

**RESOLUTION NO. 24-046**  
**RILEY PURGATORY BLUFF CREEK WATERSHED DISTRICT**  
**BOARD OF MANAGERS**

**AUTHORIZING SOLICITATION OF BIDS FOR**  
**THE SECOND LOTUS LAKE ALUM TREATMENT**

Manager \_\_\_\_\_ offered the following resolution and moved its adoption, seconded by  
Manager \_\_\_\_\_:

**WHEREAS** in 2016, the Riley Purgatory Bluff Creek Watershed District (District) completed the Lotus, Silver, Duck, Round, Mitchell, Red Rock Use Attainability Analysis Update; Lake Idlewild and Staring Lake Use Attainability Analysis; and Lower Purgatory Creek Stabilization Study, identifying alum treatment as the best management practice to reduce phosphorus internal concentrations

**WHEREAS**, the Riley Purgatory Bluff Creek Watershed District's (District) 2018 10-Year Watershed Management Plan (Plan) identified Lotus Lake LL\_6 In Lake Phosphorous Control;

**WHEREAS** on August 8, 2018, the District held a duly noticed public hearing on the Project, in accordance with Minnesota Statutes Section 103B.251, subdivision 3, to give interested members of the public an opportunity to comment on the Project; and the Board of Managers duly considered these comments;

**WHEREAS**, at its August 8, 2018 meeting, the Board of Managers adopted Resolution 2018-006 which directed Wenck Engineer to develop plans and specifications and all other documentation necessary to procure bids for the construction of the Project, and the engineer has prepared such plans, specifications and further documentation;

**WHEREAS**, at its April 3, 2024 meeting, the Board of Managers adopted Resolution 2024-031 which directed Barr Engineer to develop plans and specifications and all other documentation necessary to procure bids for the construction of Phase II of the Project, and the engineer has prepared such plans, specifications and further documentation;

**NOW THEREFORE BE IT RESOLVED** that the Riley Purgatory Bluff Creek Watershed District Board of Managers authorizes the administrator, on completion of review of the bid documents by RPBCWD legal counsel, to issue solicitation of bids in accordance with applicable public-procurement law for the construction of the Project and to timely present bids received to the managers for selection of a contractor for the construction of the Project.

The question was on the adoption of the resolution and there were \_\_\_\_\_ yeas and \_\_\_\_\_ nays as follows:

Yea                      Nay                      Abstain                      Absent

**CRAFTON  
KOCH  
PEDERSEN  
WARD  
ZIEGLER**

Upon vote, the president declared the resolution \_\_\_\_\_.

Dated: July 10, 2024.

\_\_\_\_\_  
Tom Duevel, Secretary

\* \* \* \* \*

I, David Ziegler, secretary of the Riley Purgatory Bluff Creek Watershed District, do hereby certify that I have compared the above resolution with the original thereof as the same appears of record and on file with the District and find the same to be a true and correct transcription thereof.

IN TESTIMONY WHEREOF, I set my hand this \_\_\_\_\_ day of \_\_\_\_\_, 2024.

\_\_\_\_\_  
Tom Duevel, Secretary

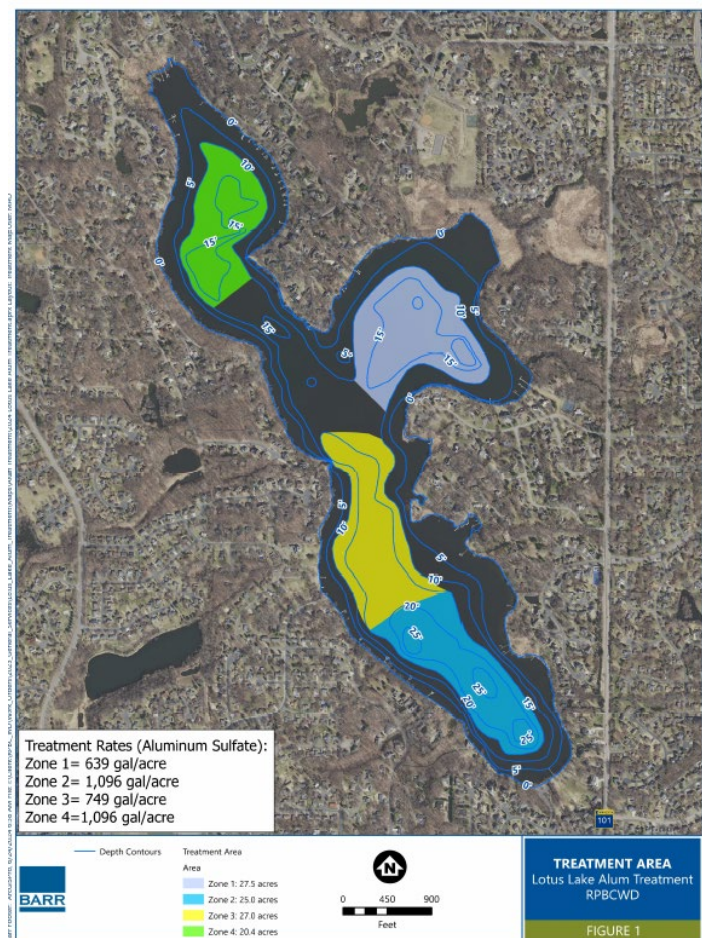
## Memorandum

**To:** Riley-Purgatory-Bluff Creek Watershed District Board of Managers  
**From:** Joe Bischoff and Scott Sobiech, P.E., Barr Engineering Co.  
**Subject:** Lotus Lake Alum Treatment – Request Board Authorization to Solicit Bids for Application  
**Date:** July 5, 2024  
**Project:** 23270053.14 040b  
**c:** Terry Jeffery – RPBCWD Administrator

### Requested Board Action

It is requested that the RPBCWD Board of Managers authorize Barr Engineering Co. to solicit bids from contractors to complete the 2024 alum application to Lotus Lake as designed and shown in the bid request documents.

In 2017, a Use Attainability Analysis was completed for Lotus Lake that determined internal phosphorus (P) loading as a result of sediment phosphorus release was as much as 68% of the phosphorus budget to the lake. In 2018, sediment cores were collected from Lotus Lake to determine sediment P release rates and the potential need for an alum treatment. Based on these results, an alum treatment was completed in the Fall of 2018, applying one half of the prescribed dose in the two deep application zones (Zone 1 and 2 shown on the adjacent map). While total phosphorus and Secchi depth improved in the lake, algal blooms continue to occur. Barr recently reviewed lake sediment and water quality data for Lotus Lake to assess the effectiveness of the first application and determine the need for a second alum application for the lake. The assessment findings were presented and discussed at the March 13, 2024 board of Manager regular meeting (see recommended treatment zone in the adjacent image; zones were updated for the final application plan). The assessment recommends proceeding with a second alum application to further reduce sediment phosphorus loading and complete the dose for the two original application zones. Two new zones of application were also identified to reduce sediment phosphorus loading from other areas in



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the lake. These two new zones include some shallower areas of the lake but are still greater than 10 feet in depth.

The RPBCWD Board of Managers authorized the design and preparation of bidding documents for the 2024 Lotus Lake alum treatment project at the April 2024 regular meeting. This application represents the second half of the overall Lotus Lake alum treatment project ordered in August 2018. This second half-dose application is based on sediment coring collected and analyzed after the first application.

Bidding documents for the 2024 Lotus Lake Alum Treatment Project were prepared including application maps, alum application volumes and rates and technical specifications. The contract documents (i.e., specifications) are in the process of being reviewed by RPBCWD legal counsel and will be finalized prior to being published for bidding. The design of the proposed project includes, but is not limited to: application of alum to 4 treatment zones at unique application rates for each zone; obtaining and delivering chemical to the project site; mobilizing application equipment; and site restoration to original conditions if required.

Alum treatments in Minnesota do not require an official permit. However, the Minnesota Pollution Control Agency (MPCA) does request notification and review of the proposed treatment activities. We received notification from the MPCA prior to the 2018 treatment which covers both half-dose applications. A courtesy letter summarizing the 2024 activities will be submitted to the MPCA prior to starting the project.

The Engineer's opinion of probable application cost (OPC) is \$224,000. The 100% OPC was developed using recent bid prices from similar projects bid in 2024. The OPC provided is made on the basis of Barr Engineering's experience and qualifications and represents our best judgment as experienced and qualified professionals familiar with the project. Because we have no control over the cost of labor, materials, equipment or services furnished by others, or over the contractor's methods of determining prices, or over competitive bidding or market conditions, Barr Engineering cannot and does not guarantee that proposals, bids, or actual costs will not vary from the OPC presented.

It is requested that the RPBCWD Board of Managers authorize Barr Engineering Co. to solicit bids to perform the 2024 Lotus Lake alum treatment project. If the Board of Managers authorizes solicitation of bids to complete the Project, the following tasks would be completed as outlined below.

- July 10, 2024 – Board of Managers authorizes Barr Engineering Co. to solicit bids
- July 22, 2024 – Advertise in in local papers and begin virtual bidding in Quest CDN
- August 14, 2024 – Virtual bid opening
- September 11, 2024 – Recommended bidder and Board approval of bid
- Issue Notice of Award by September 13, 2024

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- Issue Notice to Proceed once contracting is finalized
  - Tentative construction window: September 23, 2025 through October 31, 2024
- Project close-out and final payment by December 4, 2024

### **Attachments**

- Advertisement for Bid

**2024 Lotus Lake Aluminum Treatment  
Chanhassen, MN  
Riley Purgatory Bluff Creek Watershed District**

**ADVERTISEMENT FOR BIDS**

The Riley Purgatory Bluff Creek Watershed District (Owner) will be accepting online electronic bids only for conducting in-lake chemical treatment to Lotus Lake in Chanhassen, Minnesota. Bids will be received by the Owner via QuestCDN VirtuBid (vBid) until 10:00 a.m. CDT, Wednesday, August 14, 2024, then publicly opened and read aloud via Microsoft Teams. Interested parties can join the virtual bid opening using the following:

Link: <https://www.microsoft.com/e>

Meeting ID: 240 542 852 858

Meeting password: bwsfT6

For audio, call in via phone: 612-361-4934

US Toll: 833-450-1894

If prompted for meeting number or access code: 904 579 363#

The Work includes purchasing, delivering, storing, and applying liquid aluminum sulfate (alum) to the lake to mitigate the internal release of phosphorus from lake sediment. The Work is to be completed by October 31, 2024.

Complete digital project documents are available at [www.questcdn.com](http://www.questcdn.com). To access the electronic bid form, download the project documents and click the online bidding button at the top of the advertisement. You may download the digital plan documents for forty-two dollars (\$42.00) by inputting **Quest Project #XXXXXX** on the website's project search page. Please contact QuestCDN.com at 952-233-1632 or [info@questcdn.com](mailto:info@questcdn.com) for assistance with free membership registration, downloading, and working with digital project information.

A paper set of bid documents may be examined and/or obtained at the office of the Engineer for a nonrefundable price of \$100 per set. Please make your check payable to Barr Engineering Co. and send it to 4300 MarketPointe Drive, Suite 200, Bloomington, Minnesota 55435. Please contact us at 952-832-2600 if you have any questions. Partial sets of documents will not be issued. A bidder responding to this solicitation must submit to the Owner a signed statement under oath by an owner or officer verifying compliance with each of the minimum criteria in Minnesota Statutes section 16C.285, subdivision 4.

The bid of the lowest responsible and responsive bidder is intended to be accepted on or before the expiration of 60 days after the date of the opening of bids. The Owner, however, reserves the right to reject any or all bids and to waive any nonmaterial irregularities, informalities or discrepancies, and further reserves the right to award the contract in the best interest of the Riley Purgatory Bluff Creek Watershed District.

