



Title: Authorization to Award Contract for East Auburn Wetlands Feasibility Study

Resolution number: 22-085

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Reviewed by: Name/Title: Michael Hayman, Project Planning Manager

Recommended action: Authorize execution of a contract to conduct a feasibility study aimed at addressing nutrient loading to East Auburn Lake from a degraded wetland complex in Victoria, Minnesota

Schedule December 2022 – Authorize feasibility contract
January-April 2023 – Conduct feasibility
May 2023 – Anticipated completion and final recommendation

Budget considerations: Fund name and code: Project Planning, Engineering 2002-4340
Fund budget: \$222,500
Expenditures to date: \$51,011
Requested amount of funding: Proposed fee + 10% contingency

Past Board action: Res # 21-052 Authorization to Execute Contract for Assessment for the East Auburn Wetland Monitoring and Feasibility Support
Res # 22-063 Authorization to release a Request for Proposals for the East Auburn Wetlands feasibility study.

Background:

The 2017 Minnehaha Creek Watershed District (MCWD) Watershed Management Plan (WMP) identifies that impairments in East Auburn Lake are driven primarily by external wetland phosphorus export making its way into the lake. The WMP also identifies the wetland systems between Wassermann Lake and East Auburn Lake as a potential wetland restoration aimed at water quality improvement to address nutrient export downstream into East Auburn Lake.

Beginning in 2019, MCWD staff analyzed historical water quality data to determine the extent to which the wetland system between Wassermann Lake and East Auburn Lake exports phosphorus. That analysis revealed that the wetland exports approximately 135 pounds of phosphorus annually to East Auburn Lake. In comparison, East Auburn Lake's total watershed load reduction needed to meet water quality standards is 341 pounds of phosphorus per year, as identified in the Six Mile Creek – Halsted Bay Diagnostic Study. Therefore, a wetland project focused on phosphorus reduction could achieve nearly half of the total watershed load reduction needed for East Auburn Lake.

In 2021, MCWD staff commenced a refined water quality sampling, hydrology, and vegetation analysis in the wetland system between Wassermann Lake and East Auburn Lake, which identified a relatively small portion of the wetland as the primary driver of phosphorus export. As such, staff determined that the next step in analysis would be to characterize the nature of phosphorus throughout the wetland cell and determine how phosphorus is mobilizing and moving downstream into East Auburn Lake.

In late 2021 and early 2022, MCWD staff installed 40 monitoring wells to assess groundwater phosphorus concentrations and water levels at varying depths and locations throughout the wetland. This data collection effort indicated total phosphorus concentrations in groundwater were approximately 4.5 times higher than the median total phosphorus concentrations in the Six Mile Creek stream channel and that this phosphorus-rich groundwater is transported downstream to East Auburn Lake via Six Mile Creek.

On October 20, 2022 the Board authorized the release of a Request for Proposals (RFP) for feasibility to identify opportunities to address phosphorus export from the wetland.

East Auburn Feasibility Study RFP Process:

Scope:

The RFP was released on October 24, 2022 and included data from the East Auburn Wetlands monitoring assessment. The RFP indicated the District was seeking innovative and cost-effective ideas and did not prescribe how to solve the phosphorus issues. An informational meeting was held at MCWD offices on October 31, 2022, to fully describe the feasibility effort to interested consulting firms. The deadline for submittals was November 17, 2022. MCWD received proposals from four firms: Geosyntec Consultants, LimnoTech Engineering, Moore Engineering, and Stantec.

Proposal Evaluation:

In the RFP, firms were advised that MCWD would select a consultant on the basis of proposed methodology, experience, and cost. The Board may consider these factors as it deliberates and selects a consultant for the work on the basis of its judgement.

The written proposal evaluation was conducted by five MCWD staff. The team evaluated the firms based on the following:

- Project understanding
- Methods and approach
- Team composition and experience
- Cost

Following each submission's initial review and scoring, two firms were selected for interviews – Moore Engineering and Stantec. Interviews were conducted by a cross-departmental team of staff, including Research and Monitoring, Project Maintenance & Land Management, and Project Planning. The interview structure was such that the selected firms would present their proposal, followed by an in-depth question-and-answer session conducted by MCWD staff.

Recommendation:

Based on the evaluation of proposals and interviews, staff is recommending Moore Engineering be selected as the consultant awarded the contract for services detailed in the Moore Engineering proposal, which was provided in an email to the Board of Managers.

Moore Engineering and its partners, Wetland Solutions Incorporated and Dr. Nathaniel Johnson, demonstrated a high level of wetland-specific technical and scientific expertise through a concise and well-written proposal. The team brings extensive, nationally recognized wetland experience and a demonstrated ability to explore comprehensive and innovative solutions to wetland water quality enhancement projects that can be applied across other wetland assessments throughout the watershed.

In accordance with Minnesota Statutes §13.591, subdivision 3(b), the submitted proposals will not be part of the public record until the contract has been executed. A copy of all submitted proposals will be distributed to the Board of Managers for review via email prior to the December 15, 2022, meeting.

Next steps:

Following authorization to award the feasibility contract, project planning will initiate work with Moore Engineering and begin coordination efforts with our partners in Victoria. The feasibility study is expected to be complete in April 2024.



RESOLUTION

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- WHEREAS the Minnehaha Creek Watershed District (MCWD) has developed a plan for the Six Mile Creek-Halsted Bay Subwatershed (SMCHB) that identifies implementation strategies to achieve the District’s goals of protecting and improving water quality, water quantity, ecological integrity, and thriving communities through land use and water integration;

- WHEREAS the MCWD Watershed Management Plan (WMP) identifies the wetlands between Wassermann Lake and East Auburn Lake as a planned capital investment to reduce watershed nutrient loading to improve water clarity and create a more abundant and diverse aquatic vegetation community in East Auburn Lake;

- WHEREAS in 2021 and 2022, MCWD staff conducted a refined water quality sampling, hydrology, and vegetation analysis in the wetland system between Wassermann Lake and East Auburn Lake to identify specific areas within the wetland responsible for the majority of the phosphorus export;

- WHEREAS the analysis indicated that the wetland cell (cell 1) at the outlet of Wasserman Lake is the primary driver of phosphorus export to East Auburn Lake, indicating total phosphorus concentrations in groundwater are much greater than that in the stream channel and that the phosphorus in groundwater and wetland soil is mobilizing and exporting to downstream East Auburn Lake;

- WHEREAS on October 20, 2022, the MCWD Board of Managers authorized staff to release a request for proposals for the East Auburn Wetlands feasibility study to address the phosphorus export from wetlands cell one;

- WHEREAS in response to the RFP, the District received proposals from Geosyntec, Limnotech, Moore Engineering, and Stantec, which District staff have evaluated based on project understanding, methods and approach, team composition and experience, and cost;

- WHEREAS based on its evaluation, staff recommends the selection of Moore Engineering as their proposal articulated a high level of technical and scientific understanding of wetlands restoration, provided a project approach that allows for comprehensive and innovative solutions, and aims to develop a potential framework for future assessment of wetland systems throughout the watershed;

- WHEREAS the Board of Managers finds that the evaluation has been thorough and properly structured and that the work proposed by Moore Engineering is demonstrated to be competitive and within budget;

NOW, THEREFORE, BE IT RESOLVED that the Minnehaha Creek Watershed District Board of Managers authorizes the District Administrator, on the advice of Counsel, to execute a contract with Moore Engineering to conduct a feasibility study for East Auburn, in accordance with the developed scope of work as the Administrator may refine it, and in an amount not to exceed 110 percent of the amount set forth in the proposal.

Resolution Number 22-085 was moved by Manager _____, seconded by Manager _____. Motion to adopt the resolution ___ ayes, ___ nays, ___ abstentions. Date: December 15th, 2022

 Secretary Date: _____