

October 26, 2016

The Honorable Board of Directors Great Lakes Water Authority

Dear Chairman Daddow and Directors:

Regarding: CEO's Report - October, 2016

October is nearing a close with another GLWA Goal Exceeded! This week brings to closure GLWA's inaugural public financing transaction. The month started with investor meetings in the first week in October, pricing mid-month, pre-closing today and closing on the transaction tomorrow. The results are a tremendous success in terms of benefit we can return to our customer communities and they also reflect the recognition the rating agencies and investors gave to the GLWA organization for the achievements made across the board: consistently improved financial performance, improved operational performance, improved collaboration with our customers, a solid compliance record and effective governance. A few of the highlights:

- \$ 1.34 Billion in bonds issued at an overall all-in interest rate of 3.81%
- \$284 Million new money water bonds issued while reducing maximum annual debt service
- \$309 Million in cash savings providing future financial flexibility
- Strategic positioning for the future through a springing amendment that permits the elimination of Bond reserve funds once GLWA attains two AA category ratings, freeing up funds for additional system benefit

My compliments and thanks to all for making this first for GLWA so successful.

Last month I shared several key performance metrics with the Board in anticipation of a Board workshop on this topic in November. In the November workshop, we will discuss our work plan to align our key performance indices (KPI's) with effective utility management (EUM) attributes that provide benchmark opportunities with other high performance utility agencies. In addition to sharing our plan, the workshop will provide the Board an opportunity to identify the KPIs most important to the Board in periodic reporting. The work plan contemplates similar efforts to capture those metrics of importance to our customer communities and the investment community. A second round of metrics will be shared with the Board prior to the workshop, and subsequently at each first monthly meeting of the Board.

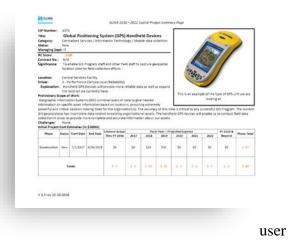
Coming soon – Legistar! Today is the soft launch of Legistar, an agenda management system that will allow GLWA to automate the preparation and documentation of items through Board committees and Board action internally, while at the same time, improving access to the agenda, supporting documentation and historical searchable information on our web site.



PLANNING SERVICES

Asset Management and CIP Group

Over the past several months, the Asset Management and CIP Group, in conjunction with the Capital Management Group, have been actively developing the FY 2018-2022 Capital Improvement Plan. Meetings with the project managers and the newly created water and sewer review committees have occurred to evaluate and prioritize new projects. In conjunction with the new prioritization methodology, the overall CIP structure and format is being redesigned and will be substantially different from previous years' CIPs. The goal is to make this document more friendly and intuitive for the reader.



The Asset Management and Capital Improvement Plan Work Group's next scheduled meeting is Thursday, October 27th. This meeting will focus on presenting a sample of the revised 2018-2019 report format to solicit valuable input from the group. In addition, many of the newly submitted water and wastewater business case evaluations along with their respective prioritizations will be presented and discussed.

Systems Planning Group

The evaluation team for selection of the Comprehensive Wastewater Master Plan consultant, continues to perform its due diligence in finalizing its evaluations. The next meeting of the Wastewater Master Plan Steering Committee is scheduled for November 16th primarily to discuss regional perspectives, concepts and approaches to ensure successful outcomes of the master plan.

Staff continues to work actively with three prospective new customer opportunities.

Project Innovations, GLWA's third-party Customer Outreach facilitator since 2003, announced at the October 6th TAC and Steering Committee meeting that they are planning to transition out of their role at GLWA. The TAC and Steering Committee co-chairs, will be sitting down with staff and Project Innovations to discuss a transition plan. The co-chairs have expressed their appreciation for Project Innovations third-party facilitation in the customer outreach program and their desire to be involved in the transition.



PLANNING SERVICES (continued)

System Analytics and Meter Operations Group

The System Analytics and Meter Operations Group continues to implement their new programmable logic controller program. There are now 38 sewer meters reporting real time reads to the Greater Detroit Regional Sewerage System (GDRSS) Portal. All meter locations are expected to be collected real-time by the end of the year. The real-time data and new customer dashboards were presented October 12th at the Wastewater Best Practices Workgroup.

The team provided lead support for the GDRSS Application portion of a database migration. This migration facilitated upgrading of the database, operating system, and moving the server hardware to a Virtual Machine environment. This upgrade will provide better server management, disaster recovery, security, and increased system performance.

The group continues its efforts related to the West Side Sewer Monitoring and Modeling Program. The project team continues to meet monthly to review progress and provide program updates. With the large rain event on September 29th sewer response data was collected and is providing a better understanding of the sewer system flows in the area. The project is planned to continue for another two to three years.

A solicitation document for support services for water and sewage metering is being prepared. This work will support the group in a variety of ways including meter pit construction, mechanical piping work, hatch installation and repair, and the installation, calibration and monitoring of meters and other system monitoring devices. This will be a critical contract to support the accuracy and availability of water and sewer meter data. It is anticipated that a request for bid for this work will be published in the next couple of weeks.

Energy Management Group

The Energy Management Group is developing a model to map the steps necessary to becoming an energy positive organization. The team is in the data gathering and planning phase, using budgetary data as a baseline and developing key performance indicators. The idea is to model



incremental changes to our *One Water* value chain, and assess the impact of the changes until we reach energy positive. Once we determine the appropriate mix of operational changes, maintenance, generation and capital improvements, we can then develop a plan to phase in the changes over time.



PLANNING SERVICES (continued)

Two staff members attended the Michigan Water Environment Association Sustainable Energy Conference on October 13th in Lansing. Staff will be participating on this committee to support its efforts to reduce energy consumption and take additional steps as we continue to move from waste treatment to resource recovery.

WASTEWATER OPERATIONS

Wastewater Operations and Compliance

The Wastewater Treatment Plant was in compliance with all National Pollutant Discharge Elimination System and Michigan Department of Environmental Quality water quality permits in the month of September.

Wastewater Maintenance

Maintenance staff continues to complete and expand preventative maintenance activities. Staff is focused on expanding the use of Asset Management system tools, assisting Logistics and Materials Group in a stockroom/spare parts reorganizational effort, and providing maintenance-based guidance for ongoing engineering design and construction efforts.

Wastewater Engineering

Fire Remediation

Remediation of the area of Incinerator Complex II that was damaged by the March fire continues. The scheduled date of incinerator operational start-up has been extended by two months (from December 7, 2016 to February 10, 2017) due to two necessary incinerator ancillary components: sludge conveyors and maintenance crane monorail. The conveyors required substantial frame repairs, which only became noticeable when the majority of the demolition and damaged conveyor belt removal had taken place. Lead time for necessary conveyor parts and limitations in available manpower (the iron workers are currently at full employment) mainly contribute to the delay. The monorail system rehabilitation has also caused delays. Current building code requires heavier rail sections, which require additional structural steel bracing and stiffening needed for support of the heavier rails. This plan avoids costly rework and longer delays because it allows for continuation of monorail installation which is about 70% complete.

Other progress notables are as follows: The replacement concrete roof deck has been installed. Mechanical piping work for valve replacement is in progress. Fire protection cabinets are on order, and related work is scheduled to begin before month-end. Emission monitoring umbilicals have been installed. Lighting installation continues along with cleaning and repair of burner control panels, burner checkouts, and loop checks. Painting continues on the fourth floor.



Rouge River Outfall (RRO) Disinfection Project Update

The design team met with staff in September to coordinate the planning of the new building on the wastewater treatment plant property required to dose disinfectant as part of the project. This month, the contractor submitted the 60% design for review and held a controls workshop. Staff and the contractor met with the City of Detroit Buildings, Safety Engineering, and Environmental Department for a pre-plan review of the design. The project continues to be on track with the aggressive schedule.

Bio-Solids Dryer Facility (BDF) Update

Over the past month the BDF has processed, on average, 90% of the dry tons requested. This was partially due to taking individual trains out of service during the month in order to upgrade and improve existing train components. The schedule for completion of these improvements and required performance testing is January 2017. Throughout the month, though, three of the four trains were always available with only a few brief exceptions.

Pilot testing is in progress for the ferric chloride addition to the sludge to reduce sulfur dioxide air emissions. Initial results are promising.

Research and Innovation

Letters of support were provided to two applications for grants from the National Science Foundation. The first is an application being submitted by Wayne State University proposing to develop specialized algae cultures that can be used for biofuel production. The second letter supports a project housed at the University of Connecticut to develop for market, the next generation of operating parameter sensors, such as those that measure pH, dissolved oxygen, residual chlorine and temperature. These sensors are printed on 1.5 by 3-inch pieces of cellulose and would be very inexpensive to manufacture. If awarded the grants, staff would provide support such as data and testing.

The organization has received the draft results of an innovation-ready survey taken as the first step in participating with the Water Research Foundation's project, Fostering Innovation within Utilities. The results will be used to help develop a plan to move the organization to an "Innovative Utility."

Industrial Waste Control (IWC)

The IWC Group continues to make progress on updating its rules and regulations for non-domestic wastewater dischargers.



A stakeholder meeting was held to receive input from industry and customers prior to finalizing the updated rule document. The proposed rules are on the Board agenda for today's meeting. Following the Board Meeting will be a public comment period which will run through November 23rd.

The IWC section has been working with Information Technology and Procurement to acquire replacement software for its existing Pretreatment and Laboratory Information Management Systems (PIMS and LIMS respectively). Staff from IWC and the Analytical Lab served on the evaluation team for the selection of the software. The LIMS software is robust and will permit expansion and use beyond the Analytical Lab to Combined Sewer Overflow Operational Laboratory staff.

WATER OPERATIONS

The Lake Huron, Southwest, and Springwells Water Treatment Plant laboratories were certified by the Department of Environmental Quality (DEQ) for compliance monitoring under the Safe Drinking Water Act (SDWA) for analysis of the Microbiology parameters. The Springwells Plant was also certified for Inorganic Chemistry parameters.

This certification requires maintenance of an acceptable quality assurance program, use of approved methodology and equipment, and satisfactory performance on evaluation samples. This certification expires on June 22, 2019 for Lake Huron, August 11, 2019 for Southwest, on August 19, 2019 for Springwells.





Additionally, the Southwest Water Treatment Plant was issued a certificate of achievement by ERA to recognize its laboratory as a "Laboratory of Excellence" for achieving 100% acceptable data in a study which included 184 participating laboratories. This achievement is a demonstration of the superior quality of the laboratory in evaluation of the hardness, pH, and turbidity standards.

	CERTIFICAT	E OF EXCELLENCE
In re	cognition of the quality of	your laboratory in proficiency testing for
		VS-241
	GLWA - Sou	thwest Water Plant
Excellence for achiev	ring 100% acceptable data in	4. This laboratory has been recognized as a Laboratory of this study which included 184 participating laboratories. This guality of the laboratory in evaluation of the standards listed below.
	Hardness	Heterotrophic Plate Count
	Inorganics Residual Chlorine	pH
	PREAME CONTIN	Turbidity
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Contract:Pressure Regulating Valve Vault Improvements Project (DWS-891)Status:Under construction

Project Background: On February 25, 2015, the DWS-891 project was awarded to Lakeshore Global Corporation at a cost not to exceed \$1,849,500. Lakeshore Global was provided a notice to proceed for the project on May 14, 2015 with a final completion date extended to June 30, 2017. The project involves replacement of pressure reducing valves (PRVs) and vault enlargement/upgrades at 5 pressure reducing station locations throughout the system.

The pressure reducing station sites substantially completed as part of this project and the construction status are as follows:

Porter and 6th / Park and Elizabeth PRV Sites: PRV replacement and vault construction is substantially complete at these sites with only minor items remaining such as final testing of pressure sensors and hi-water floats.

Chene and Maple PRV Site: PRV replacement and vault construction is near substantial completion at this site with minor items of completion such as installation of pressure sensors, and testing of mechanical equipment such as sump pumps.





Porter and 6th PRV At grade access hatches were incorporated into the outdoor seating area of the Most Holy Trinity Church at the site. Careful coordination took place to make sure that the Church's outdoor seating area was not disrupted with the final layout of the hatches.



Porter and 6th PRV Final piping layout of completed PRV replacement. PRVs were replaced in full with all new pilot systems resulting in improved reliability. The vault expansion at the site allows for more room for maintenance activities within the vault.



Park and Elizabeth PRV Final restoration photo showing double hatch access to the upgraded vault. Double hatch will facilitate operations and maintenance activities at the site.



Park and Elizabeth PRV Final piping layout of completed PRV replacement. PRVs were replaced in full with all new pilot systems resulting in improved reliability. In addition, a new gate valve isolation was provided at the site such that the PRV could be taken out of service for maintenance in the future with less impacts to customers in the vicinity of the site.





Chene and Maple PRV Final restoration at Chene and Maple site. Double hatch access allows for improved safety and ease of access.



Chene and Maple PRV New gate valve installation at the site to allow for more reliable shutdown capability at the site.

The High Lift building at the Springwells Water Treatment Plant was identified as a safety hazard due to the potential of falling debris. The Plant Manager procured the services of a contractor to replace deteriorated sandstone blocks on the south side of the High Lift building. The contractor brought new sandstones from the Indiana Corey for this project.



SPW High Lift Building – Before

SPW High Lift Building – After

735 RANDOLPH DETROIT, MICHIGAN 48226



The Water Quality team has successfully completed and reported lead and copper rule monitoring for the City of Detroit under the shared services agreement. The testing for the City of Detroit was conducted with MDEQ updated sampling protocol and results continue to demonstrate the benefit of effective corrosion control.

Field Services

On the morning of October 10, GLWA became aware of a leak on 96-inch main Air Valve near M-59 and Dequindre. The only isolation valve on the 96-inch main between the Imlay City Water Booster Station and North Service Center Water Booster Station is at Dorsey and Dickenson Streets. (There is approximately 18.3 miles of water main between Imlay City Water Booster Station to Dorsey and Dickenson Streets; and 14 miles from Dorsey and Dickenson to North Service Center Water Booster Station.) GLWA Water Quality was on location to provide assistance and ensure the integrity of the water was maintained. The repair was made without loss in pressure to surrounding communities and the main was returned to service on October 18, 2016. (See photo below).



The frequency of air valve leaks on this section of the 96-inch main have increased in the last two years, emphasizing the importance of the strategy to improve reliability with the planned valve program currently under procurement and the CIP project to parallel the 96-inch main in this reach.



The Infrastructure team has begun installing new Wireless Access Points at the Water Board Building (WBB). This enterprise level network will have DWSDnet as the ID for floors 1-10 and GLWAnet for floors 11-20. The login credentials will match the users' network (PC) login. Once this is complete, the other facilities will also be set up in a similar manner which will enable users to seamlessly connect to the network regardless of location.

The IT team has enabled SharePoint Single Sign On which eliminates the need to log into SharePoint when on the network.

We are currently in the Soft Launch phase of Legistar implementation; it is being presented to the Board of Directors today. The first meeting using Legistar will be the November 4, 2016 Audit Committee. The Soft Launch continues through the end of November; as of December, the system will be fully implemented and the paper-based manual process will be retired.

The GIS team is working with the City of Detroit and the Detroit Fire Department to improve functionality of the Fire Hydrant Inspection process (Inspection season started October 1, 2016 and runs until April 30, 2017); delivered rest end points for them to consume Water Mains and Hydrant Flow Test layer, in addition to Hydrant layer.

The GIS team has successfully completed 10 GIS Workshops to date across both GLWA and DWSD. These workshops provide an introduction to GIS here at GLWA and highlights the work being done. They continue on a request basis. Asset Identification (GLWA, DWSD, Other) on 2.3 million asset records is complete; now we are actively meeting with various business groups to validate and finalize.

The GLWA Information Technology team has purchased the Symantec Endpoint Encryption (SEE) product, for workstation hard drive encryption. Encrypting the hard drives of the GLWA/DWSD workstations will greatly increase the security of our systems, and is a required step in order to attain Payment Card Industry (PCI) compliance for those systems that handle credit card data (i.e., workstations in Customer Service). We have begun the infrastructure buildout and pilot rollout, and are planning to deploy the encryption software to all GLWA/DWSD desktops, laptops, and tablet computers by the end of the 1st quarter of 2017.

The GLWA IT Security and Risk Management team participated in two days of security walkthroughs with the Department of Homeland Security (DHS), at the Wastewater Treatment Plant, on October 18 - 19, 2016. GLWA has systems/processes in place for all IT security areas listed by DHS.



INFORMATION TECHNOLOGY (continued)

Our ERP software vendor, BS&A, makes available new features within its software twice a month. These features are available through upgrading the software to a new version based on the date of the release. GLWA recently put steps in place to test the new versions prior to upgrading to ensure current processes continue to function as expected and also to proactively test the new features. These steps were developed and successfully executed for the first time with our upgrade to the September 15, 2016 version of BS&A, which was put into our production environment on October 13, 2016. GLWA's designated BS&A "Module Owners" and "Functional Experts" developed and performed the testing with facilitation provided by the IT Group. In addition, through the collection of items to test for BS&A, the IT Group now has a central repository of items for continued follow-up to further enhance the effectiveness of BS&A and its interfaces to WAM.

PUBLIC AFFAIRS GROUP

As Public Affairs moves forward with the roll-out of GLWA's inaugural internal communications plan, it is embarking on a 3-month research project to establish a baseline measure of employees' current understanding and perceptions of the Authority's communications strategy and messaging. The project will also identify the communication channels that employees currently use, prefer and perceive as most credible so that we can ensure that we are communicating with employees as effectively as possible. This project includes:

- In-depth interviews with senior leadership;
- Focus groups with employees at all levels of the organization;
- Development of a survey questionnaire (online and paper/pencil) designed to measure and track awareness, understanding and perceptions of GLWA's strategy as well as the effectiveness of communication channels;
- Programming of an online survey, tabulation and processing of the data and analyzing of the results from online and paper/pencil survey. Results will be presented in a detailed PowerPoint-style report. The report will also include communication implications and recommendations for improving internal communications.

The project begins the week of October 24, and is expected to be completed by the end of the calendar year.

FINANCIAL SERVICES GROUP

For the past 30 days, the Financial Services Group has focused on finalizing the inaugural GLWA New Market and Refinancing Bond transaction. This month in lieu of the traditional Financial Services Group report, please see the Agenda package for today's Audit Committee meeting and the materials presented for the Recap of the Bond transaction on today's Agenda.



ORGANIZATIONAL DEVELOPMENT

Since January 1, 2016, the organization has hired 124 employees. The total number of FTE's to date is 805. There are 42 open recruitments across the organization which are posted on the GLWA website.

New Employee Orientation is currently being held each month at Water Works Park. To date, 185 employees have participated in the orientation.

Training Highlight: Doug Cartland's Hungry Leadership Development Series

GLWA's leadership team completed ten (10) weeks of training to enhance the organization's leadership skills through participation in the same learning experience. 119 employees participated in this training series.

The leadership team members were given the opportunity to practice leadership skills by interacting with each other through role-playing, behavioral modeling and other group activities. This will help to build consistency as well as momentum toward creating a common leadership culture across the organization.

Benefits Administration

Open Enrollment is scheduled to take place Monday, November 7, 2016 through Friday, November 18, 2016. New offerings this year include, voluntary employee, spouse and child life plans as well as a new Internet-based employee discount plan through Perks at Work.

KUDOS and STAFF ACCOLADES

As part of normal data review, the System Analytics and Meter Operations Group identified a significant increase in the volume of one of the wholesale water customers. The increase was estimated to be approximately one million gallons per day. The group notified the customer of their observation, and upon investigation it was determined to be due to a break in a private water service line of an industrial customer. The break went unnoticed because the water was running into a deep crevasse on their property. A repair was promptly made and volumes returned to normal. Kudos to the team for providing exceptional customer service! The team consisted of: Chandan Sood, Manager – Planning Services; Douglas Inman and Eric Griffin, Applications Analyst – Planning Services.



KUDOS and STAFF ACCOLADES (continued)

Congratulations to both Keith Carter and Priscilla Williams from IT's Service Delivery for receiving the "*Bomgar Representative Essentials*" certification. This certification allows representatives to become knowledgeable in session initiation, troubleshooting tools, session management and other support features. As a result, representatives gain confidence and greater efficiency when initiating sessions and resolving customer issues remotely. Service Delivery now has six (6) Service Desk Analysts and one (1) Office Support Specialist that has achieved this certification.

LEGAL

General Counsel's October Report is attached to the Chief Executive Officer's Report.

Respectfully submitted,

Sue M. Cormica

Sue F. McCormick Chief Executive Officer

SFM/dlr Attachments (1)

• General Counsel's Report



General Counsel – October, 2016

General Counsel worked on the following matters:

1) Contract matters:

<u>Contracts reviewed as to form</u>: General Counsel reviewed 19 contracts as to form and execution.

Contracts drafted or revised: General Counsel drafted or revised 12 contracts.

We are in the midst of our water contract reopener season. This year we have 3 regularly scheduled reopeners (Almont, NOCWA, and Romeo). We have 2 confirmed requests to reopen out of sequence from Northville Twp. and Washington Twp. (Note: Commerce Twp. was determined to be ineligible for a reopener as their storage facility did not operate at all during the 2016 peak season.) Additionally, we are trying to secure the execution of 2 new contracts with Imlay Twp. and Grosse Ile Twp. Additionally, we had 2 water contract exceedances for 2016 (Bruce Twp. and Harrison Twp.) related to peak hour usage and we are in the process of negotiating a remedy with these customers.

2) Subpoenas / Information Requests:

General Counsel received 7 subpoenas/information requests and responded to 2 subpoenas/information requests.

3) <u>New Cases</u>:

Gail Beasley v City of Detroit and Great Lakes Water Authority, WCCC No. 16-012602 <u>NZ</u>: This is a "class action complaint" related to the July and August rain events.

<u>DCMU Garnishment Complaint</u>: This is a Writ of Garnishment for certain funds held by GLWA for one of its employees. As this is the first case of its type, it is being brought to the Board's attention. Unless otherwise directed, future matters of this nature will be handled in the normal course of business but will not be included in these reports in consideration of the employee involved.



4) <u>Cases Closed</u>:

Sanitary Chemists and Technicians Association v DWSD MERC Case No. c 14 A-OB: On October 19, 2016, MERC issued its final order dismissing the Union's challenge to DWSD's job reorganization.

- 5) <u>AFSCME v DWSD and GLWA, MERC Case No. C 14 E060</u>: ALJ Stern entered her proposed Order granting GLWA and DWSD Summary Disposition and dismissing AFSCME's claim that DWSD was required to bargain over the placement of Office Support Specialists and Plant Technicians. On October 25, 2016, MERC granted AFSCME an extension to November 28, 2016, to file objections to the proposed order.
- 6) <u>Main Break Claims</u>: General Counsel continues to work on the disposition of main break claims filed by Madison Heights and Redford Township
- 7) <u>Gordie Howe International Bridge</u>: General Counsel continues to support this ongoing project to manage, among other things, the purchase/condemnation by the State of the Livernois/IWC building and various water and sewer infrastructure relocations/impacts. Activity on this project has been minimal while we await offers to purchase from the state.
- 8) <u>Lapeer County Property Acquisition</u>: Properties for locating the booster chlorination stations for continuing service to Lapeer County customers Imlay City, Mayfield Twp. and Lapeer have been identified and appraised for condemnation purposes. The Mayfield Twp. property owner, Kamax, L.P., has offered to sell their parcel for \$5945. Our expectation is to take the offer and an easement for this parcel to the Board for approval on October 26th. Regarding the property located in Goodland Twp., a Good Faith Written Offer, based on the condemnation appraisal report, was made to the owner in the amount of \$4000; the owner rejected the offer. GLWA has begun eminent domain proceedings for this parcel. A potential attorney for the owner has proposed a settlement amount of \$10K. GLWA attorneys will counter with an offer of \$5900, equal to that of the Kamax parcel.
- 9) <u>DWSD</u> v <u>Highland Park</u>: The Court of Appeals has scheduled argument on the merits of Highland Park's appeal for November 1, 2016.
- 10) <u>IPP Program Transfer</u>: This matter was presented to the Technical Advisory Committee (TAC) at its last meeting and is being presented to the GLWA Board of Directors to initiate the opportunity for public input and comment. The draft Rules will be discussed with the Board at its November Workshop meeting.



- 11) <u>NPDES Permit Renewal</u>: General Counsel continues to support this initiative.
- 12) Flint: General Counsel continues to assist in responding to investigators and litigants.
- 13) <u>ATT</u>: General Counsel is assisting GLWA and DWSD IT in addressing this issue. A tentative resolution has been reached, subject to staff review and Board action next month.