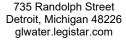
Great Lakes Water Authority





Legislation Text

File #: 2020-344, Version: 1

Contract No. 1904197
Long Term CSO Control Plan
CIP # 270003/BCE Score:59.6

Agenda of: October 28, 2020

Item No.: **2020-344** Amount: \$7,748,507.00

TO: The Honorable

Board of Directors

Great Lakes Water Authority

FROM: Sue F. McCormick

Chief Executive Officer

Great Lakes Water Authority

DATE: October 6, 2020

RE: Contract No. 1904197

Long Term CSO Control Plan

Vendor: LimnoTech

MOTION

Upon recommendation of Suzanne Coffey, Chief Planning Officer - Planning Services, the Board of Directors (Board) of the Great Lakes Water Authority (GLWA), authorizes the Chief Executive Officer (CEO) to enter into **Contract No. 1904197**, "Long Term CSO Control Plan" with LimnoTech, at a cost not to exceed \$7,748,507.00 for a duration of 54 Months; and authorizes the CEO to take such other action as may be necessary to accomplish the intent of this vote.

BACKGROUND

The Clean Water Act of 1972 was the beginning of a national focus on improving the water quality of our rivers, lakes, and streams. The Clean Water Act introduced the National Pollutant Discharge Elimination System (NPDES) permit system, wherein DWSD, GLWA's predecessor organization, received its first permit in 1976. Beginning in the late 1980s, the permits required wet weather control measures. To better understand the effect of wet weather on its combined sewer system, DWSD began installing wet weather instrumentation in the 1970s. In the mid-1980s, DWSD installed two insystem storage devices to curb Combined Sewer Overflows (CSOs). These measures were just the beginning.

In the 1990's addressing wet weather issues became a very high priority. By 1998, DWSD had constructed three Retention Treatment Basins (RTBs), Pump Station #2 at the WRRF and seven in-system storage structures along the Rouge River. These assets resulted in cutting the untreated CSO volume nearly in half, from an estimated 21 billion gallons per year to approximately 12 billion gallons per year. The price tag for this work was approximately \$200M.

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In the years that followed, DWSD added three Screening and Disinfection Facilities (SDFs), three more RTBs, 14 additional in-system storage structures, and expanded the WRRF to a wet weather capacity of 1700 million gallons per day. By 2015 with these improvements operational as protections against untreated overflows, the annual average untreated CSO volume reduced to an estimated one to two billion gallons per year. With the standup of GLWA, DWSD and GLWA became co-permittees in the regional system's NPDES permit, each having specific responsibilities for compliance. In 2019, GLWA added the Rouge River Outfall Disinfection project to the compliment of wet weather controls. This improvement added disinfection and dechlorination to all treated overflows at the WRRF. Together these improvements had a price tag of over \$800M.

So, as of today our investment of over \$1B in the regional system for wet weather control has reduced the untreated CSO volume by 93%. Looking at it from an overall control perspective, the regional system that is operated by GLWA treats an average of 97% of all flow it receives.

The tremendous body of work to construct the wet weather facilities that we operate today came by way of careful planning and negotiation with our regulators, incrementally over time. In total, we have had six Long Term Control Plans (LTCPs), Updates and/or Supplements. It is noteworthy that the 2011 LTCP Update incorporated green storm water infrastructure as an affordable element that could be done at that time with minimal investment. That LTCP Update acknowledged the fact that Detroit and the State were still in an economic recession. Since that time, we have had surges and downturns in our economy. The most recent being a downturn because of the COVID 19 pandemic.

Today we are again at a point where we must plan the next steps for improvements in wet weather control.

With the Regional Wastewater Master Plan update completed, we know where we want to go next on this journey. To take those ideas and develop them into a specific Long Term Control Plan, we need expert consultation and assistance. A competitive solicitation with qualification-based selection was undertaken this year to procure such an expert.

JUSTIFICATION

This contract is to assist in development of an update to the regional system's Long Term Control Plan (LTCP). The intersection of affordability and efficacy is our target. The consultant will assist by: evaluating, advising and producing preliminary engineering for future projects; adding specificity to conceptual system optimizations by leveraging advanced and real-time analytics; supporting GLWA and DWSD in updating its financial capability assessment; and working shoulder-to-shoulder with us as we finalize our LTCP and negotiate it with our regulators.

The update to the LTCP is an NPDES permit requirement that is due on May 15, 2023. The consultant recommended for this contract will work with GLWA and DWSD up to and beyond this date to ensure we are able to successfully work through the needed analytics, data gathering and complexities of negotiating and finalizing this very significant plan.

FINANCIAL PLAN IMPACT

Summary: Sufficient funds are provided in the financial plan for this project.

Funding Source: Improvement & Extension Fund

Cost Center: Combined Sewer Overflow

Expense Type: Design (5404-892270.000-617903-270003)

Estimated Cost by Year and Related Estimating Variance: See table below.

Fiscal Year

FY 2021 Plan 2,710,000.00 FY 2022 Plan 2,134,000.00 FY 2023 Plan 656,000.00 File #: 2020-344, Version: 1

Financial Plan Estimate 5,500,000.00

Negative Estimate Variance (\$2,248,507.00)

This negative estimating variance to be funded from I&E Capital Outlay reserves.

SAVINGS, COST OPTIMIZATION, AND REVENUE ENHANCEMENT IMPACT

This contract is for the Long Term CSO Control Plan. Cost savings are not determinable at the time of this award.

COMMITTEE REVIEW

This item was presented to the Operations and Resources Committee at its meeting on October 15, 2020. The Operations and Resources Committee unanimously recommended that the GLWA Board adopt the resolution as presented.

SHARED SERVICES IMPACT

This item does not impact the shared services agreement between GLWA and DWSD.