

City of Flint Water Department
Technical, Management and Financial Capacity
Status Update (September, 2020)

This document provides a second update to the City of Flint Water Department's technical, management and financial capacity (TMF) initiative. The initial TMF report was submitted to MDEQ/EGLE on October 30, 2018 to comply with USEPA's First Amendment to Flint's Emergency Administrative Order (Paragraph 60.b.iii) and Michigan DEQ's August, 2017 Water System Sanitary Survey. Achieving the financial, operational, customer service, project delivery and staffing goals outlined in the TMF are critical for the effective sustainability of the Flint water system.

The initial TMF report documented several of the financial challenges associated with the Flint water system. A declining customer base, low collection rate, loss of commercial and industrial customers, water theft and inaccurate meters had contributed to reduced system revenues. Additionally, the low medium household income in Flint and high water rates make it currently infeasible to increase revenues through an additional rate increase. Without appropriate revenues, it is a significant challenge for the utility to hire required staff, complete all required capital projects and implement best operating practices.

A TMF status update was submitted to EGLE in July, 2019. While the initial TMF report identified numerous methods and recommended actions to enhance Water Department revenues, the first TMF status update documented progress on several projects and initiatives impacting the Water Department's revenue and operating costs. Assumptions used for financial projections were revised and a new five-year financial projection was presented. These projections established when proper funds would be available to hire additional staff, establish a self-funded capital program and allow implementation of all recommended Standard Operating Procedures (SOPs).

This second TMF update addresses the current financial and operating assumptions and performance that impact the City of Flint's ability to obtain a sustainable water utility. Unfortunately, the timing of several projects and initiatives presented in the first update have been impacted by the pandemic. Legislative and policy changes have impacted collection levels, social distancing requirements have impacted the ability to attract and hiring qualified personnel and construction projects have been delayed. This update presents the current financial position of the Water Department, potential upside to the current budgeted revenue, revised construction schedules for WIIN funded projects and the plan for Standard Operating Procedure (SOP) development and implementation.

Financial Performance

The financial performance of a government owned and operated drinking water system needs to be evaluated from two perspectives. The first perspective, the cash flow or cash balance perspective, provides a short-term view on operating the system for the next few years. With the cash flow view, certain longer-term costs are not included such as depreciation, certain pension and retiree health care expenses and bad debt. The second perspective, the fund balance view, provides for a longer-term perspective. In this view, long-term costs such as depreciation, bad debt and other legacy costs, are included. These two different financial views of a given government-owned drinking water system are necessary to evaluate the financial health of the utility. Both of these perspectives are generated via government accounting rules and both are provided in the annual financial audit as required by state law.

Table 1 presents the first perspective or the cash balance perspective. The City of Flint has made the following financial projections as part of their budgeting process.

Table 1 – Cash Flow

	FY19-20	FY20-21	FY21-22	FY22-23
Revenue	\$30.2M	\$30.3M	\$30.1M	\$30.2M
Operating Costs - cash	\$25.6M	\$27.7M	\$28.5M	\$29.4M
Water Fund Balance*	\$25M	\$27.5M	\$29.1M	\$29.9M
Funds available for staffing and/or capex	\$18M	\$20.4M	\$21.8M	\$22.9M

*Beginning Water Fund balance = \$20.4M; Minimum Water Fund balance should be approximately 25% of O&M costs

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The second perspective, or fund balance perspective is presented in Table 2. This fund balance view is also included in the City’s officially adopted budget For FY 2020-2021 and FY 2021

Table 2 – Fund Balance [1]

	FY 20*	FY 21	FY 22	FY 23	FY 24
Operating Revenue	\$30.2M	\$30.3M	\$30.1M	\$30.2M	\$30.2M
Operating Expenses	\$33.6M	\$38.1M	\$39.3M	\$40.1M	\$40.7M
Fund Balance Change	-\$3.4M	-7.8M	-\$9.2M	-\$9.9M	-\$10.5M
Beginning Fund Balance	\$15.5M	\$12.1M	\$4.3M	-\$4.9M	-\$14.8M
Ending Fund Balance	\$12.1M	\$4.3M	-\$4.9M	-14.8M	-\$25.3M

*Estimate – FY20 audit not complete

[1] The fund balance presented is an approximation of the net position view. It does not address long-term changes in capital assets. Capital assets will be increasing over the next several years as significant WIIN funds are expended

As referenced in the footnote, Table 2 is a modified accrual approach that does not reflect changes in capital assets. This provides a good medium-term view of the Water Fund balance. However, the Flint audit reflects a full accrual approach that includes capital assets. This long-term Water Fund view shows a substantially higher Water Fund net position that will continue to grow as WIIN funded capital assets are placed in-service.

Both of the above forecasts have been developed with the following annual cost increase assumptions:

- Salary, wages, healthcare 3%
- Pension 5%
- Supplies and Materials 3%
- Power 3%
- GLWA purchased water 5%
- Other Opex costs 3.9%

Additionally, the total number of water customers is assumed to be constant for the next three years with the same mix of residential and commercial customers. Operating costs for FY20-21 and beyond include all positions (including vacant positions) shown on the current organization chart (Appendix A).

However, there is the potential that the revenue presented in Tables 1 and 2 can be increased. The potential areas of revenue enhancement are as follows.

Collections

Unfortunately, the City's financial system cannot adequately differentiate revenue sources, which makes it difficult to determine a collection rate based solely include current billings. However, the total revenue residential collection rate has decreased since the last TMF update. This decrease is understandable. At the time of the last TMF update, the City was aggressively pursuing customers that were delinquent in payment of their water bills. At that time, water service was being terminated for non-payment. To reconnect, customers were required to pay their current bill, a percentage of their outstanding balance and a reconnection fee to reinstate water service. These actions increased current year customer revenue per account through the partial payment of overdue bills and prompt payment of new bills. Additionally, the previous TMF update was filed prior to the economic downturn caused by the pandemic.

The City discontinued "service termination for non-payment" during the summer of 2019. Due to the pandemic, this practice has continued and some previous service terminations have been reconnected for health reasons in accordance with Governor Whitmer's Executive Orders. Some of the revenue lost from these conditions has been offset by State-funded payment assistance programs. However, as stated in previous TMF reports, there is the potential to increase residential collection rates by 10 to 15 percent to return Flint to pre-water crisis collection levels. If this is achieved, annual revenue would increase by \$2.2M to \$3.4M. Obviously, this revenue increase cannot be realized until after the pandemic and when economic conditions have improved.

Additionally, under the terms of the purchased water Agreement with GLWA, the City can have its escrow funds released if it can properly document that its residential collection rate exceeds 90%, has made all payments due under the water contract in full and on time and has met all obligations payable from its water and sewer funds, including obligations to its bond holders, suppliers, vendors, and employees in a timely matter after the first two years of the contract, which was entered into in November of 2017 . Using best practices for collections should easily achieve this goal and make another \$3.75M available to the Water Fund. If not, then the security deposit funds would not be available until 2023.

GM Credit

Full water service from Flint water system was reinstated at the GM-Flint Engine Operations in October, 2018. Since that date, the potential revenue increase from this industrial account meter connection is approximately \$0.4M per year. However, a Flint sewer billing error resulted in overbilling the GM- Flint Complex by approximately \$1.2M for sewer service from December, 2014 to July, 2017. Therefore, GM is receiving monthly credits that offset water/sewer bills. However, this credit should discontinue in late 2021 resulting in increased revenue.

Meters

The City selected the Badger E-Series meters for their residential meter replacement. These meters are being installed with AMR/AMI technology which allows meters to be read remotely. The storage and transmission of meter reads to a central location results in more efficient and accurate meter reads.

Additionally, customers will benefit from access to continuous water use information which can help identify household leaks and promote water conservation.

The Badger E-Series meters consist of sealed, tamper protected meters and registers (with alarm) which will reduce meter tampering and water theft. To protect the City’s investment in the new meter technology, the City has taken steps to penalized any customer tampering with their water service and, in conjunction, return those customers back onto the system legally as paying customers.

The accuracy of the new meters will increase residential revenue by several percent (on the average) per household. Since approximately one-half of the new residential meters have been installed, the enhanced revenue impact of new meter installations has not been fully realized. The increased revenue from meter replacements by FY21-22 would be approximately \$0.5M annually.

However, It is difficult to quantify the potential increased revenue resulting from reduced water theft. The City will continue to attempt to determine the portion of its significant Non-Revenue Water (NRW) levels that may be associated with this theft. The first step in this process will be to undertake a leak detection survey which could occur in the Spring, 2021.

WIIN Projects

The City has completed the design of all WIIN funded projects, except for the Cedar Street Pumping Station and small main replacements. Most of the projects listed below are currently being constructed. The intent is to complete the construction of the nine(9) primary WIIN funded projects by the following dates:

<u>Project</u>	<u>Completion</u>
LSL Replacement – Phase 6	December, 2020
Chemical Building	July, 2021
Dort Pumping Stations	Q2, 2021
Dort Reservoir Rehabilitation	December, 2020
Cedar St. Pumping Station and Storage	Q1, 2022
Water Quality Monitoring Panels	December, 2020
Secondary Water Supply	April, 2021
Northwest Transmission Main	On Hold*
Water Meter Replacement	Q2, 2020

*Pending determination of WIIN fund availability

Once the amount of WIIN funds remaining for small main replacement has been determined in 2021, the WIIN-funded small main replacement program can commence. This WIIN funded program will continue through 2023. Arcadis identified over \$300M of capital expenditure requirements for the Flint water

system over the next 20 years. A majority of these projects are small main replacements. As shown in Table 1, the City of Flint should be able to support a self-funded infrastructure replacement program beginning in 2024. However, the long-term funding of this capital program will require enhanced revenue (generally through improved collections or system growth) or future water rate increases.

Water Department Staffing

The Water Department's financial performance directly impacts its ability to hire needed staff. The City continues to attempt fill all positions shown on its current Water Department organization chart (see Appendix A). However, numerous budgeted positions continue to be vacant. "Full-employment" within the Water Department has also been difficult to achieve since it is a challenge to attract qualified personnel. Additionally, the pandemic has made it difficult to interview and test potential employees. Critical operating responsibilities, such as the licensed treatment plant operator and laboratory services, have been outsourced to F&V Operations and Resource Management. Staffing progress has been closely monitored by the USEPA and the State to comply with the Emergency Administrative Order.

Arcadis recommended that the following additional positions be added to provide the appropriate TMF capacity.

- Laboratory Technician
- Cross Connection Program Manager
- Water Distribution Valve and Hydrant Crew (3)
- Customer Service/ Call Center Staff (4)
- Enterprise Asset Manager
- GIS Specialist/ Hydraulic Modeler
- Construction Inspectors
- Leak Detection Team
- Flushing Team (2)

The first six listed positions are considered "high priority". The current COF Water Department budget does include the laboratory and cross connection positions and these positions have been filled or the responsibility outsourced. The remaining positions have not been included in the three-year plan due to budget concerns and the challenge of attracting qualified personnel. The total annual costs of these positions would be approximately \$1M. However, given the projected financial performance of the Water Department and the Water Fund balance, these critical positions will be added at the earliest possible date to provide appropriate technical, operating and management support for the utility. Some of these responsibilities could be outsourced, such as valve exercising, if it is found to be cost-effective.

Standard Operating Procedures

The Water Department has implemented numerous Standard Operating Procedures (SOPs) included in the Arcadis report. However, the execution of several of the SOPs was deferred until several of the appropriate WIIN construction projects were completed and additional staffing was available. These additional staff are associated with the implementation of the following SOPs.

<u>Staff</u>	<u>SOP</u>
Water Distribution Valve and Hydrant Crew (3)	-Valve Inspection, Testing and Maintenance
Customer Service/ Call Center Staff (4)	- Customer Complaint Tracking
Flushing Team (2)	-Unidirectional Flushing/ Conventional Flushing for Water Turnover

The recommended positions of Enterprise Asset Manager, GIS Specialist/Hydraulic Modeler and Construction Inspectors will be hired to support the future Flint-funded capital program beginning in FY2023.

The remaining SOPs will be implemented in conjunction with the completion of specific WINN-funded capital projects.

<u>Project</u>	<u>SOP Implementation Date</u>	<u>SOP</u>
Water Meter Replacement	December, 2020	-Meter Installation, Inspection and Testing
Dort/Cedar Pumping Stations	March, 2021	-Water Age Management -Distribution Storage and Pumping Station Operation and Maintenance

Action Items

- The City will fill all vacant positions within the Water Department organization during FY20-21. The majority of the hires will not be completed until 2021 given the restrictions associated with the pandemic.
- Based on the updated financial performance information presented, it appears that the Water Department will have funds available to hire (or outsource) the additional employees recommended in the Arcadis report entitled “Water Distribution System Optimization Plan”. Since significant time and effort will be required to fill existing vacancies during FY20-21, it is proposed to hire the new positions in FY21-22.

- SOPS will be revised and implemented as construction projects associated with each SOP progress and staffing becomes available to facilitate these best practices.
- Diligently pursue the completion of the nine WIIN funded projects reference in this update. Once these projects have advanced to the point where accurate project budgets are established, determine the WIIN funds remaining to support the small main replacement program. Establish a project list for 2022 and 2023 construction.
- By 2024, the Water Fund cash balance may be adequate to self-fund a couple of years of small main replacements. However, the fund balance level and available cash may make it difficult to self-funding additional projects beyond 2025. Successfully achieving several of the revenue enhance opportunities – improved collections and the associated escrow fund release, water theft reduction and maintaining accurate metering will improve long-term financial performance. Additionally, reduction of non-revenue water will help improve operating cash flow. If these revenue enhancements and operating efficiencies are not achieved and the fund balance continues to deteriorate, water rate increases will be required to properly maintain infrastructure.