



Financial Services Audit Committee Communication

Date: June 16, 2017

To: Great Lakes Water Authority Audit Committee

From: Jon Wheatley, Public Finance Manager

Re: Request for Public Hearing: 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 Drinking Water Revolving Fund (DWRF) financing program for funding in the state’s 2019 fiscal year. The deadline for submitting all DWRF project plans to MDEQ is May 1, 2018. Prior to submitting the project plans, GLWA must hold a public hearing for each project and present the plans. The public hearing for both projects has been set for April 11, 2018 at 1:00 p.m.

The FY 2019 DWRF Project Plans and public hearing notices for the Lake Huron Water Treatment Plant Sludge System Improvements Project and the Waterworks Park to Northeast Transmission Main Project have been posted on the GLWA website and can be found at: <http://www.glwater.org/category/news/hearing-notice>. These project plans will be presented at the public hearings. After the public hearings are closed, the included draft resolutions will be scheduled for action by the GLWA Board of Directors at its regularly scheduled meeting also on April 11, 2018. The resolutions must be approved and signed to ensure that the finalized Project Plans are assembled, printed, and submitted to the MDEQ by the deadline of May 1, 2018.

Analysis: Below is a description of the two projects.

Lake Huron Water Treatment Plant Sludge System Improvements – (CIP# 111007):

This 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 significant operational matters 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 DWRP 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: The Audit Committee recommends that the Great Lakes Water Authority Board hold the public hearings on April 11, 2018 for the project and approve the resolution to accept and submit the DWRP Project Plans for the Lake Huron Water Treatment Plant Sludge System Improvements Project and the Waterworks Park to Northeast Transmission Main Project as presented, at its regular meeting on April 11, 2018.