



Financial Services Audit Committee Communication

Date: March 27, 2020
To: Great Lakes Water Authority Audit Committee
From: Nicolette N. Bateson, CPA, Chief Financial Officer & Treasurer
Re: CFO Updates

COVID-19 Response

Supporting Operational Needs: The Great Lakes Water Authority's dedicated team members are fully engaged in ensuring continuity of operations. The role of Financial Services Area, which includes the Logistics & Materials and Procurement function, has been on the front line of expanding sources of equipment and supplies.

Vendor Relations: On March 23, 2020, Governor Gretchen Whitmer issued Executive Order 2020-21, the "Stay Home, Stay Safe" Order. This permits critical infrastructure organizations to continue operations. Under Section 8 of the Order, "water and wastewater" operations are critical infrastructure and healthy workers in this sector may continue to work. Section 9 of the Order addresses the vendor community that supports critical infrastructure operations. In accordance with those provisions, starting March 27, 2020, GLWA is sending letters by email to vendors that have been identified as meeting the criteria established in that order.

Potential FEMA reimbursement: This week, we also began the process to identify the incremental costs associated with COVID-19 and revising business processes to easily capture those costs in anticipation of Federal Emergency Management Agency (FEMA). In addition, we have also been in contact with other levels of government to collaborate and coordinate in preparing required documentation.

Budget Impact: Given that this COVID-19 pandemic has incrementally increased in Michigan over the past few weeks, the additional expenses incurred have not been calculated but are at a level that can be managed within the prioritization of the current total operations and maintenance budget. Next month's report will include an update.

Service Revenue Impact: The Public Finance team is developing additional detailed analysis for GLWA to monitor any material changes in usage. An initial report is expected next week.

Investment Income Impact: Attached is a memo from Brian Quinn, Managing Director, PFM Asset Management LLC. He was asked to provide an analysis of the recent market volatility and describe how it is impacting the investment management. Based on what we know today, it appears that investment income in the short-term (i.e. through June 30, 2020) could result in a negative variance of \$1.4 million. Brian also addressed how the market today could impact GLWA's investment earnings over the course of the five-year planning horizon. While there is some fluctuation from prior projections, The Foster Group was

asked how this impacts the current, published five-year financial plan. Fortunately, the new investment rate assumptions from PFM over the course of five years, are within then forecasted investment income (negative variance in first two years and positive in the subsequent three years).

Remote Work Locations: Team members who can perform their work at offsite locations are successfully doing so. Given our multi-location organization with significant cross-functional team interaction, going remote was a relatively easy transition. The functional teams readily developed productivity measures, check-in meetings, and embraced the use of technology to operate in a virtual office environment.

2020 Bond Transaction

The GLWA management team and advisors continue to monitor the market in light of the COVID-19 impact. Like many other refinancing transactions, GLWA will look to execute the transaction when conditions are favorable and the savings objectives are met.

Financial Services Knowledge Share



Members of the Financial Services (FSA) and IT teams recently attended 2-day training for Adobe Captivate software with a New Horizons instructor onsite. Captivate will be instrumental in creating FSA instructional videos and presentations which can then be uploaded to YouTube or LMS.

LtoR: Katlyn Butzin, Jackie Morgan, Shavarn Smith, Susan Kopinski, Greg Monson, Phyllis Walsh, Liz Duncan, Dan Workman (New Horizons instructor), Melissa Phelan, Lynn Herrick (IT), Jodi DiVito, Ashlee Gravley, Nickie Bateson and Sharon Davis-Beavers. (not pictured-Jennifer Payne from IT)

Proposed Action: Receive and file report.



March 26, 2020

Memorandum

To: Nicolette Bateson, CPA, Chief Financial Officer/Treasurer
Deirdre Henry, Treasury Manager
Great Lakes Water Authority

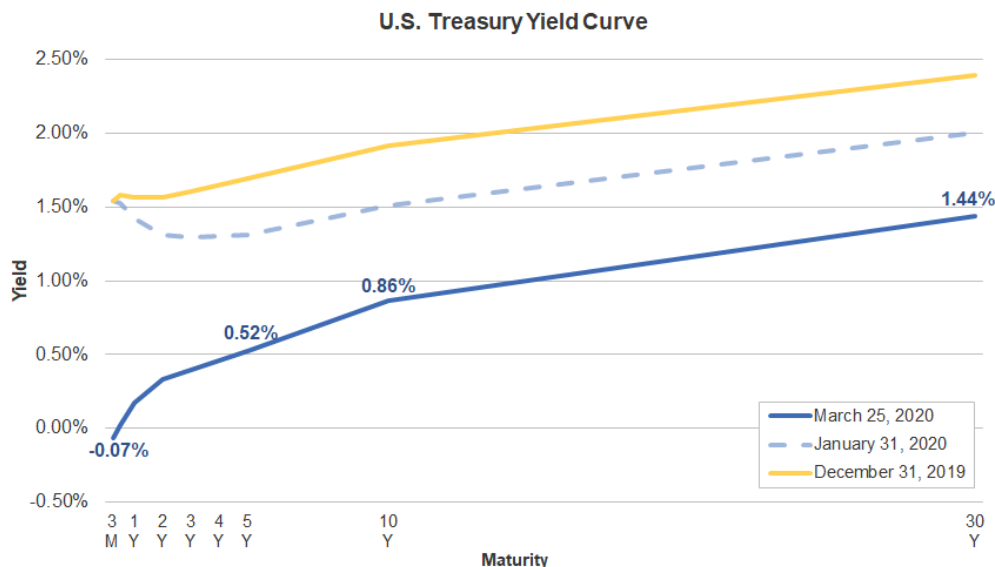
From: Brian Quinn, Managing Director
PFM Asset Management LLC

Re: Monitoring the Great Lakes Water Authority's Investment Program in a Volatile Market

I am writing to update you on the investable assets that PFM Asset Management LLC ("PFM") manages on behalf of the Great Lakes Water Authority (the "Authority"). Market volatility over the past month has been extraordinary, and we have been very active in monitoring the Authority's assets to provide needed liquidity and return a yield that is reflective of the short-term investment markets. It should be noted that PFM has updated the Authority on how the coronavirus has affected the financial markets and together have addressed the current market turbulence fueled by growing concerns over the impact of the coronavirus.

Liquidity:

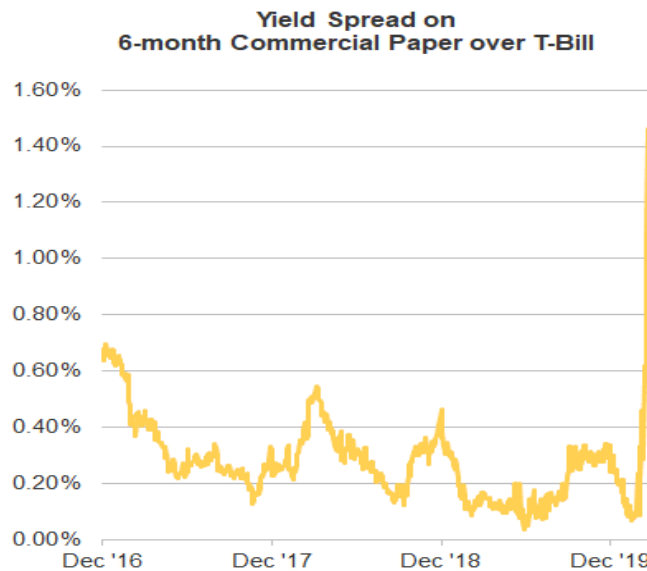
The current market turbulence has been caused by the spreading coronavirus, oil market price collapse, and other market disturbances. Additionally, the sharp downward move in short-term rates, created in part by the Federal Reserve's unscheduled cut in the target overnight rate by 0.50% on March 3rd (and the Fed's subsequent emergency action of slashing interest rates close to zero on March 15th), has pushed U.S. Treasury interest rates lower as noted below:



Source: Bloomberg as of March 25, 2020

To illustrate the magnitude of the interest rate decline, the 3-month Treasury has declined by 1.62% year-to-date and the current yield is -0.07% (as of March 25, 2020).

In addition, commercial paper (“CP”) spreads have widened dramatically in response to the crisis. Commercial paper spreads spiked recently as noted below:



The widening of commercial paper spreads initially caused a liquidity crunch in the short-term market. In mid-March the Federal Reserve moved quickly to remedy this situation by taking numerous steps to provide liquidity to the fixed income markets as highlighted in the table below:

Date	Program Name	Purpose
3/17/2020	Commercial Paper Funding Facility	Backstop Commercial Paper market
3/17/2020	Primary Dealer Credit Facility	Enhance market liquidity by allowing Primary Dealers to post collateral with Fed for loans
3/18/2020	Money Market Mutual Fund Liquidity Facility	Provide liquidity to prime money funds by allowing prime funds to post collateral with Fed and receive advances
3/19/2020	Central Bank Liquidity Swap Lines	Reduce strains in dollar funding markets

Credit:

The spread of the coronavirus has had a significant impact on the financial industry. While the current crisis is not considered a financial crisis/credit crisis, there are obvious ramifications for commercial enterprises generally in the United States; however, unlike 2008, banks and financial institutions are much better capitalized to withstand financial pressures through improved capital and liquidity requirements.

In this environment, a liquidity provider's/bank's ability to generate cash flows may be pressured in the short-term. However, the above-mentioned steps taken by the Federal Reserve to provide liquidity to the corporate and banking sector should help to lower liquidity concerns as the Fed's facilities should allow banks and liquidity providers to borrow directly from the Fed's credit facility.

Earnings Impact

Given the extensive volatility in the bond market driving yields down, it is difficult to approximate earnings for the remainder of the 2020 fiscal year until the volatility subsides. Our original projection for fiscal 2020 was \$17.4 million. Given the Federal Reserve's March movement of the overnight rate to a range of 0-.25% and the short duration of the portfolio, we believe earnings may be negatively impacted to approximately \$16 million. It should be noted that GLWA had already earned \$10.45 million through December 2019.

The more significant impact of the lower interest rate will be felt in future years. The following tables contain an updated interest earnings projection for the Authority for fiscal years 2021 – 2025 by category. Note that the fiscal year 2019 average balances were used to calculate the following projections as we felt that this was the best proxy that we had available for future balances. In addition, in our updated calculations, the implied forward rate on the 3-month Treasury Bill was used as the reinvestment assumption for the cash / money market fund accounts; the forward curve on the 6-month Treasury Bill was used for the cash-flow driven accounts; and the forward curve on the 1-year Treasury Note was used for the benchmarked managed assets. These projections (all based on implied forward rates as of 2/29/2020) may be modified in the future depending on changes in the Authority's balance sheet and interest rates.

<u>Investment Type</u>	<u>Fiscal Year 2019 Average Balance</u>	<u>Average Yield (FY 2021)</u>	<u>Average Yield (FY 2022)</u>	<u>Average Yield (FY 2023)</u>	<u>Average Yield (FY 2024)</u>	<u>Average Yield (FY 2025)</u>
Cash / Money Market	\$447,777,915	0.82%	0.86%	0.99%	1.19%	1.39%
Cash-flow Driven Managed Funds	\$392,714,691	0.82%	0.87%	0.99%	1.19%	1.39%
Benchmarked Managed Funds	\$216,863,701	0.82%	0.87%	1.00%	1.20%	1.40%
Total	\$1,057,356,307	0.82%	0.87%	0.99%	1.19%	1.39%

<u>Investment Type</u>	<u>Fiscal Year 2019 Average Balance</u>	<u>Approximate Earnings (FY 2021)</u>	<u>Approximate Earnings (FY 2022)</u>	<u>Approximate Earnings (FY 2023)</u>	<u>Approximate Earnings (FY 2024)</u>	<u>Approximate Earnings (FY 2025)</u>
Cash / Money Market	\$447,777,915	\$3,671,779	\$3,850,890	\$4,433,001	\$5,328,557	\$6,224,113
Cash-flow Driven Managed Funds	\$392,714,691	\$3,220,260	\$3,416,618	\$3,887,875	\$4,673,305	\$5,458,734
Benchmarked Managed Funds	\$216,863,701	\$1,778,282	\$1,886,714	\$2,168,637	\$2,602,364	\$3,036,092
Total	\$1,057,356,307	\$8,670,322	\$9,154,222	\$10,489,514	\$12,604,226	\$14,718,939

Note: Information projected based upon implied forward rates as of February 29, 2020.

PFM Steps:

PFM continues to review issuers and portfolio holdings in consideration of the current market environment and each client's investment policy requirements. Our credit process looks at business strengths/risks, including analysis of many dynamics including the evaluation of market liquidity, government or regulatory activity, whether the actual business is critical to the welfare of the United States, the quality of the current management, as well as its credit rating and many other factors. All these items are being considered to determine the financial strength of a company and its ability to pay principal to investors at maturity. In concordance with other economists and rating agencies, we do not foresee substantial weakening of credit quality or liquidity availability from large domestic financial institutions.

First and foremost, PFM remains focused on liquidity and safety in the Authority's portfolios. We have temporarily halted most credit purchases for our clients as we await a return to normalcy in the marketplace. With the exception of a few very short-term highly-rated financial institutions, we are not currently buying any sectors other than Treasuries and federal agencies. While this does not necessarily affect the Authority due to your specific investment policy guidelines, rest assured that we continue to invest in highly-liquid and highly-rated securities on your behalf in all of your portfolios.

Please note that the investment team at PFM is vigilant around possible future market moves and will continue to monitor the Authority's funds to preserve principal and provide liquidity as needed. PFM will continue to work proactively with the Authority to determine the best course of action based upon the current and projected market conditions. We would be happy to discuss this memorandum with the Authority further should it have any questions or concerns or need additional information or clarification.