



Office of the Chief Executive

735 Randolph Street, Suite 1900
Detroit, Michigan 48226

March 22, 2017

The Honorable
Board of Directors
Great Lakes Water Authority

Dear Chairman Daddow and Directors:

Regarding: CEO's Report – March, 2017

On the evening of Tuesday, February 28, 2017, after consultation with the Michigan Department of Environmental Quality (MDEQ), GLWA issued a boil water advisory to several customer communities including Highland Park, Hamtramck and a large section of Detroit, after an equipment malfunction at its Water Works Park Water Treatment Facility caused a temporary drop in water pressure levels. Specifically, a valve within the High Pressure Water System, the plant's technology that controls the valves, failed. That failure caused other valves to close and the pumps to shut down. Therefore, water could not get through to the distribution system. As a result, there was a drop in pressure levels.

Within hours of identifying the problem, GLWA crews were able to create a manual workaround to keep the valves open, allowing the pumps to come back online and water pressure levels to begin to be restored. However, given the drop in pressure that occurred, and out of an abundance of caution, GLWA, in consultation with MDEQ, issued a boil water advisory alert for Highland Park, Hamtramck and the area of the City of Detroit defined by the following borders: south of McNichols, east of Linwood, west of Conner and north of the Detroit River. Once issued, a boil water advisory remains in place for a minimum of 48 hours to allow appropriate testing to be completed to assure there were no negative impacts on water quality.

Two rounds of testing were required. The results taken by GLWA related to the February 28, 2017 boil water advisory all came back clear, confirming that water quality was sustained throughout the event. GLWA made the recommendation to the impacted communities to lift the boil water advisory on the morning of March 3, 2017.

A complete review of the status of the control technology related to the valve operation is being undertaken at Water Works Park as well as of similar technology in other GLWA facilities. In addition, GLWA is working with the City of Detroit on coordination of communication during events that effect the level of service in the City of Detroit.

GLWA's Customer Outreach Program is launching a new work group which will be focused on improving communication processes between GLWA and our member communities. Communication and coordination during events affecting level of service will also be included in the scope of this work group.

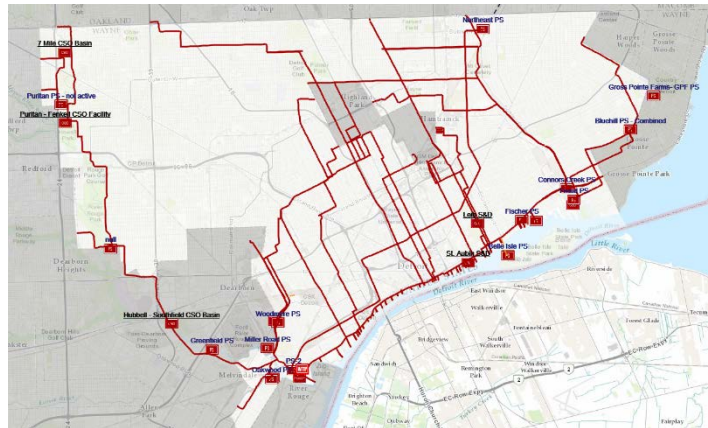
PLANNING SERVICES

Asset Management and CIP Group

It is anticipated that the Asset Management and CIP Group, in conjunction with the Financial Services Area, will present the FY 2018-2022 Capital Improvement Plan to the GLWA Board of Directors in April.

The group is finalizing charters, standard business processes and forms that will be the foundation of the Asset Management Strategic Organization (AMSO) governance model. Staff has been assigned to the various satellite teams and regular monthly meetings continue to track progress and provide assistance for the highest priority projects. An AMSO SharePoint site has been created to manage this ongoing effort. The overall AMSO governance documentation, project task lists and team rosters can be found on the GLWA Intranet Portal at: <http://sp.dwsd.org/group/glwa/amso/SitePages/Home.aspx>. The AMSO model and associated documentation will be presented this spring to the Asset Management and Capital Improvement Plan Customer Outreach Work Group.

A new joint effort is underway between Asset Management and Information Technology to improve the GLWA Geographic Information System (GIS) over the next several months. Improvements to the GIS include field verification, adding and cleaning up asset attribute data and confirmation and modification of horizontal asset data (pipe, valves, manholes, etc.) for both water and sewer assets.



The Asset Management and Capital Improvement Plan Customer Outreach Work Group's next scheduled meeting is March 28, 2017. Agenda items include the roll-out of the group's upcoming schedule and priorities, and an Asset Management presentation from a local consulting firm

Systems Planning Group

The first Water Technical Advisory Committee and Wastewater Steering Committee meetings of 2017 was held on March 2, 2017. Bill Wolfson shared GLWA's Brand Promise and how we plan to use Key Performance Indicators (KPIs) and Effective Utility Management to meet the Brand Promise to be the provider of choice. Input from customer communities was requested during a "Perfect World" exercise, in which they were encouraged to dream big about what their ideal KPIs would be as well as ideas for GLWA to strive towards.

The work group will be an ad hoc subcommittee of the Analytical Work Group. The first meeting is scheduled for April 11, 2017.

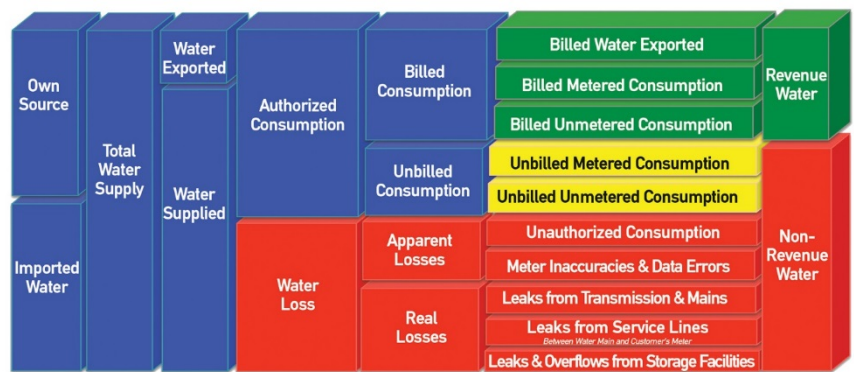
PLANNING SERVICES (continued)

The contract for the Wastewater Master Plan has been provided for Board approval. Pending approval from the Board, the next Master Plan Steering Committee meeting is planned for April 6, 2017.

Sue McCormick presented to the Lyon Township Board of Trustees on March 6, 2017 regarding the potential of joining GLWA’s water system. Her presentation touched on GLWA’s Brand Promise, the services we provide, and the Customer Outreach Program. Lyon Township is currently reviewing the proposal and taking input from their water customers regarding the prospect of joining the GLWA.

System Analytics and Meter Operations Group

The “Units of Service for Non-Master Metered Customers and System Water Audit” contract has been awarded to Black & Veatch and a kickoff meeting was held on February 28, 2017. This contract will follow the AWWA Standard Water Audit compilation and data validation process. Data requests are being formulated for GLWA groups and non-master metered customers. The project team will be reporting on their methodology and approach at the Analytical Work Group (AWG) meeting this month. The Units of Service evaluation for non-master metered customers is targeted for completion by November, 2017.



The West Side Sewer Modeling and Monitoring Program is ongoing. Two additional river level sensors were installed last month to support the river model for the program. The total count of newly installed instruments under the program is 77 to date. The project team has an update meeting scheduled on March 30, 2017 to review the progress. The program is ongoing for the next two to three years.

Two new laser sewer meters for locations DT-S-11 and DT-S-12 were brought online into the Greater Detroit Regional Sewer System (GDRSS) Portal. Additionally, three sewer meter sites also have improved programmable logic controller software which reports missing readings over the radio network resulting in a lower number of estimated reads. Progress on these items will be reported at the next Wastewater Analytics Work Force (WATF) meeting on March 31, 2017.

System Analytics requested and received the feedback for improvements from the end users of the Wholesale Automated Meter Reading (WAMR) portal. The planned improvements for year 2017 will be presented to the water member communities at the AWG in late March. Meter Operations replaced two water meters, upgrading them to newer, more accurate meter technology. Fraser and Canton metering locations were upgraded and rehabilitated.

PLANNING SERVICES (continued)

Energy Management Group

Energy Management has started two projects this month with Aquasight, a real-time intelligence platform, designed specifically for water and wastewater utility. The first project is a one year pilot that will take place at the Adams Booster station. The value of the pilot is in two distinct areas. First, Adams is our most technologically advanced water booster station. It is fully equipped with electric meters, water meters and pressure gauges. This pilot will verify the importance of this equipment across our system. Secondly, using Aquasight software, we will be able to process the data collected to determine savings in three areas, Operational, Maintenance and Capital. If the pilot is successful, we will consider replicating it system wide.

The second Aquasight project will take place at the Water Resource Recovery Facility. It is a three year program developed by the Department of Energy to encourage wastewater facilities to adopt best-practices and cutting-edge approaches to manage data, technology and improve energy efficiency of wastewater facilities by 30%. A key deliverable in addition to the 30% energy reduction plan, will be to realize 5% in low-no cost energy savings by the completion of the program. Aquasight was the vendor selected by the Michigan Energy Office to execute the program.

Research and Innovation

Members of the Research and Innovation team attended the triennial Borchardt Conference at University of Michigan, Ann Arbor campus. The presentations were very relevant and leading edge to GLWA concerns, and the team was able to meet some of the thought leaders in the country. Several of the researchers at the Borchardt Conference presented information that repeatedly showed that GLWA's drinking water is excellent.

Research and Innovation participated in a webinar on microfibers. The webinar covered the issues with microfibers in the environment, clothing manufacturers' concerns, a fiber futurist perspective, several solutions targeted at clothing consumers and the end of pipe treatment perspective; which highlighted the scope, size, lengthy time horizons and remaining exposures.

Research and Innovation was invited to speak at two upcoming seminars; one focused on bioenergy to market issues and the other on bioenergy economy and why wastewater treatment plants are interested in emerging technologies.

WATER RESOURCE RECOVERY FACILITY

Water Resource Recovery Facility Operations and Compliance

The Water Resource Recovery Facility was in compliance with all National Pollutant Discharge Elimination System and Michigan Department of Environmental Quality water quality permits in the month of February 2017.

WATER RESOURCE RECOVERY FACILITY (continued)

Water Resource Recovery Facility Engineering

Fire Remediation

Remediation of the Incinerator Complex II area that was damaged by the March 2016 fire is in the final phase. Complex II incinerators #7 through #10 are presently warming up, and the burning of sludge will likely start in mid-March 2017 with all of the eight incinerators scheduled to be brought online by April 2017. Sludge feeding has been delayed due to an electrical incident resulting from the high winds of March 8, 2017.

Biosolids Dryer Facility (BDF)

The New England Fertilizer Company (NEFCO) has completed all the contract required demonstration tests. NEFCO has installed a ferric chloride system to reduce sulfur dioxide air emissions, and contract required air emission testing is scheduled for May 2017. Recycle bin modification work is scheduled to begin in April 2017 and should be completed by the end of September 2017.

Rouge River Outfall Disinfection Project

The Contractor submitted a Guaranteed Maximum Price (GMP) to GLWA on January 20, 2017. Negotiation of the GMP was completed and presented for Board approval. A lump sum agreement to dispose of the sluicing sludge from the chlorine contact conduits via the Water Resources Recovery Facility (WRRF) in lieu of dewatering, trucking, and landfill disposal has been reached between GLWA and CDM. The sludge cleaning from the conduits are expected to be complete in May 2017.

The isolation and dewatering of one of the main WRRF discharge conduits continues. The conduit cleaning and inspection is expected to be complete in May 2017.

Industrial Waste Control (IWC)

Final contract terms are still being negotiated for the Laboratory Information Management System (LIMS) software purchase and are expected to be completed by the end of March 2017. Since the kick-off meeting for the Pretreatment Information Management System (PIMS) project last month, the sharing of information, documents, and database copies are underway to deliver this project to IWC by late 2017.

Superfund Amendments and Reauthorization Act (SARA) reports were submitted to the State of Michigan on February 28, 2017 for 22 facilities including the water treatment plants, water reclamation facility, combined sewer overflow facilities, pump stations, and the Central Service Facility.

WATER OPERATIONS

A research specialist from the University of Michigan Water Center Graham Sustainability Institute is working with a team on watershed assessment of nutrient loads for the St. Clair-Detroit River System. As part of the watershed assessment, the team from U of M is developing a model to look at nutrient dynamics in Lake St. Clair, and is interested in using GLWA Water Quality data from the monthly analyses of intake water to test and refine their modeling. GLWA Water Quality Manager, Mary Lynn Semegen, will provide monthly mineral analysis reports which will contain some of the information of interest. The two Detroit River Intakes is their current area of focus.

The following Water Operations employees attended the AWWA 2017 Borchardt Conference at the University of Michigan on February 21, 2017:

Mary Lynn Semegen, Manager	Abul Ahmed, Chemist
Patrick Williford, Chemist	Wallace Mencavage, Operations Team Leader
Omar Brown, Water Technician	Christine Steary, Chemist
Michael Ermler, Water Technician	Yao Kouassi, Operations Team Leader

Many of the topics discussed shared information that allows water utilities to be proactive to the challenges facing municipalities. Topics such as sustaining the water transmission and distribution system here in our country and across the world.

One attendee stated, “It was very encouraging to be a part of the academic private and municipal industries who collaborated together to problem solve instead of trying to place the blame on someone else. I appreciate the investment made by the Great Lakes Water Authority (GLWA) to send me to the conference.”

On July 20, 2016 at 9:10 a.m., GLWA experienced a significant water pressure drop in the area of the Wastewater Treatment Plant (WWTP) due to a leak in one of the system's transmission lines. Crews were immediately dispatched to investigate and identified the area of the leak. The leak was difficult to detect, but ultimately discovered in the Rouge River crossing pipe. As crews closed valves to isolate the leak so that repairs could begin, pressures were being restored. The transmission line outside the river is 42-inches in diameter but the crossing under the river is 30-inches.

Construction of the 30” water main under the Rouge River started on January 19, 2017. This was GLWA’s first pilot directional boring and the installation of pipe.

The final tie-ins and disinfection of the main are complete as of March 13, 2017. Field crews opened the by-pass gates on the 42-inch main on Jefferson, near the Water Resource Recovery Facility (WRRF) and restored the main to full service.



42-inch Water Main Break under Rouge River near WWTP on July 20, 2016

Field Engineering

Cross-functional collaboration starts with understanding our operational partners and what they do. To that end, Troy Davenport, Tammie Dubose and Sureshkumar Patel of the Damage Control Team joined the GIS and IT groups on a tour of the WRRF. The purpose of the tour was to see the process GLWA undergoes to process the effluent being received. The Field Team wishes to express their gratitude to the WRRF Team for taking the time to share during their three hour tour.

Systems Control

The pumpage for February 2017 was down by 1.6% compared to February 2016.

INFORMATION TECHNOLOGY

The IT Security team continues to work on removing obsolete software and systems from the GLWA/DWSD network. This includes systems running unsupported operating systems, along with unsupported software, which are vulnerable to attack. In the first quarter of 2017, we have removed and/or upgraded over 50% of the obsolete software and systems on the GLWA/DWSD network.

The Service Delivery team completed a Verizon cell phone audit on 402 cellular lines. Approximately 51 lines are identified for suspension.

The Enterprise Application's team has launched new SharePoint Intranet sites for the Finance Services Group, Public Affairs, and Security and Integrity. These new sites help communicate and disseminate important news, announcements, instructions, forms, and other information to GLWA staff.

INFORMATION TECHNOLOGY (continued)

The Enterprise Application's GIS team hosted two students from University of Michigan's School of Information Science for one week this month. They were participating in an Alternative Spring Break Program, where they worked with the GIS unit on data analytics and metadata tagging. We also had an opportunity as a team to take them on a tour of the WRRF.

The Enterprise Application's GIS team has completed the re-drawing of shapefiles under new categories for Miss Dig for both GLWA and DWSD. This delivery will help reduce the number of calls for Miss Dig services by improving the accuracy of the call areas. The GIS unit helped facilitate discussions between GLWA and DWSD Field Services to collaborate on a solution that met the needs of both organizations.

PUBLIC AFFAIRS GROUP

As has previously been reported, Public Affairs has been in the process of conducting an internal communications research project with its research and analysis partner, Fleishman Hillard. Phase 2 of the project, a system-wide survey of all employees, is now complete. The survey was provided to employees in two formats, electronic and paper copy, and was open from February 27 through March 10. Our overall completion rate was 63 percent (519 out of 818 employees); with a total of 229 online surveys and 290 paper surveys taken. Fleishman is now in the process of analyzing the completed surveys and compiling a final report, which will assist Public Affairs in making appropriate adjustments to its internal communications plan. Public Affairs will share the report with the GLWA Board and Executive Leadership Team, and a summary article will also be published for employees in the Spring edition of WaterWorks Magazine (coming in May).

Public Affairs has also been providing counsel/recommendations to Organizational Development surrounding its inaugural advertising buy in support of GLWA's ongoing recruitment efforts. Proposals are now being reviewed from both the CBS and Radio One broadcast groups. Stay tuned for more information on the timing of the placements and the radio spots themselves.

SECURITY AND INTEGRITY

During the month of March, the Security and Integrity Group is currently in discussions for a Security Forum Outreach Program. The group also continues to participate in several extensive training efforts; a Tactical Strategies Webinar regarding "Active Shooter in the Workplace", FEMA's Disaster Training for Water and Wastewater Utilities, Dispatch Supervisory Training and Staff and Command Training.

ORGANIZATIONAL DEVELOPMENT

Organizational Development continues to work on the inaugural Apprenticeship Program, partnering with Focus: Hope and Henry Ford College. The implementation of this Apprenticeship Program will fulfill the one of many mandates stemming from the Federal Court Mediation. Development of additional Apprenticeship programming will follow.

ORGANIZATIONAL DEVELOPMENT (continued)

Organizational Development is preparing information for a Dependent Audit that will begin in the coming weeks. This audit will verify that employee dependents are within the established guidelines.

There have been nineteen (19) new hires since the last CEO report. The New Employee Orientation continues on the last Friday of each month. Legacy employees that joined GLWA from DWSD are included in the New Employee Orientation to ensure employee exposure and understanding of the GLWA mission and brand promise.

The new Cornerstone Learning Management System (LMS) implementation is going well – design, conversion and interfaces with Dayforce have been completed and successfully tested. Test scripts are drafted. End user testing began on Monday, March 20. OD is also doing an assessment on how to migrate any historical training records.

In addition, a combined IT and OD team has reviewed a robust performance and recruitment model within the LMS. There will be further review and consideration of these modules.

LEGAL

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

FINANCIAL SERVICES GROUP

Procurement

Members of the Procurement team participated in a one day training session on World Class Procurement Practices. This class was sponsored by the National Institute of Governmental Purchasing (NIGP) and was facilitated by the Michigan Public Purchasing Officers Association (MPPOA). The one day event hosted 30 attendees, with GLWA accounting for one-third of the class. The event provided an opportunity to share ideas with colleagues from other large authorities, counties and a comparable large public utility. The program addressed what it meant to be "World Class", such as having highly skilled individuals, being rated a top performer in the industry, and an organization that others strive to be. They also openly discussed what practices organizations are adopting to achieve such status. There were many areas where the staff was validated in GLWA's efforts to improve processes, implement KPIs, reduce processing timelines, and perform commodity analysis. Overall the training session was a tremendously collaborative learning environment which concluded with identifying other training opportunities. One of these opportunities will be hosted by GLWA in April at Water Works Park for NIGP and MPPOA. This training session will be open to the Procurement and Project Engineering teams to focus on improving RFP development.

GLWA Procurement has begun to expand the use of efficiencies available on the Michigan Inter-governmental Trade Network (MITN) site. This includes vendor responses and bi-award information.

FINANCIAL SERVICES GROUP (continued)

This is a step leveraging existing technology which will be expanded over the course of the next year. Access to this information also fosters improved vendor relations and increased participation.

The table below presents contract activity. Although the contracts executed in the month of February 2017 appears less than compared to other months, we currently have over 50 contracts in process which is a by-product of the level of construction activity. The current numbers are as follows:

EXECUTED CONTRACTS - FEBRUARY 2017		
Type	Quantity	Contract Amount
Consultant	8	\$ 1,773,471.00
Legal	1	\$ 250,000.00
Grand Total	9	\$ 2,023,471.00
IN PROCESS CONTRACTS - FEBRUARY 2017		
Type	Quantity	Contract Amount
Construction	14	\$ 67,085,974.06
Consultant	32	\$ 60,558,218.06
Design Build	6	\$ 44,899,880.19
Lease Agreements	2	\$ 78,000.00
Legal Services	1	\$ 50,000.00
Grand Total	55	\$ 172,672,072.31

As a national initiative, the Financial Services Group is recognizing March as Purchasing Month. This is an opportunity to recognize our procurement professionals and celebrate GLWA's collaborative, cross-functional partnerships that are essential to effective procurement. On March 30, 2017, Supply Chain Operations, on behalf of all of the Procurement team, is hosting an open house with educational materials, one-on-one Questions and Answers, financial system tools and tips, other information sharing and team bridge building at the Water Resource Recovery Facility from 8:00 a.m. until 4:30 p.m.

Transformation

The Financial Services Group has initiated an "organic" survey design for its internal finance customers. Although the primary finance support needs are pretty well known, this unique approach is designed to elicit out any unanticipated responses and/or perceptions. This approach utilizes an unstructured customer interview to produce a structured survey that relays the results using the customers' own words.

FINANCIAL SERVICES GROUP (continued)

In order to better serve our internal customers, and assess the next round of transformational activities, and the unanticipated responses help us better understand the following:

- Unknown services internal groups could use
- Services already being provided that GLWA groups may not be aware of
- Easier ways to deliver existing services
- Smart practices applied in one area that could be implemented by other teams with immediate benefits

Financial Planning & Analysis

The FP&A team has made significant progress on the new budget document. The narratives on the analysis of the variances in the budget, between FY 2017 & FY 2018 and FY 2018 & FY 2019, have been completed and presented to the Board. Both the Staffing Analysis and the Budget Roll-up reports have been added to the budget document.

Additional information is being added to the tables, such as the change in Fiscal Years which are represented in dollars. This information will help to make the changes in the budget more transparent to the end users and the tables easier to read.

The team is in the process of reviewing the General Ledger activity for FY 2017 to ensure that the activity is recorded in the correct areas of the financial statements. This review is beneficial in ensuring the accuracy of the financial information being used when comparing actual expenditures against budgeted figures.

The team is continuing to develop the Capital Outlay plan to modernize the capital spend planning and transparency. The purpose of this project is to identify the GLWA assets that are not included in the Capital Improvement Plan and will aid in forecasting both budget and cash needs for repairs and maintenance of existing assets as well as the replacement of these assets as they near the end of their useful lives.

Internal Audit

Fifteen final procedures for June 30, 2016 and June 30, 2017 were provided to GLWA's external auditors, Rehmann. There are currently two procedures still in process.

- Human Resource/Benefits Procedure – This is in the final stage of review
- Documentation Standard Procedure – This is still in process

The next phase will consist of developing Visio flowchart updates for all procedures. The Risk Control Matrices (RCM) are in process. RCMs serve the following purposes.

FINANCIAL SERVICES GROUP (continued)

- Identification of the risks relevant to the achievement of the Finance objectives
- Internal control objective to cover the risks
- Existing internal control activity

The internal control activities included in these matrices are incorporated in the completed procedures. Three matrices in process include the following:

- Federal compliance control framework - Office of Management and Budget (OMB) Federal Compliance Supplement format – This is in the final stage of review.
- Finance risk control matrix including IT application controls – This is in the final stage of review. It includes a) control types (preventive/detective), 2) financial statement assertions (existence/occurrence, completeness, valuation/allocation, rights/obligations, and presentation/disclosure), and 3) system application controls
- General computer controls (Information Technology) control framework – This is scheduled to be completed by March 24th.

WRAP Update

The Water Residential Assistance Program (“WRAP”) has completed its first year of providing assistance to water and sewer customers within the Great Lakes Water Authority service area. 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 “opt-in” 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, 2017, 60 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, 2017 for the City of Detroit and Suburban participants.

FINANCIAL SERVICES GROUP (continued)

**WRAP Funding Status
As of February 28, 2017**

	Detroit	Suburban	Total
Completed Applications	11,012	2,541	13,553
Households Assisted	2,949	1,157	4,106
Shutoffs Avoided	1,536	354	1,890
Home Audits	704	154	858
Number of Home Repairs	384	83	467
Amount of Home Repairs	\$284,710	\$54,650	\$339,360
Average Cost of Home Repair	\$741	\$658	\$727
Total Bill Assistance Committed	\$805,052	\$376,850	\$1,181,902
Total Arrearage Assistance Committed	\$1,620,109	\$380,748	\$2,000,857
Total Assistance Committed	\$2,425,161	\$757,598	\$3,182,759
FY 2016 & FY 2107 WRAP Funds Uncommitted	\$89,819	\$0	\$89,819
Total Bill and Arrearage Assistance Paid to Date:	\$483,342	\$90,018	\$573,360

KUDOS

A special thank you to the management staff (Balvinder Sehgal, Yao Kouassi, and Reginald Bryant), the operations staff (Shannon Williams, Brian Carter, Gary Winston and Jeffrey Jones), and the maintenance staff (Brandon Ross, Leonard Fleming, Chirag Kawa, Jason Hammond, Mark Mapp, Jackie Hunt, Johnny Thackthay, Elgin Collier-Jones and Joseph Haffey) all within the Water Operations Group, for their quick response in the repair and restoration of system operating pressure to the public related to the February 28, 2017 low water pressure event affecting Highland Park, Hamtramck and the City of Detroit.

Respectfully submitted,



Sue F. McCormick
Chief Executive Officer

SFM/dlr

Attachment (General Counsel's March Report)