



Financial Services Audit Committee Communication

Date: July 20, 2018

To: Great Lakes Water Authority Audit Committee

From: Jon Wheatley, Public Finance Manager

Re: Update: Drinking Water Revolving Fund (DWRF) Project Plan Submittals for the Lake Huron Water Treatment Plant Sludge System Improvements Project and the Waterworks Park to Northeast Transmission Main Project

Background: The Great Lakes Water Authority (the “GLWA”) has identified two water system projects in the proposed FY 2019 to FY 2023 Capital Improvement Plan (CIP) for submittal to the Michigan Department of Environmental Quality (MDEQ) for the DWRF financing program for funding in the state’s 2019 fiscal year. Public hearings were held for both projects on April 11, 2018 and both were approved by the GLWA Board of Directors at its meeting later that day. Both project plans were submitted to MDEQ by the July 1, 2018 deadline.

On July 18, 2018, GLWA received notification from MDEQ that both the Lake Huron Water Treatment Plant Sludge System Improvements (DWRF Project #7446-01) and the Water Conveyance System – Waterworks Park to Northeast Transmission Main Project (DWRF Project #7445-01) projects were within the fundable range for the states FY 2019. Final project milestone schedules have not been determined for either project.

At the April 20, 2018 GLWA Audit Committee meetings, GLWA had presented information on the Water Infrastructure Finance and Innovation Act (WIFIA) program which is administered by the United States Environmental Protection Agency (EPA). This program provides funding for large water and sewer projects at an interest rate that is lower than traditional revenue bonds. The deadline for submitting letters of intent for the next funding cycle is July 31, 2018. GLWA had originally identified the Water Conveyance System – Waterworks Park to Northeast Transmission Main Project as a candidate for this program to cover eligible costs that were not funded through the DWRF. Since MDEQ has indicated the entire project will be in the fundable range, then GLWA will not be pursuing WIFIA funding since the DWRF program interest rate is lower.

The Projects: Lake Huron Water Treatment Plant Sludge System Improvements – (CIP# 111007): The project is comprised of the evaluation, design, and construction of the Raw Sludge Clarifiers and Raw Sludge Pumping Systems at the Lake Huron Water Treatment Plant (LHWTP). Constructed in 1976, the LHWTP is a Type I public water system that

supplies water to residential, commercial, and industrial customers in GLWA's Northern communities. The LHWTP uses source water drawn from a single intake located in Lake Huron. There are major issues associated with the sludge handling system at the LHWTP as it relates to the twice annual cleaning of the settling basins. This project is necessary to ensure that GLWA can maintain treatment of flows at the LHWTP without system failure.

The proposed project will provide construction of a new redundant wash water retention basin and a new sludge pumping station with the existing clarifiers being abandoned or demolished. Additionally, provisions for decanting clear water from Lagoon 5 and Lagoon 6 to Lagoon 8 so Lagoon 8 can serve as temporary overflow storage during basin cleanout are included within the scope of this project. These improvements and modifications are detailed in the Project Plan. The estimated cost of the project is \$7,250,000.

Water Conveyance System – Waterworks Park to Northeast Transmission Main Project- (CIP# 122003): The primary purpose of the project is to better align the GLWA water production capacity with long-term system water demands, while improving reliability, water quality protection and reducing future operational and maintenance costs as well as capital improvement costs.

The intent of the project is to provide finished water to the NE site from WWP through a proposed transmission pipeline such that treatment facilities at the NE site can be de-commissioned and the existing NE high lift station and reservoirs can be used to re-pump finished water to the NE service area. The proposed NE Repurposing will largely eliminate the need to complete the large and costly backlog of capital improvement projects at the NE site with the goal of long term capital cost savings. In addition to NE repurposing, the project is also intended to provide additional reliability to the WWP service area through the proposed transmission pipeline in case of loss of service at the WWP. The project is comprised of the final design and construction of a new transmission main, isolation valves, control valves, and related appurtenances to provide a design flow rate of 160 million gallons per day (MGD) of finished drinking water from Waterworks Park WTP to the Northeast facility. These improvements and modifications are detailed in the Project Plan. The estimated cost of this project is \$133,700,000.

Justification: GLWA is seeking low interest loan assistance through the DWRF program for both projects. Although the Michigan Department of Environmental Quality (MDEQ) interest rate for FY 2019 will not be determined until October 2018, the current year's interest rate of 2.00% is less than the present conventional revenue bond interest rates. Based on the combined project amounts of \$140.9 million, GLWA could save an estimated \$92 million in interest costs and avoided issuance costs, based on a similar open market revenue bond with a 30-year term and 5.00% interest rate, over the life of the 30-year bond issue. This will afford savings to both GLWA and its members.

Budget Impact: Debt service is anticipated to begin in FY 2020 for both projects and will be included as part of the FY 2020 financial plan.

Proposed Action: Receive and file report.

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