



735 Randolph Street, Suite 1900 Detroit, Michigan 48226

March 27, 2019

The Honorable Board of Directors Great Lakes Water Authority

Dear Chairman Baker and Directors:

Regarding: CEO's Report – March, 2019

News of the Board of Director's adoption of the FY 2020-2024 CIP and FY 20 Budget and Charges was shared with our member partners during the One Water Partnership meeting last week. Positive feedback was received for both the earlier conclusion to the process and for the outstanding results, reflecting GLWA's successful efforts in controlling costs and commitment to long term affordability. Letters to member partners advising them of their charges effective July 1, 2019 were finalized and mailed on March 25th.

The letters provided the following summary for Suburban Sewer Charges:

- Limiting the sewer revenue requirement budget to a 2.2 percent increase from the prior year;
- Improvement in Highland Park payments which lowered the bad debt charge to wholesale customers; and
- The impact of the recent amendment to the Oakland Macomb Interceptor Drain Drainage District ("OMID") service agreement where OMID will provide all maintenance and financing activities related to the Northeast Sewer Pump Station ("NESPS").

The result: Sewer charges for suburban wholesale customers will decrease by an average of 0.1 percent, rather than the 0.5 percent increase originally presented in January 2019.

The letters provided the following summary for Suburban Water Charges:

- Increasing the water revenue requirement budget by 2.5 percent from the prior year;
- Utilizing the Phase 2 Units of Service Study (USS) for GLWA's non-master metered customers as prepared by Black and Veatch;
- Implementation of the units of service from the Contract Alignment Process (CAP), which aligned the scheduled reopener dates (starting in 2022) for 80 of the 82 of GLWA's member partners on a water model contract.

The result: Water charges for suburban wholesale customers will increase by an average of 0.3 percent, rather than the 0.9 percent originally presented in January 2019.

Together these results demonstrate the lowest charge adjustments since the launch of GLWA in 2016 and four consecutive years of delivering on the "Promise" of no greater than 4% increase in the Budgeted Revenue Requirement.

PLANNING SERVICES

Asset Management

The Strategic Asset Management Plan (SAMP, CS-198) is continuing to progress exceptionally well in order to meet the anticipated July 2019 completion schedule. Recently, key areas of focus have been on the asset management vision, policy, drivers, asset hierarchy and definitions, financial and lifecycle costing strategies and the establishment of an Asset Management Plan framework, just to name a few.



Participation from across the Authority has been high with substantial input, direction and subject matter expertise from Team Members. The success of this project revolves around their engagement and our GLWA Team has exceeded expectations. Thank you GLWA Team Members for your commitment of time and resources to provide the necessary input to shape our strategic asset management direction and put us on a path for continuous improvement. It's only with your support that this project will be a success!

CIP

In preparation of the 2021-2025 Capital Improvement Plan, the CIP team has been working to develop a strategy to incorporate changes that will help to better define the business case evaluation problem statements, coordinate project stage terminology with our Procurement Team, and look for ways to refine the current project risk scoring methodology. Below is a work in progress schedule for the development of the 2021-2025 CIP:

WORKING DRAFT 2021-2025 CAPITAL IMPROVEMENT PLAN DEVELOPMENT SCHEDULE

Plan Development Process	Date	
Internal Kick-Off Meeting	Jul-2019	
Business Case Evaluations (BCEs) Due	September 16, 2019	
Water/Wastewater Review Committee Meeting	September 23, 2019	
Publish Draft #1	October 9, 2019	
Board CIP Committee Review of Draft #1	October 15, 2019	
Questions/Comments Due	November 5, 2019	
Publish Draft #2	December 6, 2019	
Board CIP Committee Review of Draft #2	December 17, 2019	
Request Board Approval	Feb-2020	



PLANNING SERVICES (continued)

Systems Planning

The Water Analytical Work Group met on Tuesday, February 26^{th} to review a presentation on redundancy in the transmission system. The 14 Mile Road and Downriver redundancy projects were discussed in detail. Tim Kuhns, Manager in Water Engineering, also shared information on the Water Works Park to Northeast Transmission Main Project. This discussion was intended to provide work group members with a thorough understanding of the project to prepare them for the project cost analysis to be shared in September. The next Water Analytical Work Group meeting is planned for Tuesday, April 23^{rd} from 9:00 a.m. -11:30 a.m. at the Westland City Hall.

The Water Management Best Practices Work Group held their first meeting of 2019 on February 27th. The group spent time doing a deep dive into the results of the Outreach Scorecard that was conducted in Fall 2018 and shared their observations and suggestions for the next iteration. The work group also decided to sponsor a workshop focused around Emergency Preparedness for Member Partners this spring.



The CIP Work Group (formerly the Asset Management & CIP Work Group), held its first meeting on March 12th. The meeting kicked off by discussing and refining the purpose statement for the work group and reviewing the meeting schedule. These meetings will be held on a quarterly basis, with the next meeting scheduled on June 11th. Ali Khraizat, CIP Director, shared the CIP Process and discussed the Capital Program Management (CPM) project scope. The Procurement Team provided updates regarding its new monthly newsletter, "The Procurement Pipeline" and the Small Business Initiative. Participants provided their thoughts on the Construction Work in Progress Report, as well as other topics they would like to see at future work group meetings.

The One Water Partnership meeting was held March 21st where the group adopted the new One

Water Partnership Bylaws. The proposed bylaws can be found by clicking here. Previously, the group was governed by two sets of bylaws:

- The Technical Advisory Committee (water) and
- The Steering Committee (sewer) bylaws.

Since the One Water Partnership Agreement was created and signed in the Fall of 2017, the co-chairs and Member Outreach team have been working to

create one combined set of bylaws. The proposed bylaws were discussed in detail at the December 13th One Water Partnership meeting and no further input had been received. Another topic at the One Water Partnership meeting was be a member project spotlight on the Detroit Water and Sewerage Department (DWSD), with Palencia Mobley highlighting DWSD's Drainage Charge Effort. If you know of a member project that would be worth highlighting at a future One Water Partnership meeting, please email outreach@glwater.org.



PLANNING SERVICES (continued)

February Member Outreach Meeting Attendance			
Meeting	# Attended		
Wastewater Analytics Task Force (2/1)	31		
Public Education Work Group (2/7)	9		
Water Quality Work Group (2/8)	24		
Communications Work Group (2/14)	16		
Wastewater Master Plan Steering Team (2/15)	32		
Charges Work Group (2/21)	51		
Water Analytical Work Group (2/26)	30		
Water Management Best Practices Work Group (2/27)	15		

The Sewer SHAREs group continues to meet approximately every two weeks. Future areas of focus include D+ metering and peaking.

Real-time controls in the sewage collection system were discussed at the March 15th Wastewater Master Plan meeting. Dr. Branko Kerkez from the University of Michigan presented on potential use and benefits of dynamic real-time controls, and Biren Saparia, Manager at GLWA, presented on dashboards being developed for Member Partners to gain insight into current conditions and sewer levels in the wastewater collection system. The first meeting of the Regional Operating Plan (ROP) Work Group was successful with engineers and operators from Member Partner systems discussing the scope of the ROP and reviewing an initial draft of the plan.

System Analytics and Meter Operations (SA&MO)

The System Analytics & Meter Operations (SA&MO) team is working on a "Wholesale Water Meter Pit Rehabilitation and Meter Replacement" project. Under this project, 50-meter sites will be rehabilitated including meter upgrades where appropriate. This work will be completed with coordination and collaboration with member partners and their respective engineering consultants and/or contractors. This past month the team conducted meetings with the cities of Allen Park, Pontiac, and Rochester Hills to plan the work on their respective meter pits.



PLANNING SERVICES (continued)

The SA&MO team recently added a new screen for the MDEQ annual pumpage/usage report under the billing screen in the wholesale automatic meter reading (WAMR) portal. GLWA's member partners are required by MDEQ to submit an annual usage report. Prior to a release of the compiled report online, member partners would have to create the report manually. The MDEQ screen was released to all users on March 6, 2019 and has received positive feedback by several member partners.

Monthly Billing Annual Billing	MDEQ	
ar: 2018 GET REPORT		
Month	Pumpage (MG)	Pumpage (Gallons)
JANUARY 2018	130.072	130,072,347
FEBRUARY 2018	101.404	101,403,601
MARCH 2018	111.620	111,620,380
APRIL 2018	104.012	104,012,489
MAY 2018	113.786	113,785,971
JUNE 2018	127,818	127,818,375
JULY 2018	149.058	149,058,296
AUGUST 2018	143.833	143,833,084
SEPTEMBER 2018	138.590	138,590,295
OCTOBER 2018	105.004	105,004,195
NOVEMBER 2018	106.686	106,685,898
DECEMBER 2018	111.418	111,418,259

TOTAL YEARLY PUMPAGE: 1443.303 MG / 1,443,303,270 Gal
AVERAGE DAILY PUMPAGE: 3.954 MG / 3.954,256 Gal

MAXIMUM DAILY PUMPAGE/DATE: 09/08/18 - 7.623 MG / 7.622,840 Gal
MINIMUM DAILY PUMPAGE/DATE: 05/16/18 - 1.528 MG / 1.527,808 Gal

The new Greater Detroit Regional Sewerage System (GDRSS) portal was released to beta testers in December 2018. Since then additional fixes and enhancements have been made. The updated portal allows for higher functionality of the site as well as provides flexibility for enhancements. It can be previewed at https://gdrss.glwater.org/m.

The GDRSS annual data compilation for year 2018 is near completion. A detailed fiscal year report has been created to demonstrate the similarities and differences in GDRSS data and an older (antiquated) report referred to as the Ovation report manager. The SAMO Team will present this new report to the Wastewater Analytical Task Force for their review and comment prior to switch over. New functionality for rain data quality assurance has been added to correct data in GDRSS.



WASTEWATER OPERATING SERVICES

Wastewater Operations

Water Resource Recovery Facility (WRRF) operations were in compliance with the Water Quality Standards for the month of February 2019.

The Great Lakes Water Authority (GLWA) received a Violation Notice VN-009057 from the Michigan Department of Environmental Quality (MDEQ) on February 15, 2019. The Violation notice captured various items ranging from May 2018 thru October 2018. The items include self-reported exceedances of water quality limitations, failure to report valid data, and failure to maintain primary pumping capacity in accordance with NPDES Permit No. MI0022802. The GLWA is working on developing a response to the violation notice.

Maintenance

February has been a busy month for the maintenance staff at the WRRF. The Incineration Team has had multiple major equipment repairs to attend to address in the Incineration area. The ramble arm broke on Incinerator #11. As a result, the incinerator had to be completely cooled to allow entry to replace the arm and teeth. Another major repair was the replacement of the motorized head pulley for the N Conveyor located on the 5th floor of Complex II Incineration.



Complex II Incineration N Belt repair in process

The Facilities Team has been busy performing a fire extinguisher audit that includes labeling the extinguishers in the New Administrative Building with signs to increase their visibility. The Facilities Team also removed three more unsightly Conex boxes (9 total since January 1st) from the plant grounds.



WASTEWATER OPERATING SERVICES (continued)

The Dewatering Team has been busy with the replacement of Dewatering Pumps #6 and #12, plus Polymer Feed Pumps #1 and #2 have been replaced.

The Central Maintenance Team is replacing old light fixtures and upgrading them with new LED fixtures that will be more efficient and allow us to apply for DTE rebates.

Engineering & Construction

Design Engineering

The WRRF Design Engineering Team continues to develop new proposals for both Capital and O&M projects around the WRRF. Some highlighted projects are:

Capital Improvement Projects:

• Requests for Proposal Development:

- o Incineration Ash System Rehabilitation this RFP is for a study to determine the most cost-effective improvements for ash disposal.
- o Pump Station #2 Rack and Grit Rehabilitation this RFP will be for study and design efforts to improve the fine screening and grit removal at Pump Station #2.
- Construction Plans and Specifications Development:
- Relocation of the Wastewater Operations Analytical Lab this design is to modify space at the WRRF to allow the Analytical Lab to move from Mid-town.
- The team is working with Noresco on development of Phase II scope for the investment grade audit project (IGA). The scope includes two energy conservation measure:
- Aeration system improvement: including operational improvements, maximizing oxygen usage, minimize losses, and expansion of our biological phosphorus removal.
- o Secondary final effluent system: including right sizing of the system, reconfiguration of the pumps with VFD's or varying size to meet demand. Evaluation and incorporating filtration system for repurposing secondary effluent for expansion of onsite use.

Operations and Maintenance Projects:

- Aeration Decks Concrete Repair this design will replace broken pre-stressed roofing panels in Decks 3 and 4.
- Complex II Heating Improvements the construction of supplemental heat in the basement is nearing completion.
- Pump Station #2 Gas Detection Repairs the installation and repairs have begun.
- WRRF IT Office Rehabilitation this design will update the IT office environment.



WASTEWATER OPERATING SERVICES (continued)

Construction Engineering

The construction of Aeration System Improvement Project (PC-796) is nearing completion. The scope of this project includes replacement of gate valves and/or actuators at select intermediate lift pumps (ILP), aeration basins, and recycled activated sludge (RAS) piping. Also included are the replacement of miscellaneous sensors and analyzers for the aeration basins, modifications to electrical panels, and replacement of variable frequency drives (VFDs) of ILPs 3, 4 and 7. This work adds reliability to the aeration system so the WRRF can meet NPDES permit requirements for treatment and capacity.

Another key aspect of this project is adding additional piping and valving to allow ILP 7 to be used as a swing pump capable of feeding all four aeration basins. This improves the redundancy and resiliency of the aeration system.



120-inch diameter Knife Gate valve installation in Aeration Basin No. 2

Construction of the primary clarifier rehabilitation, modification to the incinerator sludge feed system in complex 2, and Rouge River Outfall Disinfection projects are progressing.

CSO Control Program

Structural repairs to the St. Aubin Outfall began on February 20, 2019 and were completed by March 1, 2019. This work completed issues noticed in November of 2018 due to proactive inspections of the outfall. These inspections are part of the CSO Team's efforts to understand what we have and to ensure we are paying attention to the highest risk assets. Inspections at our Leib treatment sewer and outfall also resulted in some concerning conditions.



Tentatively, we have four pipe penetrations through our sewer line. We have identified one of the penetrations as belonging to DTE, and we are working with DTE to remove their pipe from our sewer at their cost. We will continue to investigate the sources of the other penetrations to resolve who they belong to and to ensure they are removed.



WASTEWATER OPERATING SERVICES (continued)

Evaluation meetings and interviews were held for CS-299 – CSO Facility Assessment. A vendor has been selected with negotiations to follow. Evaluations were also held for the Construction Job Order Contract and six vendors were selected. We are presently working with Legal and Procurement to develop a contract for these job order services.

The CSO Team recently kicked off construction activities for the Leib Electrical Improvements project. Other CSO design related activity in March 2019 includes: advertisement of the Leib HVAC Improvements project; kicking off a reliability centered maintenance study on the chemical feed system at Baby Creek; and bidding out the construction plans for the Seven Mile roof replacement and the Seven Mile and Puritan-Fenkell instrumentation upgrades.

WATER OPERATIONS

Team Members Daniel Aman, Jason Hammond, Candice Hobson, Edwin Merriweather, and Tamika Winston passed the Certified Reliability Leader Exam that is offered through the Association for Asset Management Professionals. With these newly earned credentials, these team members will bring value to GLWA with the knowledge gained in addressing the root causes of the failure rate of assets, and the understanding gained of maintenance and reliability appropriate to the work they do.

On behalf of Water Operations, we would like to congratulate these team members and thank them for their hard work and dedication in gaining this new credential.

Superfund Amendments and Reauthorization Act (SARA) Title III Tier II reports were submitted for the five (5) GLWA Water Treatment Plants to Michigan Department of Environmental Quality (MDEQ). Known officially as the Emergency and Hazardous Chemical Inventory Reports, they are submitted annually to local fire departments, Local Emergency Planning Committees (LEPC) and State Emergency Response Commissions (SERCs) to help those agencies plan for and respond to chemical emergencies. Reports submitted online for GLWA are automatically submitted to the SERC, LEPC and Fire Departments.

Additionally, Risk Management Plan (RMP) submittal to United States Environmental Protection Agency (EPA) was completed for all the five (5) Water Treatment plants. The next anniversary date for resubmittal is in 2024. The RMP Rule implements Section 112 (r) of 1990 Clean Air Act amendments. RMP requires facilities that use extremely hazardous substances (liquid chlorine at GLWA Water Treatment Plants) to develop a RMP.

EPA's Chemical Accident Prevention regulations at 40 CFR part 68 require owner/operator of an RMP facility to update and resubmit RMP at least once every five years. If certain process changes occur at the facility prior to the five-year anniversary, RMP must be updated and resubmitted. For example, the RMP for Water Works Park must be resubmitted prior to 2024 when the chlorine room updates are complete. The five-year anniversary date is based on the date of the most recent full submission and is reset when the RMP is resubmitted.



On March 13, 2019, Abul Ahmed (WWP Chemist), Wajid Khan (WWP Chemist), Jessica Vachon (WWP Chemist), Yao Kouassi (WWP Operations Team Leader), Patrick Williford (Management Professional, Water Quality), and Balvinder Sehgal (Special Projects Manager, Water Operations) spent dedicated time and effort volunteering (on behalf of GLWA) as professional judges at the 62nd Annual Science and Engineering Fair of Metro Detroit (SEFMD) held at the Cobo Hall Convention Center in Detroit, Michigan. A total of 1,353 students participated in the Southeast Michigan Science Fair.

High school junior and senior students presented different projects related to Chemistry, Biology, Environmental Sciences, Microbiology, and other subjects. Impressively, there were several water related projects that included topics such as PFAS, Watershed, pH, Hardness, asphalt in water (from road construction), which were very commendable.

Special Projects

Balvinder Sehgal, Special Projects Manager, has been selected as advisory board member for Smart Management of Microplastic Pollution in the Great Lakes, a three-year project funded by Great Lakes Protection Fund. The overall goal of the project is reduction of microplastics in Great Lakes. This goal will be pursued through public engagement in activities to reduce microplastic pollution and deploy sensor technology to detect and monitor microplastic pollution. The time commitment is minimal, with two mid-day meetings annually for three years that may be attended remotely. Interested stakeholders for the project will be representing governments, watershed groups, academia, industry and other advocates.

Water Works Park Treatment Plant

Our contractor conducted an underwater inspection and shutdown at the Screen House utilizing a remote operated vehicle. The shutdown began between the hours of 9:00 p.m. and 2:00 a.m. The inspection observed the condition of the concrete, presence of sediment, and the condition of the screens.

The shutdown required the following:

- A complete shutdown of flow to the low lifts of Springwells and Northeast Treatment
- Coordination between Water Works Park, Springwells, Northeast, and System Control Center staff covering two (2) shifts.
- Traveling screens and low lift pumps to be shut down and lockout/tagout.

Additionally, chemical pre-treatment of the water with chlorine and fluoride at the Screen House was stopped for the duration of the shutdown. We were able to identify a problem with Screen No. 4 and are making plans to repair the problem.



Overall, the inspection resulted in positive findings. The concrete in the Screen House are in good condition and no cracks or major defects were found. The concrete structure is also in excellent shape. Therefore, the traveling screens were returned to service, the flow was restored, and the chemical feed was resumed.

Abul Ahmed, Chemist at Water Works Park Treatment Plant, represents GLWA on the State of Michigan/Michigan Department of Environmental Quality (MDEQ) Plankton/Algae Task Force Committee. As a GLWA employee of this committee, he will assist the committee with developing test questions regarding plankton for the 'F' licensure exam.

Annually in July, MDEQ and the American Water Works Association (AWWA) offers a 3-day training course on plankton for drinking water treatment plant operators. Last year, Mr. Ahmed joined the team as a volunteer instructor. He will teach part of the course and work towards Water Works Park being one of the primary teaching locations on a regular basis.

Fleet and Facilities

The underground fuel tank manufacturer sent a representative to WRRF to inspect and repair the new fuel tank. The tank was struck by the rigging after a swivel hook failure. The manufacturer will recertify and guarantee the tank.





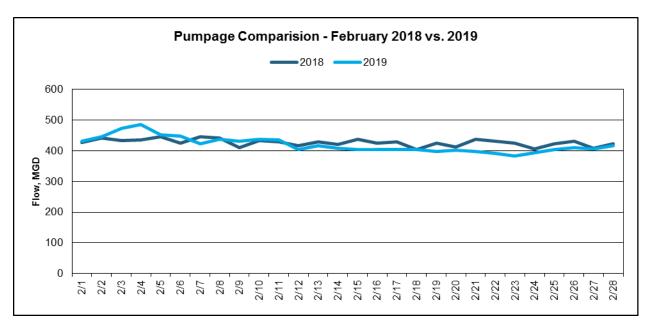
A tent has been set up for climate control for adhesives on piping and conduit. Currently, work is being done on venting the underground fuel system and preparing to run wiring for electricity.



Systems Control Center

February Pumpage

February 2019 pumpage was 1.47% less than February 2018 pumpage.



Northwest Interceptor (NWI) emergency rehabilitation is on schedule. The contractor has installed the ribs to stabilize the sewer and are installing lagging.



Lagging Installation between Ribs



Completed Lagging



DB-226 – Detroit River Rehabilitation

DB-226 contractor has mobilized in the first section of DRI. The first phase rehabilitation will start from Alter Road near Grosse Pointe and will end at Fairview Pump Station.



Barrier Installed at work zone east bound Jefferson at Connor for Access Shaft

Energy, Research & Innovation (ERI)

We met with the University of Michigan (UM) and operations lab staff at the WRRF to discuss the second phase of the 'Bioreactor Characterization' project. The team from UM is planning on installing small bioreactors (~1.6 Gallons) to analyze biological phosphorus removal (bio-P). The bioreactors will be fed with primary effluent without ferric chloride addition to mimic the conditions in the full-scale bioreactors lacking chemical treatment for phosphorus removal. This will give information on the bio-P removal capacity.

PUBLIC AFFAIRS

In May 2019, Public Affairs will launch its inaugural brand awareness campaign in southeast Michigan, which will be designed to raise awareness of GLWA, what it does and the value it provides to its member partners and their end consumers. To assist in message development, Public Affairs, working with the Research Division of FleishmanHillard, is conducting an online survey in southeast Michigan to get a baseline for brand awareness in the eight counties served by GLWA, as well as the city of Detroit. The survey was conducted from March 7-22, and we expect a full report on the baseline findings back the first week of April. This information will then help formulate the appropriate messages to use during the five-month campaign, which will run from May 15 - October 15. At the end of the campaign, we will conduct a follow-up survey to capture the impact the campaign had on overall brand awareness. In advance of launching the campaign, Public Affairs and FleishmanHillard will make a presentation of the campaign before the Board.



PUBLIC AFFAIRS (continued)

The Public Affairs Team is partnering with Enterprise Risk Management and Safety to promote safety messages throughout GLWA. Each month, a specific safety message is published in the One Water News e-newsletter and on GLWA facilities' monitors. March was "National Eye Wellness in the Workplace" month.

To promote this key message, Public Affairs Specialist Stephanie Geiger participated in a safety walk at Water Resource Recovery Facility and Springwells Water Treatment Plant to identify team members wearing Proper Protective Equipment (PPE) and using safety best practices. Wastewater Operations Team Leader Sajit George hosted the safety walk at WRRF through the Incinerator 2 and Laboratory. The team members caught working safely included George Calhoun, Reggie Scott, Linda Kostrzewski and Sarah Watkins. Water Operations Team Leader Karone Law hosted the safety walk at Springwells with Health and Safety Coordinator Marcus Askew. The team members caught working safely included David Joshua, Deouynya Hill, Dondi Griffin, Patrice Franklin, Allen Wilson, Demario Barker and Carl Chandler.

Overall, team members were excited for the recognition and appreciated the opportunity to demonstrate how they utilize safety at work.

The team members who were caught working safely, received a GLWA insulated bottle water and were featured as Safety with Ambassadors their photo published to the One Water Connect homepage and monitors.



Thank you to the Water Resource Recovery Facility, Springwells Water Treatment Plant and Enterprise Risk Management Teams for participating in this program. Public Affairs looks forward to continued participation in this safety program to promote safety best practices and recognize safety ambassadors at GLWA! #OneTeamOneWater!



SECURITY AND INTEGRITY

During the month of March, the Security and Integrity Team has provided the following:

The Hazmat Unit has coordinated and completed a total of 227 hours of training during the month.

Security and Integrity Officers Agee and Delta have completed the first phase of K-9 training.

The Emergency Response Plan is continuing to be updated which is due in May 2019.

Security and Integrity continues its planning for table top exercises with Dearborn, Detroit and Wayne County Emergency Management with the exercises will be held June 20, 2019.

ORGANIZATIONAL DEVELOPMENT

Talent Management and Recruitment

Organizational Development is announcing a realignment of our service structure for talent management and recruitment. Effective March 4, 2019, two Human Resource Generalists (HRG) became dedicated to recruitment and two HRG's will be dedicated to talent management. These two teams will work collaboratively to provide the most effective services possible to each GLWA operational team and Team Member.

We believe that realigning the talent management and recruiting functions will ensure that we meet GLWA's organizational goal to find and retain highly talented, well-qualified individuals to help us fulfill our vision to be the water and wastewater service provider of choice in southeast Michigan.

The recruiters will be attending several recruitment events in March and April including:

- MIAT College of Technology Career Fair
- Lee Hecht Harrison and Right Management Virtual Job Fairs
- Focus: HOPE Reverse Interview event

Staffing

Since the February CEO report, one (1) new contractor has become a GLWA team member. The table below provides a breakdown of GLWA Team Members to date:

Total Staffing - Regular FTEs	995
Number of Hires - 2019 YTD	53
Total Number of Contractors (FTEs)	120



ORGANIZATIONAL DEVELOPMENT (continued)

Benefits & Wellness

One Water Wellness will have a variety of events focused on financial health as well as general wellness. Under the theme "April Saves", there will be seminars, and presentations of services from ICMA-RC and Public Service Credit Union.

To encourage movement as spring approaches, we will start Walking Wednesdays, and a new 35 Day Health and Fitness Challenge.

We will also share online communications on Healthy Living through GovDelivery, with Diabetes-related information to support team members and their families in managing their diabetes.

Training

Between January 1, 2019, and February 28, 2019, GLWA:

- Provided over 3,647 hours of training and development.
- Provided training and development to 529 GLWA team members (more than two courses per team member).
- Facilitated 28 courses in Safety, Water Operations, Wastewater Operations, and Technology.

FINANCIAL SERVICES



March brings with it the annual Michigan Government Finance Officers Association (MGFOA) Spring Seminar. This is an excellent professional development opportunity as well as a chance to connect with many of the finance teams

from our Member Partner organizations. Five GLWA Financial Services team members were in attendance this year. City of Detroit Chief Deputy CFO John Naglick was the keynote speaker and delivered an update on the significant progress made within the City of Detroit since bankruptcy.

March 2019 Audit Committee Recap

On March 15, 2019, the GLWA Audit Committee considered the following:

- ✓ Update related to closing out FY 2017 Shared Services activity by the end of FY 2019.
- ✓ GLWA's financial advisor presented an analysis of GLWA's credit rating compared to service sector peers and benchmarks. They also reviewed opportunities for future taxexempt bond refunding opportunities which occur in calendar year 2021.
- ✓ As part of the Monthly Financial Report, staff reported on results through December 31, 2018. (See Executive Summary Dashboard attached).



- ✓ The second quarter FY 2019 construction work-in-progress report was presented. See graphs below that highlight the updated spend level through December 31, 2018.
- ✓ The Audit Committee approved a recommendation that the Great Lakes Water Authority Board hold a public hearing on April 24, 2019 for the 14 Mile Road Water Transmission Main Loop Project which would include low cost financing. See further information under the "Public Finance" section below.

Financial Planning & Analysis

The Public Hearings for the presentation of the FY 2020 and FY 2021 Biennial Budget and the FY 2020 Schedule of Service Charges was opened on February 27, 2019. The Public Hearings were held open through March 13, 2019, at which time both the Biennial Budget and Schedule of Service Charges were unanimously approved by the GLWA Board of Directors.

With the budget and charges approved, the Financial Planning & Analysis (FP&A) team, along with other members of the Financial Services Area, have begun work on the detailed Financial Plan document. This document will provide a look at the various aspects of the financial plan in greater detail including, but not limited to, Revenue Requirements, Debt Service Coverage calculations, the Operations & Maintenance expense budget, Personnel Costs, Improvement & Extension and Construction Bond Funds, Capital Investments, and Customer Charges and Revenues. The team looks forward to its inaugural submittal of the final budget document to the Government Finance Officers Association for consideration in the Distinguished Budget Presentation Award Program.

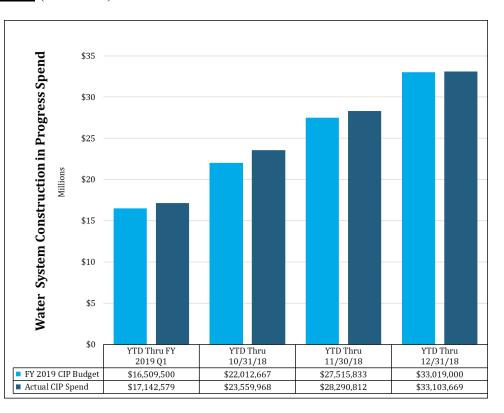
Financial Reporting and Accounting

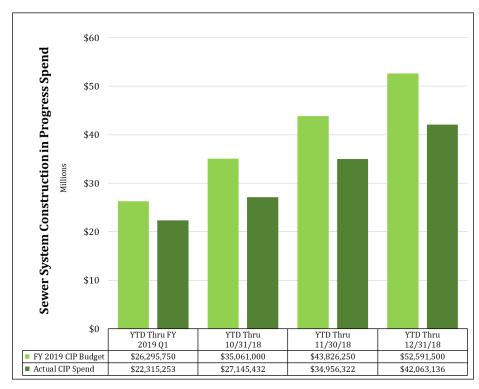
Through a collaborative process, the FR&A Accounts Payable team and the Energy Management Operations team have successfully placed the Capturis utility information management application into service. This tool allows GLWA to pay utility bills associated with energy usage in the most efficient manner possible while also allowing more timely usage data to the GLWA Energy Management Operation team for comparative analysis.

The Financial Reporting team has now been preparing monthly unaudited interim financial statements for approximately fifteen months. In the commitment to continuous improvement, they are now revisiting the current process to further automate that process. The rework of the current process and future automation will significantly improve the efficiency of monthly financial close and reporting.



The Construction Accounting team reports an ongoing improvement in construction in progress spending as the fiscal year progresses. As of December 2018, the Water system incurred over \$33.1 million of construction costs to date. This is 100% of the total fiscal year 2019 prorated, budgeted spend and continues a trend of on-target spend.





As of December 2018, the Sewer system incurred over \$42 million of construction costs to date. This is 80% of the total fiscal year 2019 prorated, budgeted spend and a steady increase over the period. prior Quarterly Construction Work in Progress report was presented at the March 15, 2019 GLWA Audit Committee meeting and provided detail regarding the specific projects within each system and their status.



Procurement Team Update

Mark your calendar! The annual GLWA Vendor Outreach event will be held on May 16, 2019 at Laurel Manor in Livonia. This year, we have engaged Renee Walker Associates, event management, to improve the event experience with registration kiosks and support staff in hosting a professional and meaningful event. Save the Date notices will be emailed to those registered in Bonfire soon.

The second edition of The Procurement Pipeline has been distributed and is attached. The "one-pager" concept has now expanded to both sides of one page to include an upcoming procurement planner. This much anticipated information by the vendor community was the collaboration of cross-functional team members at GLWA to compile - and commit to – the upcoming opportunities with GLWA.

Public Finance

SRF Project Financing - GLWA has identified one water system project for submittal to the Michigan Department of Environmental Quality (MDEQ) for the Drinking Water Revolving Fund (DWRF) financing program for funding in the state's 2020 fiscal year.

The proposed project is the 14 Mile Transmission Main Loop Project (CIP #122013) which would provide a transmission main loop to the 14 Mile system to increase redundancy on this branch of the system. The project has an estimated cost of \$54.4 million. The DWRF is a low-interest loan program through the state of Michigan with a current program interest rate of 2.00%, which is well below current revenue bond rates. This will afford savings to both GLWA and its member partners.

The deadline for submitting all DWRF project plans to MDEQ is May 1, 2019, but prior to submitting the project plan, GLWA must hold a public hearing for the project and present the plan. The public hearing for this project will be set for April 24, 2019 at 2:00 p.m.

Shared Services - The Great Lakes Water Authority (GLWA) and the Detroit Water and Sewerage Department (DWSD) are parties to a Shared Services Agreement. This agreement provides the framework for shared services for the efficient operations of both entities. DWSD and GLWA Shared Service Teams are currently diligently working together to complete the Fiscal Year (FY) 2017 true up. Both Shared Service Teams keep in communication to ensure reviews and discussions of the calculations move forward. The goal is to complete the FY 2017 True Up by June 30, 2019.



WRAP Update

The Water Residential Assistance Program ("WRAP") began accepting applications for residential customer assistance on March 2, 2016, with the first community to opt into WRAP being the City of Detroit. Subsequently, outreach meetings were held in Wayne, Oakland and Macomb Counties to educate GLWA customer communities on details on the WRAP and what was required to "optim" to the program. Since those meetings, Wayne Metro, along with the Community Action Alliance partners, have been working with individual communities to get them opted into the WRAP. As of February 28, 2019, 76 communities have opted into the program.

Below is a summary of committed and spent WRAP funds as well as home audits and home repairs performed through February 28, 2019 for the City of Detroit and Suburban participants. Please note that the uncommitted funds included in the table below now includes the budgeted WRAP funds for bill assistance, arrearage assistance, home audits and repairs of \$4.5 million for FY 2019. The table below also reflects the reallocation of uncommitted FY 2017 WRAP funds to Detroit and Flint, based on the Board's action on August 22, 2018.

WRAP Funding Status			
As of February 28, 2019			
	Detroit	Suburban	Total
Scheduled Appointments	18,554	7,550	26,104
Completed Pre-Applications	18,434	7,545	25,979
Households Assisted	5,884	4,670	10,554
Shutoffs Avoided	4,175	908	5,083
Home Audits	1,583	719	2,302
Number of Home Repairs	1,043	363	1,406
Amount of Home Repairs	574,327	\$195,298	\$769,625
Average Cost of Home Repair	\$551	\$538	\$547
Total Bill Assistance Committed	2,615,430	\$1,660,205	4,275,634
Total Arrearage Assistance Committed	2,345,192	\$1,372,168	3,717,360
Total Assistance Committed	\$4,960,622	\$3,032,372	\$7,992,995
FY 2016-2019 WRAP Funds Uncommitted	\$ 155,747	\$ 6,270,114	\$6,425,861
FY 2016 Uncommitted Funds Reallocated to Detroit	\$ 1,664,833	\$ (1,664,833)	\$0
FY 2017 Uncommitted Funds Reallocated to Detroit	\$ 786,981	\$ (786,981)	\$0
FY 2016 Uncommitted Funds Reallocated to Flint	\$ -	\$ 131,985	\$131,985
FY 2017 Uncommitted Funds Reallocated to Flint	\$ -	\$ 425,635	\$425,635
Net FY 2016-2019 Funds Uncommitted	\$ 2,607,562	\$ 4,375,920	\$6,983,482
Total Bill and Arrearage Assistance Paid to Date:	\$3,087,414	\$1,748,139	\$4,835,553



LEGAL

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

Respectfully submitted,

Jue FM Cornica

Sue F. McCormick Chief Executive Officer

SFM/dlr

Attachments



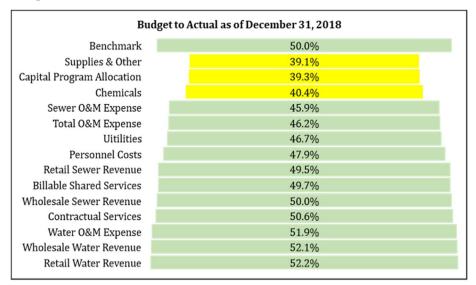


Revenue and Expense Budget to Actual¹ - Pro-rata Benchmark of 50%

Most categories are within 5% of the prorata benchmark.

Supplies & Other: Due to timing of one-time or annual expenses.

Capital Program
Allocation: Ongoing
analysis of team
member time assigned
to maintenance
programs versus
capitalizable projects.



Chemicals: Expected

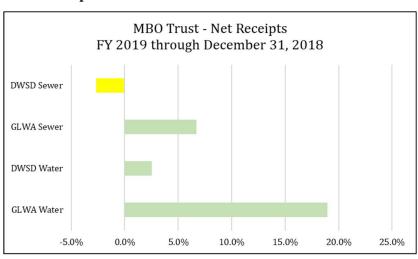
variance as usage does not follow a 1/12th monthly budget pattern.

Master Bond Ordinance Trust Net Receipts

Overall cash flow for GLWA is positive.

DWSD net water cash flows are positive, although DWSD sewer cash flows continue an overall negative trend.

During the development of this report DWSD made a principal payment of nearly \$7 million towards the loan receivable associated with the FY 2016 and FY 2017



sewer cash receipts shortfall of \$29.3 million. This will be reported as part of February 2019 *Trust Receipts and Disbursements* report activity.

Other Topics

Highland Park's total receivable balance is \$41.7 million. FY 2019 cash receipts equal \$629,000 through December 30, 2018, although a \$2.1 million payment has been subsequently received and will be reflected in the January 2019 report activity.

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

¹ All amounts are GLWA entity-wide unless noted as water, sewer, and/or retail.



The Procurement Pipeline March 2019

Welcome to Spring and the second edition of The Procurement Pipeline, a monthly newsletter designed to bring you informative updates on doing business with GLWA.

The Procurement Pipeline Tip of the Month: If you meet the criteria, then bid on the project! First, you must be registered on Bonfire to bid on projects. Second, anyone can bid/propose on an open solicitation if you meet the criteria. The size of your company does not matter. GLWA looks forward to competitiveness and new local business partners.

GLWA Vendor Outreach - Mark your Calendar

GLWA is planning our 2019 Annual Vendor Outreach event which will be held at Laurel Manor in Livonia. We are confirmed for the morning of Thursday, May 16, 2019. Additional information will follow. Please register in Bonfire to make sure you receive an invitation.



Small Business Initiative (SBI)

Through GLWA's partnership with the U.S. Small Business Administration, Tom Vargo, Lead Business Opportunity Specialist, will be in attendance at the May 2019 Outreach Event to answer your questions regarding their programs.

Getting Paid by GLWA

Each month, a Key Performance Indicator reported to our Board is Number of Days to pay an invoice with a goal of no more than 30 days. We need your help to make this goal! When working with GLWA, please ask our team members to provide a purchase order (PO) number, make sure that PO number is on the invoice, and always submit your invoices to AccountsPayable@glwater.org.

Keeping Up With GLWA

Our CEO's monthly report provides a wealth of information and news about important initiatives.

Visit us online!

See the Vendors page at www.glwater.org or contact us via procurement@glwater.org.

Where to Meet GLWA

We participate in many outreach events throughout southeast Michigan. We welcome you to stop by the GLWA table at the following events. Note: event sponsors may require pre-registration and/or a fee.

- MDOT's DBE Annual Small Business Development Conference on March 18, 2019
- Public Sector Construction Forum's 2019 Small Business Industry Day on April 10, 2019
- Michigan Public Purchasing Officers' Association Reverse Trade Fair on April 12, 2019

New Capital Improvement Plan Webpage

We are pleased to inform you that GLWA's Capital Improvement Plan now has its own webpage. Visit glwater.org/CIP to view the business case evaluation for projects coming up for procurement.

What's Coming Down the Pipe?

Current Solicitations: Available on Bonfire. *Next Three to Nine Months:* See page 2

Interim Procurement Director Announced

Sonya Collins was named the Interim Procurement Director in February 2019. Sonya has over 16 years of experience in procurement, 9 years in the public sector. She is responsible for the daily operations of the procurement group.

Most recently, GLWA received the Michigan Public Purchasing Officers Association Agency of the Year Award for 2018, with Sonya being a key contributor

for this honor.

Sonya holds two degrees from Michigan State University. She is also a Certified



Professional Public Buyer (CPPB) and serves on the Leadership Assessment Committee for the National Institute of Government Procurement.



March 2019

Upcoming Procurements - Next 3 Months*			
Category	CIP#	Description	Budget Estimate
Water System			
Construction	122005	Schoolcraft Road 48" Water Transmission Main	\$18,062,000
Construction	n/a	Uniform Rental and Laundering for a three year period with two one-year renewal options	\$219,000
Design	122016	Transmission Loop to the Downriver System	\$4,000,000
Design	111001	Lake Huron Low Lift /High Lift and Wash Water Pumping Improvements	\$8,385,000
Design Build	132010	West Service Center Pump Station - Duval Rd Division Valve Upgrades	\$37,000,000
Design Build	111009	Lake Huron Water Treatment Plant - Two New High Lift Pumps, Flow Meter, and Yard Improvements	\$26,000,000
Design Build	114002	Springwells Water Treatment Plant Low Lift Suction Isolation Gate Replacement	\$113,303,000
Design Build	132007	Imlay Pumping Station - Energy Management Freeze Protection Pump Installation	\$2,160,000
Maintenance	n/a	Switchgear Repair and Maintenance	\$1,000,000
Services	n/a	Wireless Power Monitoring	\$89,882
Services	n/a	Dual Channel Permanent Flowmeter (West Service Center)	\$88,328
Services	n/a	Grounds Maintenance Services for a three year period with two one-year renewal options	\$2,900,000
Wastewater Syst	tem		
Consultant	n/a	Task Order Engineering Services at Water Resource Recovery Facility and all Combined Sewer Overflow Facilities	\$30,000,000
Services	n/a	Thickener 1 Bull Gear Repair at Water Resource Recovery Facility	\$68,900
Centralized Serv	vices		
Consultant	n/a	Comprehensive Corrosion Control Optimization Study	\$5,500,000
Supplies	n/a	Hardware Supplies to GLWA Warehouses for a three year period with two one-year renewal options	\$1,200,000
Supplies	n/a	Industrial Lubricants to GLWA Warehouses for a three year period with two one-year renewal options	\$500,000
Supplies	n/a	Mechanical Supplies to GLWA Warehouses for a three year period with two one-year renewal options	\$1,200,000
Supplies	n/a	Plumbing Supplies to GLWA Warehouses for a three year period with two one-year renewal options	
Supplies	n/a	Safety Supplies to GLWA Warehouses for a three year period with two one-year renewal options \$500,	
Supplies	n/a	Tool Supplies to GLWA Warehouses for a three year period with two one-year renewal options	\$1,500,000
Consultant	n/a	Water and Sewer System Charges Consultant for a three (3) Year Period with 2-1 Year Renewal Options	\$900,000
Consultant	n/a	External Auditor Services (Three Year Contract - FY 2020, 2021, & 2022 Audits)	\$900,000

Upcoming Procurements - Next 4 to 9 Months*			
Category	CIP#	Description	Budgeted Amount
Water System			
Design	122004	96" Water Transmission Main Relocation and Related Transmission System Improvements	\$17,016,000
Design	115005	5 Water Works Park Process Areas Ventilation System Improvements \$	
Design Build	122017	7 Mile/Nevada Water Transmission Main Rehab and Flow Control Station \$20,5	
Construction 170800	Lake Huron Water Treatment Plant, Imlay Station, Springwells Water Treatment Plant and Southwest	\$52,360,000	
	Water Treatment Plant Finished Water Reservoir Improvements	Ψ52,500,000	
Wastewater System			
Design	211007	Pump Station #2 Bar Racks Replacement and Grit Collection System	\$1,574,000
Design	216006	Assessment and Rehabilitation of Yard Piping and Underground Utilities \$24,853,000	
Construction	212004	Chlorination and Dechlorination Process Equipment Improvements Project \$4,586,000	
Construction	214001	Relocation of Analytical Laboratory Operations to Water Resource Recovery Facility \$8,300,000	
Study	213008	Rehabilitation of the Ash Handling Systems at Water Resource Recovery Facility \$80,000	

^{*} Dates and projects are subject to change. Sign-up to Bonfire to receive *The Procurement Pipeline* with monthly updates.

Office of the General Counsel



735 Randolph Street, Suite 1900 Detroit, Michigan 48226

Office of the General Counsel - March, 2019

- **NPDES Permit Renewal and ACO Dismissal:** The Office continues to support this initiative and has retained an expert to assist in this endeavor. The Office prepared and submitted the renewal application for the Permit and materials on financial capability. GLWA received the draft Permit and provided comments to the MDEQ. A Public Hearing on the permit has been set for April 18, 2019.
- Legislative Updates: The Office continues to support HB 4806 which contains amendments to the exception to governmental immunity, regarding liability for sewer back up claims. GLWA continues to cooperate with member partners on the Lead and Copper Rules as well and attend webinars on the subject.
- *Gordie Howe International Bridge*: The IWC program vacated 303 Livernois and relocated to WWRF, however, GLWA's reimbursable relocation costs remain an open item. The Closing on 303 Livernois should occur in the next 30 days. GLWA will receive sale proceeds.
- *Trenton Water Main*: The Office is negotiating the transfer of the 24-inch water main to GLWA.
- *Water Contract Negotiations:* The Office continues discussions with the City of Dearborn on a model contract. The most recent meeting occurred on March 25, 2019.
- 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. The Office is also assisting on GLWA's property remediation efforts.
- **Record Retention Policy:** The Office is drafting a record retention policy for GLWA.
- *Industrial Pretreatment Program*: The Office continued to work with the Industrial Waste Control ("IWC") Group and external stakeholders on finalizing and implementing an updated IPP and overseeing the current program. The Office is also coordinating the transfer of a portion of GLWA's IPP to the Oakland County Water Resource Commissioner ("OCWRC").
- *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.

- **Third Feed to WRRF:** The Office continues to work with DTE and Conrail to identify the most cost-effective method to construct and operate a third feed to WRRF. Conrail and GLWA signed the purchase agreement and are scheduling a closing date. GLWA has orders granting possession of all easements necessary for the project.
- Civil Litigation: The Office continues to vigorously defend actions against GLWA, including recently filed class action lawsuit regarding IWC charges. GLWA continues to pursue its action against Highland Park for the collection of unpaid water and sewer invoices. In the past month, GLWA was named as defendant in one lawsuit. GLWA is a plaintiff in the lawsuit against the State related to the Lead and Copper Rules. GLWA was voluntarily dismissed in a wrongful death case. GLWA, DWSD, and AFSCME settled a pending lawsuit related to pre-bankruptcy grievances.
- *Labor Relations*: The Office continues to provide legal advice to Organizational Development on labor relations and employment matters.
- *Trademark*: The Office submitted a trademark for the One Water Institute. The trademark should be published in April 2019.
- Arbitration: The City and GLWA will conduct an expedited arbitration pursuant to the Leases and the Water and Sewer Services Agreement related to GLWA's water usage at one of the Leased Facilities.
- Northeast Pump Station: GLWA and OMIDDD executed an amendment to the services contract to allow OMIDDD to fund maintenance, repairs and capital improvements to the facility.
- *Conner Creek CSO*: GLWA, the City and DBRA negotiated a purchase agreement to transfer the unimproved portion of the CSO Basin land to support the FCA Jeep Project.
- **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 and Procedures and updating GLWA's template contracts.
- Seminars Attended: AWWA/WEF Utility Management Conference

• Past Month's Statistics:

Contracts reviewed as to form:	38
Contracts drafted or revised:	74
Subpoenas/Information requests received:	3
Subpoenas/Information responded to:	5