

Memorandum

To: Riley-Purgatory-Bluff Creek Watershed District Board of Managers
From: Scott Sobiech, PE-Barr Engineering
Subject: Lotus Lake Water Quality Improvement Project: Recommendation to Award Project
Date: August 16, 2024
Project: 23/27-0053.14 040B
c: Terry Jeffery-RPBCWD Administrator

Recommended Board Action

Manager _____ moved and Manager _____ seconded adoption of the following resolutions for the Lotus Lake Alum Application project at the September 11, 2024 meeting of the managers:

Resolved that the alum application project be awarded to Solitude Lake Management at the bid price of \$227,672.19;

Resolved that on the President or administrator is authorized and directed to sign and deliver the Notice of Award, execute the contracts, and sign the Notice to Proceed at the appropriate points in the contracting process;

Resolved that the administrator is authorized to execute change orders within 10% of the contract amount.

Upon vote, the resolutions were adopted, _____ [VOTE TALLY].

Lotus Lake is a deep, eutrophic lake located at the headwaters of Purgatory Creek in Chanhassen. The lake is listed on the Minnesota Pollution Control Agency (MPCA) impaired waters list for excess nutrients. The most recent Use Attainability Assessment (UAA) estimated that the internal phosphorus loading accounts for 68% of the total annual phosphorus budget (Barr, 2017). To lower internal phosphorus loading, alum applications were recommended.

An alum dose was specified for Lotus Lake and the first application was applied in September of 2018 which included two zones in half dose applications. A total of 108,055 gallons of alum were applied to the lake. Sediment cores were collected in February of 2020 to measure sediment phosphorus release and changes in sediment chemistry. The results of these cores were used to determine the second alum application dosing and application zones.

The fall 2024 application has been designed to treat four zones of the lake with a total of 87,563 gallons. Contract documents were prepared for this application were posted online via Quest CDN and posted in two local publishing for three consecutive weeks. One bid was received on August 14, 2024 by Solitude Lake Management with a bid of \$227,672.19. The engineer's opinion of probable cost for the project was \$224,000. Solitude Lake Management meets all qualifications listed for the project and successfully submitted all required bidding forms such as a bid bond, list of equipment and suppliers, non-collusion affidavit, sworn statement of responsible bidder, and bidder qualifications list. Barr has managed many successful alum applications with Solitude Lake Management and recommends them for the application to Lotus Lake.

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It is recommended that the RPBCWD Board of Managers:

- Award the project to Solitude Lake Management at the bid price of \$227,627.19.
- We also recommend authorizing the President or administrator to sign and deliver the Notice of Award, execute the contracts, and sign the Notice to Proceed at the appropriate points in the contracting process.
- We also recommend authorizing the administrator to execute change orders within 10% of the contract amount.

If the Board of Managers decides to award the project the following would be completed:

- Notify Solitude Lake Management of their selection.
- Solitude Lake Management provides the following information:
 - Three fully-executed counterparts of the Form of Agreement
 - Certificate of Insurance and all other insurance documentation identified in the Contract Documents
- Notice to Proceed is issued in September.
- Application must be completed by October 31, 2024.