset performance, reduce operations costs, and improve public health and safety.
PLANNING SERVICES  (continued)

Systems Planning

The Member Outreach Team has developed a recommendation for the format of future Member Outreach Meetings. The team proposed a hybrid approach, allowing members a choice to participate in-person or virtually. While this may look different for each work group, the team continues to work with the IT Group to determine the technology needs to make it happen. Overall, members were supportive of the recommendation. Read on to learn more of what was shared at the March 4th One Water Partnership Meeting about this approach.

Two Member Partner communities presented at the One Water Partnership Meeting. Elizabeth Renaud, Van Buren Township’s Executive Assistant of Public Services shared their recent Public Engagement Plan, which includes branding, public education and communication, as well as numerous ways for residents to get involved. Click here to see her full presentation. Jacob Rushlow, Livonia’s Superintendent of Public Works shared Livonia’s experience with implementing a voluntary water usage restrictions policy last summer to help reduce their maximum day and peak hour demands. Click here to see his full presentation.

Finally, Lori Byron of Bridgeport Consulting, GLWA’s Third Party Facilitator shared the recommendation of a hybrid meeting approach for future Member Outreach meetings. This means that all meetings be designed to accommodate the option of virtual participation, whether that participation is one-way (i.e., livestreamed to a virtual audience) or two-way (i.e., virtual participants actively engage and contribute alongside in-person participants). The approach would be most easily implemented with a single meeting location hosted by GLWA that would have adequate spacing, two-way technology and the amenities needed for a successful meeting.

Ms. Byron shared the thought process of the team and the following principles that continue to guide us:

1. Default to safety, from a COVID-19 perspective
2. Generate interactive, engaging experience for all participants
3. Remain flexible and adjust as needed.

The next One Water Partnership meeting is scheduled for June 3rd at 10:00 a.m. via Zoom.

The CIP Work Group met on February 9th with over 65 participants, and a lot of new faces! Participants heard an update on the FY 2022 through FY 2026 Capital Improvement Plan and the Capital Program Management Project from Donal Barron of AECOM. Mr. Barron shared a brief overview on each of the ten tasks in the project.
Michael Lasley, GLWA’s Procurement Manager shared the exciting news of GLWA’s Business Inclusion & Diversity Program that began February 1st. He also shared an update on the Task Order Engineering Services Contract. The next CIP Work Group meeting is planned for June 8th.

On February 10, 2021, a special meeting of the Watershed Hub Work Group was held where representatives from watershed councils in the Clinton, Rouge, Detroit, and Huron River Watersheds were invited to learn about multiple water quality monitoring initiatives being stewarded by the Work Group. The content shared at this meeting was a preview for the second public stakeholder webinar hosted by the Watershed Hub Work Group on March 2, 2021, where the core Work Group shared progress and requested feedback from nearly 100 interested parties. Each meeting began with a brief background of the Watershed Hub’s mission and origins by Sherri Gee of GLWA followed by Dan Gold of GLWA giving a high-level overview of three water quality monitoring efforts currently in different phases ranging from early development to implementation. Next, Annette Demaria from Alliance of Rouge Communities presented a deeper dive into the proposed investigational E. coli grab sampling program. Then Andrea Busch of GLWA’s Energy, Research, and Innovation Team presented the details of their plans to test new technology by piloting in-stream real-time monitoring equipment and developing new DNA-testing methods to assist with source tracking at impaired hotspots. The webinar also included multiple breakout sessions and opportunities for stakeholders to ask questions and provide feedback. The next meeting of the core Watershed Hub Work Group will take place on April 13, and the next stakeholder webinar will be announced for early summer 2021.

The Wastewater Analytics Task Force (WATF) met on February 11, 2021. Kassem Ajami of GLWA presented on system analytics and meter operations, Tim Minor of ASI presented on behalf of the Oakland-Macomb Interceptor Drain Drainage District regarding their flow meter replacements activities, and Ed Hogan of Wade Trim presented on the Evergreen-Farmington Capacity Request and the Detroit Water and Sewerage Department’s Far West Detroit Green Infrastructure project. These presentations were followed by a brief overview and update from Carrie Turner and Dante Zettler of Limnotech regarding their work on the Long-Term CSO Control Plan Update.
February 2021 Member Outreach Meeting Attendance

<table>
<thead>
<tr>
<th>Meeting</th>
<th># Attended</th>
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<tbody>
<tr>
<td>CIP Work Group (2/9)</td>
<td>66</td>
</tr>
<tr>
<td>Watershed Hub Work Group (2/10)</td>
<td>23</td>
</tr>
<tr>
<td>Wastewater Analytics Task Force (2/11)</td>
<td>36</td>
</tr>
</tbody>
</table>

**Systems Analytics and Meter Operations (SAMO)**

The Group continues its progress working on wholesale water meter pit rehabilitation and meter replacement program. Last month coordination meetings were held with the City of Farmington Hills, City of Hazel Park, City of Livonia, Macomb Township, Orion Township, and City of Romulus. The planned work has been completed at 37 of the 58 water meter pit locations and is underway at another six locations.

In addition to the WATF meeting noted above, a special WATF meeting was held on March 11, 2021 to present FY 2020’s flow balance. The flow balance identifies various elements of wastewater flows including member partner specific contributions and its data is used to update SHAREs. The meeting began with a presentation by Bart Foster on the hypothetical impact of FY 2020 flow data on Sewer SHAREs calculations. This is a new element of our flow balance reporting and makes a direct tie from wastewater flow analytics to SHAREs. It is hypothetical because our SHAREs method will only update flows after three years. This look at one year into the process gives member partners a glimpse of where the data is heading and allows them to consider actions if unexpected flows or anomalies are noted. CDM Smith presented on the main topic, the flow balance itself.

CDM’s presentation included a focus on four special circumstances including DWSD’s reduction in dry weather inflow and infiltration, Grosse Pointe Farms flows, the impact on river inflow due to high river levels, and the identification of changes in base sewer flows related to the COVID-19 pandemic in some communities.

*Figure 1: Reduction in Base Flow for Allen Park and Dearborn related to COVID-19*
WASTEWATER OPERATING SERVICES

Wastewater Operations

Water Resource Recovery Facility (WRRF) operations complied with the Water Quality Standards for February 2021 with one exception. At one monitoring point, the primary effluent monthly average CBOD (carbonaceous biochemical oxygen demand) exceeded the limit. This was the first wet weather flow event in ten weeks, and all parameters on the first day’s sample were elevated, probably reflecting a worse “first flush” condition than usual because of the long-time interval between wet weather events.

Maintenance

At the WRRF’s chlorination and de-chlorination facility the Secondary Team has been working with a construction contractor to perform in-house maintenance to resize the process piping to match the current demands of the system. The contractor has upgraded the evaporators, chlorinators, and sulfonators and cleaned and painted many of the large pipes.

The Secondary Team has been doing clean up, removing smaller unused lines, and then blanking off any open lines that are no longer in use. It has been a team effort, but the end results are a cleaner, safer, and more efficient work environment.

Process Control Center (PCC)

The Process Control System (PCS) Team prepared for the Ovation Control System Upgrade that will be replacing all 70 workstations and upgrading all 56 controllers at the WRRF. Preparation work includes planning the transition from the existing system to the new system, setting up a test system to perform an on-site/offline acceptance test and operation testing.

The upgrade will include a scheduled outage of the Ovation system during which Plant Operations will manually control the critical process areas that will remain in service.
WASTEWATER OPERATING SERVICES (continued)

The upgrade plan is an extensive document that details the entire sequence. It includes pre-outage activities, replacing workstations, upgrading controllers, and the orderly restoration of the upgraded system.

A standalone Ovation control system was assembled on the 3rd floor of the New Administration Building to perform testing prior to deployment. The test system includes the 70 computers that will be eventually moved to the field along with 56 spare controllers which were placed on an isolated network. The extensive test plan includes hardware testing, verification of software load sets and licensing. Functional testing of all control applications is being verified.

Operational testing was performed in three process areas in preparation for the upgrade. This testing included placing process equipment in local control, an orderly shutdown of controllers, documenting any anomalies to process equipment, running the process area in local control, then powering up the controllers, documenting any issues, and transitioning from local to automatic control.

Laboratory

The move from the old analytical laboratory located at 2727 Second Ave. (MCHT) to the WRRF is completed.

Chemists have now completed training on the new ICP (Inductively Coupled Plasma) systems. Validation of these systems is now in process with completion expected by the end of March 2021.

The Sample Receipt and Distribution areas have completed 5S training. The next areas to be addressed will be the BOD (biochemical oxygen demand) and Ammonia Lab areas.

Industrial Waste Control (IWC)

As of February 28, 2021, in response to the presentations that were made to introduce the Pretreatment Rules to the communities and requesting a community resolution adopting them, we have now received and acknowledged 75 (96%) executed agreements.

The US EPA created a Dental Discharge Category which required the submission of a one-time only compliance report by October 21, 2020 addressing practice controls for Mercury from amalgam removal. GLWA’s obligations included (i) providing notice to this class of users within our service area, (ii) receiving and reviewing reports, and (iii) identifying non-complying users. We have received 852 reports or responses and identified 183 non-complying users as of February 28, 2021. This information will be reported to Michigan-EGLE in our Annual Report (filing date April 1, 2021). No future reporting will be made on this topic. In Complex II Incinerators, recently installed screw feeder systems on MHIs #7 through #10 are experiencing frequent flareup and fire in the noticeably short period of operation. A
WASTEWATER OPERATING SERVICES (continued)

Engineering & Construction

Design Engineering

An investigation discovered several deficiencies in the design and fabrication. In addition, these issues also resulted in increased slagging and clinkering as well. It was noted that there were several design deficiencies with equipment configurations, etc. GLWA will follow-up with the Design Engineering Group for its input. In the meantime, GLWA had removed the existing sludge feed drop chute and repaired the bearings of the flap gates so they do not get stuck in the closed position which prevents sludge feed.

There are various, but minor damages, to the grating floors through the Complex II Incineration Building. A JOC is being developed to receive unit prices for the repair. Completion is expected by the middle of April 2021.

Construction Engineering

Rehabilitation of Primary Rectangular Clarifiers (Package A), Rehabilitation of Electrical/Mechanical Buildings and Pipe Gallery of Rectangular Primary Clarifiers (Package B), and Replacement of Rake Arm Assembly for Circular Clarifiers Nos. 15 and 16 (Package C) under Contract PC-757 has been completed.

Package “A” is the rehabilitation of the twelve (12) Rectangular Primary Clarifiers. Its scope includes the removal of existing sludge and scum collection equipment inside the clarifiers and their replacement with new mechanical conveyance systems such as longitudinal and cross collectors, scum troughs, rails and beaches. Concrete repairs and crack injection inside the clarifiers were also included.

Package “B” is the rehabilitation of the Electrical/Mechanical buildings and Pipe Galleries of the Rectangular Primary Clarifiers. Its scope includes the removal and replacement of eight new make-up air units, removal and replacement of 12 sludge pumps, installation of five new sump pumps, and removal and replacement of piping for secondary seal water, compressed air and natural gas.

Package “C” is the replacement of the Rake Arm Assemblies for Circular Primary Clarifiers Nos. 15 and 16. Its scope includes replacing the center drives, center drive cages, influent dispersion wells and supports, painting of clarifier bridges, new clarifier perimeter handrails and chain link fabric.

Contract times and milestones:
A. Original Contract Amount: $51,905,000.00
B. Start Work Date: July 18, 2016
C. Original Substantial Completion Date: November 17, 2019
D. Original Final Completion Date: May 18, 2020
WASTEWATER OPERATING SERVICES (continued)

Contract final price and milestones thru Change Order No. 3-Final

A. Revised Substantial Completion Date: November 30, 2020
B. Revised Final Completion Date: January 30, 2021
C. Credit to GLWA in Change Order No. 3: $437,402.75
D. Contract Final Price: $51,467,597.25

All the scopes of work in the three packages noted above were completed and are currently in service. Training has been provided and preliminary O&M manuals have been distributed to Operations and Maintenance staff.

As-built drawings, and final O&M Manuals have been submitted and reviewed and will soon be posted on GLWA SharePoint. The Contract final completion was achieved on January 30, 2021.

As of the end of February 2021, the final pay estimate no. 48 has been drafted and will soon be issued. The retention amount of $2,595,250.00 will be released after receiving all the close out documentation from the Contractor. With the release of retainage, the Contract will officially be closed.

Package (A)

Clarifier drives, disconnect boxes and Drive covers (Typical clarifiers 1 – 12) Drives and covers. In the foreground to the left make up air unit is shown (typical of 8)
Congratulations to the WRRF Construction Engineering Team members Nicolas Nicolas (Construction Engineer), Broderick Ward (Construction Inspector), Derek Bennett (Inspection Team Leader) and Philip Kora (Construction Engineering Manager) for successfully administering/managing and completing this $50M CIP project and providing a rehabilitated primary clarifier system to Wastewater Operations for many anticipated years of reliable service!
CSO Control Program

The CSO Team is working on the following projects:

- **CIP 274001, 278001 – Leib and Oakwood Facility Improvements.** We are currently developing RFPs for improvements to Leib and Oakwood. We anticipate having these RFPs completed and to procurement in early July 2021.

- **JOC Task 29 – Baby Creek Chemical Tank Relining.** This project should be resuming in March 2021 to begin making progress on chemical storage tank relining. We anticipate eight to twelve months until full completion.

- **JOC Task 51 – Conner Creek Flushing Improvements.** This project was put on hold for bidding through the JOC until July 2021 to properly coordinate with DB 226 (Improvements to the DRI which affect flows to the Conner Creek CSO Basin).

WATER OPERATIONS

Water Quality

*Water Quality Laboratory Chemist Team performing Bactobox Analysis*

Water Quality chemists along with GLWA Research & Innovation have been working on a research project using the Bactobox instrument to measure cell counts in the Water Works Park water treatment chain and doing a comparison study in the distribution system on low chlorine residual total coliform rule (TCR) samples.

The Bactobox is a benchtop impedance flow cytometer that pumps a water sample through a sample cell where two electrodes apply the current. The impedance of the electrical current is measured at multiple frequencies to give a count of the number of intact bacteria that pass through the sample cell. The technique is performed at room temperature and is very fast. This type of research is beneficial to GLWA and the water service sector as quick turnaround times are essential to protecting the water supply and public health. This project will help in understanding regrowth potential within the treatment plant and the transmission system.
WATER OPERATIONS (continued)

Water Works Park

Filter No. 3 Comprehensive Inspection

Regular filter inspections are key in running a successful water treatment plant. A proper filter inspection requires advance planning, organization, and alignment between the inspection team, safety team, and laboratory team. For the filter inspection, the team was comprised of Water Works Park (WWP) staff from operations, maintenance, engineering, and water quality, as well as GLWA Research & Innovation and Wayne State University researchers. The team performed sampling and other tasks to collect data that will shed light on the overall health of the filter. Over the next several weeks, the data will be analyzed and compiled into a report.

Systems Control Center (SCC)

February 2021 pumpage was 4.5% higher than February 2020
INFORMATION TECHNOLOGY

In the past month, the IT Security team has proactively blocked or thwarted 13,262 spam messages, 11,670 spoofed messages and 34 viruses. Additionally, 1,055 phishing attempts have been caught and 17 malware attempts have been blocked.

The IT Security team has continued finalizing review of a new endpoint detection software platform to replace Symantec Anti-Virus which its end of life is August 2021. We have also begun the business case to deploy multi-factor authentication for Office 365 to continue to strengthen our security posture for remote employees.

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

- Rolling out GLWA’s Daily COVID-19 Smartsheet form to team members at the five Water Treatment Plants and the Water Board Building, including announcements via GLWA’s emergency broadcasting system, ReadyOp.
- Presentations to the WRRF Leadership Team on sharing online files and features that GLWA has enabled in Microsoft Teams in order to increase team members’ adoption of these tools.
- Deploying a “Water Monitoring Verification Solution” tool for water technicians to use a mobile app to inspect and enter asset health details, track issues, and alert appropriate owners. Data is aggregated into reports and dashboards.
- Preparing for a 1-hour training by a Smartsheet representative, that was attended by 82 GLWA team members, and following up on questions asked during the session.
- Updating GLWA’s payroll system, interfaces, and processes in order to discontinue using a stand-alone database for maintaining driver’s license information.

The IT Infrastructure team:

- Has completed the deployment of Voice over Internet Protocol (VOIP) at Water Works Park and the Water Resource Recovery Facility.
- Is currently drafting the business case and SOW (Statement of Work) 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.

The IT Customer Service Delivery Team completed the replacement of the Print Shop Enterprise Production printers. The previous printers were over twenty years old and had exceeded end of life and support. The new more efficient production printers allow for faster, higher quality, high definition (HD) printing and increases the Print Shop’s ability to produce a wider variety of printing products such as banners, envelopes, and binders all from one device. The Customer Service Delivery Team also assisted the BPS team with the rollout of the Water Monitoring Verification Solution by accessing, testing, and deploying the devices needed to utilize the software.
INFORMATION TECHNOLOGY (continued)

The IT Enterprise Asset Management Systems Team along with Enterprise Asset Management Group, Finance, and Water and Wastewater Operations Areas have completed interviews, software demonstrations, reference checks, total cost of ownership and a vendor viability evaluation for the new Enterprise Asset Management (EAM) system. We are glad to announce that we have made a Notice of Recommendation for Negotiation in February with NEXGEN Asset Management as our next EAM system. Negotiations will be conducted over the next few months with a contract and start of implementation expected in late summer to early fall.

The IT GIS team has enabled improved access to OnBase via GIS both in the office and in the field. This allows team members no matter where they are to securely access important documents and information, they need to do preventive and corrective maintenance to the transmission water and sewer conveyance systems.

Currently, the IT PMO is managing 24 active projects and is processing 20 project requests.

PUBLIC AFFAIRS

Water Works Magazine

The 19th edition of GLWA’s quarterly news magazine, WaterWorks Magazine, written by team members for our team members was published in mid-March. The Spring edition continued to be published exclusively in a digital E-edition due to COVID-19. The magazine’s feature story was on the teamwork it took the Lake Huron Water Treatment Facility to safely conduct a Hi-Lift Suction Chamber inspection. Other articles focused tips to prevent virtual burnout, the WRRF scoring a 90 percent on its first 5S monthly audit, how vaccines work, and how Security and Integrity team members have been working to ensure our team members are safe during COVID-19. The magazine also used its centerfold, The Wandering Eye, to capture our team members furry family members.
**PUBLIC AFFAIRS** (continued)

**GLWA Continues Support of Science and Engineering Fair of Metro Detroit (SEFMD)**

The Public Affairs team facilitated GLWA’s annual participation in the 64th Science and Engineering Fair of Metro Detroit which took place on March 8 and 9, which was entirely virtual for the first time this year due to COVID-19 restrictions. Five GLWA team members from across the Authority’s operating areas joined the virtual fair as professional judges and evaluated more than 25 water-related science projects submitted by two separate student groups: Juniors (middle school) and Seniors (high school).

A total of six winners (three in each group) were selected and earned both an award certificate and a custom GLWA trophy.

**New One Water News Drop Highlights Unique GLWA/DWSD/Oakland County Collaboration**

The Public Affairs team created a new One Water News Drop video in conjunction with the media event to announce the collaboration between the Authority, the Oakland County Water Resources Commissioner and the Detroit Water and Sewerage Department – to improve the region’s public health by reducing wet weather discharges into the Rouge River.

The video explains the different projects, our collective investments, and the benefits of these projects to the southeast Michigan region. You can watch the video by clicking here.

**Flushables Video Wins National Public Education and Engagement Award**

GLWA’s internally produced public education video on the impacts of flushable wipes on our sewer systems has won the 2021 National Environmental Achievement Award in Public Education and Engagement from the National Association of Clean Water Agencies. The video included interviews with Candice Miller, Macomb County Public Works Commissioner, and Jim Nash, Oakland County Water Resources Commissioner, both highlighting the importance of how dealing with the flushable wipes problem in our region can improve our services. The video also featured the processes at the Water Resource Recovery Facility with an interview of WRRF Operations Manager Luther Blackburn Jr.

You can watch the video here.

**SECURITY AND INTEGRITY**

The Hazmat Unit coordinated and completed a total of 176.5 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 (continued)

Security and Integrity began its process with Detroit Homeland Security in planning GLWA’s participation in the statewide emergency planning exercise, in addition, beginning its process of updating the 2021 Emergency Response Plan for GLWA.

ORGANIZATIONAL DEVELOPMENT

Apprenticeships

EICT-E apprentices celebrated their one-year anniversary in February. During the month of March, the apprentices rotated to their new assignments. During their on-the-job-learning, the apprentices reported they assisted their journey workers with a number of tasks including:

- Wiring motors for mixers
- Wiring LED lights
- Installing new emergency light assembly
- Installing a temporary sump pump in a lift station
- Troubleshooting motors that affect variable resistance in a circuit
- Replacing circuit boards

Performance

The Mid-Year Performance Review for Union Team Members are underway. Seventy percent of Mid-Year Performance Reviews have been completed.

Talent Management

Staffing

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

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<tbody>
<tr>
<td>Number of New Hires</td>
<td>12</td>
</tr>
<tr>
<td>Number of Separations</td>
<td>10</td>
</tr>
<tr>
<td>Total Staffing - Regular FTEs (YTD)</td>
<td>1033</td>
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Benefits/Wellness

Recent guidance has impacted flexible spending accounts for both dependent care (DCFSA) and health care (HCFSA) for the benefit of GLWA team members.
ORGANIZATIONAL DEVELOPMENT (continued)

The temporary provisions put in place by the 2020 Consolidated Appropriations Act, have been extended via the joint notice provided by the Department of Labor, Department of Treasury and Internal Revenue Service (EBSA Disaster Relief Notice 2021-01). Updates include:

- Unrestricted carryover for DCFSA
- An increase in eligibility age for DCFSA
- Extended grace and runout periods for DCFSA and HCFSA
- Election Changes without Qualifying Life Events for both DCFSA and HCFSA

Training

During the month of February 2021, 220 GLWA team members completed instructor-led safety and non-safety courses. 130 GLWA team members and 33 member partners completed 376 online 360 Water Report courses.

FINANCIAL SERVICES AREA

February 2021 Audit Committee Recap

February’s Audit Committee meeting was held on Friday, February 26, 2021. The GLWA Audit Committee binders are publicly available at www.glwater.org. The meeting included the following discussion topics.

- Updates on the Business Inclusion and Diversity program and Water Residential Assistance Program redesign implementation.
- Audit Committee input regarding requested changes to the FY 2022 Budget and Charges recommendations made by GLWA staff.
- Introduction of proposed amendments to the Investment Policy, review of qualified financial institutions, and presentation of the Quarterly Investment Report.
- Presentation of the November 2020 Monthly Financial Report (Executive Summary attached).
- An update on Shared Services activity and prior year service analysis.
FINANCIAL SERVICES AREA (continued)

Procurement Contract Status

![Graph showing contracts initiated and executed by month for 2020 vs 2021]

For the twelve months ending December 31, 2020, the GLWA Procurement team reports a steady increase in the number of contracts initiated and executed demonstrating the team’s ongoing commitment to process improvement and its impact on organization-wide goals. The number of contracts initiated and executed through January 31, 2021 fell slightly below the prior year.

Procurement Pipeline

The March 2021 Procurement Pipeline edition is attached. This month features information on the B.I.D. Program solicitation scoring criteria, a Coronavirus update on COVID-19 visitor access requirements along with details on upcoming vendor outreach events and current solicitations.

Government Finance Officers Association Distinguished Budget Award

The Government Finance Officers Association (GFOA) established the Distinguished Budget Presentation Awards Program encourage and assist state and local governments to prepare budget documents of the very highest quality that reflect both the guidelines established by the National Advisory Council on State and Local Budgeting and the GFOA’s best practices on budgeting and then to recognize individual governments that succeed in achieving that goal.
FINANCIAL SERVICES AREA (continued)

The GLWA Financial Services Area (FSA) submitted the FY 2021 & FY 2022 Biennial Budget and related FY 2021 through FY 2025 five-year financial plan to the GFOA for review and consideration for the Distinguished Budget Presentation Awards Program.

The GLWA team was recently advised they had achieved this honor for the second year in a row! GLWA is honored to be recognized once again because achieving the highest level of financial management and transparency throughout the organization is critical to long-term sustainability.

The General Counsel’s March Report is an attachment to the Chief Executive Officer’s Report.

Respectfully submitted,

[Signature]
Sue F. McCormick
Chief Executive Officer

SFM/dlr
Attachments (1)
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.

<table>
<thead>
<tr>
<th>Metric</th>
<th>FY 2021 Budget</th>
<th>FY 2021 Actual</th>
<th>Variance from Financial Plan</th>
<th>Report Page Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wholesale Water Billed Revenue ($M)</td>
<td>$137.8</td>
<td>$142.5</td>
<td>3%</td>
<td>45</td>
</tr>
<tr>
<td>Wholesale Water Billed Usage (mcf)</td>
<td>6,398,000</td>
<td>6,826,000</td>
<td>7%</td>
<td></td>
</tr>
<tr>
<td>Wholesale Sewer Billed Revenue ($M)</td>
<td>$111.6</td>
<td>$111.6</td>
<td>0%</td>
<td>47</td>
</tr>
<tr>
<td>Wholesale Water Operations &amp; Maintenance ($M)</td>
<td>$55.9</td>
<td>$55.1</td>
<td>-1%</td>
<td>6</td>
</tr>
<tr>
<td>Wholesale Sewer Operations &amp; Maintenance ($M)</td>
<td>$76.0</td>
<td>$70.5</td>
<td>-7%</td>
<td></td>
</tr>
<tr>
<td>Investment Income ($M)</td>
<td>$1.5</td>
<td>$3.6</td>
<td>140%</td>
<td>35</td>
</tr>
<tr>
<td>Water Prorated Capital Spend w/SRA* ($M)</td>
<td>$45.0</td>
<td>$49.0</td>
<td>9%</td>
<td>27</td>
</tr>
<tr>
<td>Sewer Prorated Capital Spend w/SRA* ($M)</td>
<td>$34.0</td>
<td>$30.0</td>
<td>-12%</td>
<td>28</td>
</tr>
</tbody>
</table>

*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 51)

Net cash flow receipts remain positive for GLWA Water while Sewer reports a small shortfall of $3.3 million related to the timing of payments received. This means that all legal commitments of the MBO Trust and the lease payment for the Water fund are fully funded and for the Sewer fund nearly funded to date – and that positive cash flow is available for additional capital program funding in subsequent year(s). DWSD Water and Sewer report positive net receipts of $2.0 million and $1.5 million respectively through November 2020 attributed to the receipt of anticipated Michigan CARES Act funding.

The current DWSD loan receivable balance for fiscal years 2017 and 2018 is $19.0 million.

All amounts are unaudited unless otherwise noted.
Executive Summary Dashboard
for the Month Ended November 30, 2020

Budget to Actual Analysis (page 3)
- The first quarter budget amendment that was approved by the GLWA Board on October 28, 2020 is reflected in the FY 2021 Amended Budget columns on the tables in the November 2020 Budget to Actual report.
- The total Revenue Requirements are on target through November 2020.
- The total Operations & Maintenance expenses are at 39.7% of budget through November 2020 which is reasonably within the pro-rata benchmark of 41.7%.

Basic Financial Statements (page 10)
- The Basic Financial Statements are prepared on a full accrual basis and reflect preliminary, unaudited results.
- Operating income for November 2020 is $44.7 million for the Water fund (29.5% of total revenues) and $62.0 million for the Sewer fund (31.5% of total revenues).
- Water Net Position increased $1.7 million, and Sewage Disposal Net Position increased $15.2 million for the year to date through November 2020.

Construction Work in Progress Summary (page 26)
- Both the Water and Wastewater systems are exceeding 75% of the Capital Spend Ratio.

Master Bond Ordinance Transfers (page 29)
- For November, transfers of $13.6 million and $18.3 million were completed for the GLWA Water and Sewer funds, respectively.
- Also for November, transfers of $4.7 million and $7.7 million were completed for the DWSD Water and Sewer funds, respectively.

Cash Balances & Investment Income (page 35)
- Total cash & investments are $530 million in the Water fund and $433 million in the Sewer fund.
- The total combined cumulative investment income for FY 2021 through November was $3.6 million.

DWSD Retail Revenues, Receivables & Collections (page 40)
- Water usage through November 30, 2020 is at 92.85% of budget and revenues at 93.84% of budget.
- Sewer usage through November 30, 2020 is at 92.24% of budget and revenues at 97.26% of budget.
- Combined accounts receivable balances for the water and sewer funds report an increase of $4 million over the prior year.
- Past dues over 180 days make up 65% 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 balances (net of Highland Park) continue to be higher than usual due to mail delivery issues and COVID-related collection issues although total past dues still remain below 2% of the total accounts receivable balance.
- The Highland Park past due balance is $45.5 million, includes $34.7 million for wastewater treatment services, $1.7 million for industrial waste control services, and $9.1 million for water supply services. In FY 2021, Highland Park has made three payments totaling $1.7 million through November 2020.

Questions? Contact the Office of the Chief Financial Officer at CFO@glwater.org
Welcome to the March edition of The Procurement Pipeline, a monthly newsletter designed to provide informative updates on doing business with the Great Lakes Water Authority (GLWA).

Business Inclusion and Diversity (B.I.D.) Program: Economic Equity and Development (Solicitation Scoring Criteria)

As a regional water authority and partner to the business community, GLWA is committed to providing economic development opportunities within the state of Michigan and the GLWA service territory in which we operate. Therefore, in addition to the Business Inclusion & Diversity Plan requirement, all solicitations budgeted at $1 million or more will include the following scoring criteria:

- 1% - Business Presence in State of Michigan;
- 1% - Business Presence in GLWA service territory;
- 1% - Business Presence in an Economically Disadvantaged GLWA service territory.

A cumulative total of 3% points may be added to the overall bid or proposal score. In both a Request for Bid (RFB) and Request for Proposal (RFP), this means that 97% out of a possible total of 100% refers to the vendor’s bid or proposal, with the remaining 3% accounted for by the B.I.D. solicitation scoring criteria.

To receive these percentage points, vendors will complete and submit a B.I.D. Program Questionnaire in Bonfire indicating if they have a business presence in the above three categories. Please see the Business Inclusion and Diversity Program Requirements, available on the GLWA vendor website, for a full list of the qualifying communities and counties within GLWA’s service territory.

For additional information about B.I.D. Program scoring criteria, GLWA also strongly recommends that vendors attend pre-bid and pre-proposal meetings for all B.I.D. Program-qualifying solicitations.

Coronavirus Update #105: New Visitor COVID-19 Access Requirements

On March 5, 2021, GLWA issued Coronavirus Update #105 outlining New Visitor COVID-19 Access Requirements that will go into effect on April 5, 2021. The following topics are addressed in full detail in Coronavirus Update #105:

1. Visitor Access Levels;
2. New Visitor Questionnaire Requirements;
3. New Visitor Testing Requirements;
4. Badged Access Process and Approvals;
5. Non-Badged Access Process and Approvals;
6. Delivery Driver Access Process and Approvals;
7. COVID-19 Vaccines & Vendor Community

Coronavirus Update #105 is located on the GLWA vendor website. We thank the vendor community for their cooperation with these safety measures as we work together to maintain the health and safety of the workplace. If you have any additional questions regarding these matters, please contact Michael Lasley and Megan Torti.

Where to Meet GLWA

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

- MDOT 40th Annual DBE Small Business Development Conference Zoom webinar on March 23, 2021. 8am-2pm. Event registration link;

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 March 2021

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>Budget Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Water System (next three months)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maintenance Services</td>
<td>5-Year Sludge Removal and Disposal Services at Northeast, Springwell's &amp; Southwest Water Treatment Plant (WTPs)</td>
<td>$55,000,000</td>
</tr>
<tr>
<td>Maintenance Services</td>
<td>Skilled Trades Contract</td>
<td>TBD</td>
</tr>
<tr>
<td>Engineering</td>
<td>North Service Center Pumping Station Improvements (CIP #132016)</td>
<td>$10,000,000</td>
</tr>
<tr>
<td>Construction</td>
<td>Phase II – 14 Mile Transmission Loop Project (CIP #122013)</td>
<td>$91,000,000</td>
</tr>
<tr>
<td>Construction</td>
<td>Northeast WTP Floculator Improvements (CIP #112006)</td>
<td>$11,000,000</td>
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<tr>
<td>Construction</td>
<td>Springwells Water Treatment Plant Medium Voltage Electrical System Replacement (CIP #114002 Project B)</td>
<td>$45,000,000</td>
</tr>
<tr>
<td>Design Build</td>
<td>Belle Isle Seawall Rehabilitation (CIP #116005)</td>
<td>$1,740,000</td>
</tr>
<tr>
<td><strong>Wastewater System (next three months)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td>Rehabilitation of Outfalls – Phase III (B-39) (CIP #260508)</td>
<td>$7,000,000</td>
</tr>
<tr>
<td>Design Build</td>
<td>Control System Upgrade – St. Aubin, Leib, and 7 Mile CSO Facilities (CIP #360619)</td>
<td>$7,000,000</td>
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<tr>
<td>Construction</td>
<td>Connor Creek Dike Improvements (CSO) (CIP #260621)</td>
<td>TBD</td>
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<tr>
<td>Design</td>
<td>WRRF Rehabilitation of the Circular Primary Clarifier Scum Removal System (CIP #211009)</td>
<td>$2,000,000</td>
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<tr>
<td>Design Build</td>
<td>Baby Creek Outfall Improvements (CIP #260521) (CSO)</td>
<td>TBD</td>
</tr>
<tr>
<td>Design</td>
<td>St. Aubin Disinfection and Screening Improvements (CIP #260617) (CSO)</td>
<td>TBD</td>
</tr>
<tr>
<td>Construction</td>
<td>Generator Improvements (Controls upgrades, Generator modifications) (CIP #260600)</td>
<td>TBD</td>
</tr>
<tr>
<td>Study</td>
<td>St. Aubin CSO Facility Hydraulics Analyses (Task Order Engineering Services)</td>
<td>TBD</td>
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<tr>
<td><strong>Water System (next four to nine months)</strong></td>
<td></td>
<td></td>
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<tr>
<td>Design Build</td>
<td>WTP Ovation Workstation Upgrade Project (CIP #170303)</td>
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<tr>
<td>Progressive Design Build</td>
<td>Lake Huron WTP Instrumentation and Filter Control Improvements (CIP #111006)</td>
<td>$5,400,000</td>
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<tr>
<td>Design</td>
<td>Reservoir Inspection, Design, Construction Administration, and RPR Services (CIP #170802)</td>
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<tr>
<td><strong>Wastewater System (next four to nine months)</strong></td>
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<tr>
<td>Maintenance</td>
<td>Low-Voltage Wiring</td>
<td>$7,500,000</td>
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<tr>
<td>Professional Services</td>
<td>Virtual Tour and Laser Scanning Services</td>
<td>TBD</td>
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<tr>
<td>Construction</td>
<td>Conner Creek Flushing Improvements (Job Order Contract)</td>
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<tr>
<td>Design</td>
<td>Leib Screening &amp; Disinfection Facility Improvements for Meldrum Diversion (CIP #274001) (CSO)</td>
<td>TBD</td>
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<tr>
<td>Design</td>
<td>Oakwood CSO Facility Improvements for NWI Diversion (CIP #278001) (CSO)</td>
<td>TBD</td>
</tr>
<tr>
<td>Design</td>
<td>Pilot Netting Facility Project (CIP #270001) (CSO)</td>
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<tr>
<td>Construction</td>
<td>Rehabilitation of CSO Outfall Backwater Gates (CIP #260510)</td>
<td>$5,000,000</td>
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<tr>
<td>Construction</td>
<td>Hubbell Southfield CSO Basin Pipe Hanger Replacement (CIP #260600)</td>
<td>TBD</td>
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<tr>
<td>Construction</td>
<td>HAZMAT (Hazardous Material) Building Renovation</td>
<td>TBD</td>
</tr>
<tr>
<td>Construction</td>
<td>WRRF Administration Building 4th Floor Renovation</td>
<td>TBD</td>
</tr>
<tr>
<td>Construction</td>
<td>Pump Station #1 Screenings Building HVAC Improvements (CIP #211006)</td>
<td>$1,000,000</td>
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<tr>
<td><strong>Enterprise (next four to nine months)</strong></td>
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<td></td>
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<tr>
<td>Information Technology</td>
<td>Project Management Information System</td>
<td>TBD</td>
</tr>
<tr>
<td>Professional Services</td>
<td>Document Scanning and Management Services (WRRF, Conner Creek, Enterprise)</td>
<td>TBD</td>
</tr>
</tbody>
</table>

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

### Acronyms

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

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 is evaluating MDOT’s response.

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

Water Contract Negotiations: GLWA will attempt to secure long term contracts with all communities that are not on the model contract.

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

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

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, 96% 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. GLWA filed a lawsuit against Highland Park for unpaid water, sewer and IWC invoices. With the assistance of outside counsel, the Office is preparing for the Jeffery Moyer trial. In the City of Detroit v Highland Park matter, outside counsel is taking steps to reverse a recent decision by the trial court that vacated the 2015 Judgment and entered a judgment in favor of Highland Park. GLWA filed a notice of claim against the State of Michigan for unpaid water 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:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Contracts approved as to form:</td>
<td>29</td>
</tr>
<tr>
<td>Contracts drafted or revised:</td>
<td>62</td>
</tr>
<tr>
<td>Subpoenas/Information requests received:</td>
<td>2</td>
</tr>
<tr>
<td>Subpoenas/Information responded to:</td>
<td>5</td>
</tr>
</tbody>
</table>