

Memorandum

To: Riley-Purgatory-Bluff Creek Watershed District Board of Managers and District Administrator
From: Barr Engineering Co.
Subject: Engineer's Report Summarizing February 2026 Activities for March 18, 2026 Board Meeting
Date: March 10, 2025
Project: 23270053.14 2026

The purpose of this memorandum is to provide the Riley-Purgatory-Bluff Creek Watershed District (RPBCWD) Board of Managers and the District Administrator with a summary of the activities performed by Barr Engineering Co., serving in the role of District Engineer, during February 2026.

General Services

- a. Met virtually with Administrator Jeffery, Counsel Welch, and staff Hartmann on February 10 to discuss actions on permits, North Lotus Lake draft term sheet development, Upper Riley Creek private property access agreements, and improving coordination with legal on CIP development.
- b. Participated in the February 18 workshop of the Board of Managers.
- c. Participated in the February 18 regular meeting of the Board of Managers.
- d. Participated in the 10-year plan planning meeting to discuss upcoming steering committee meeting topics.
- e. Developing a scope of work to assist with statistical analysis of the soils program data.
- f. Prepared February 2026 engineering report
- g. Miscellaneous discussions with Administrator Jeffery about CIP projects, regulatory program, and ongoing/future studies.

Permitting Program

- a. *2023-055 Ridgewood Ponds* – The applicant constructed the 11-lot single-family residential development in Eden Prairie according to the approved plans, including the construction of two infiltration basins for stormwater management. The applicant is now seeking reinstatement of the permit and approval of a revised stormwater-management plan after the discovery of soil conditions at basin 2 are not conducive to infiltration. Worked with applicant on revised declaration.
- b. *Permit 2024-078 Avienda Stormwater Master Plan* – The applicant received conditional approval of a regional stormwater master plan at the June 2025 meeting. The regional stormwater plan covers roughly 63 acres in Chanhassen near Lyman Boulevard and Powers Boulevard. Continued coordinating with applicant and met on February 25 to discussion comments related to modification request.
- c. *Permit 2025-079: Chanhassen 2026 Street Reconstruction – Fox Hollow* – The city proposes

reconstruction of street in the Fox Hollow neighborhood as well as repairs to sanitary sewer, watermain, and storm sewer. Stormwater management will be provided by existing detention facilities, a biofiltration basin, and dry detention basin to provide volume control and rate control. The city is requesting a variance from the stormwater quality requirements until RPBCWD's planned North Lotus Lake Park BMP project is implemented. The city is pursuing a partnership with RPBCWD to allow the park BMP to be used for regulatory compliance for the street project. The permit triggers RPBCWD's Erosion Prevention and Sediment Control Rule (Rule C), Wetland and Creek Buffers (Rule D), and Stormwater Management Rule (Rule J). Assisted applicants' engineers with addressing review comments. Reviewed February 11 submittal and provided comments. Worked with applicant to address review comments. Drafted permit report for consideration at the March 18, 2026 meeting.

- d. *Permit 2026-004: Chanhassen Bluff Community Center* – The city proposes constructing new community center building as part of a larger Avienda regional development plan, including parking and utilities. Stormwater management will be provided by wet detention facilities and a rainwater harvest and reuse system. The permit triggers RPBCWD's Floodplain Management (Rule B), Erosion Prevention and Sediment Control Rule (Rule C), Wetland and Creek Buffers (Rule D), and Stormwater Management Rule (Rule J). Reviewed the February 3 submittal and provided review comments.
- e. Assisted Regulatory Program Coordinator Hartmann with administrative permit reviews, regulatory questions, and project close-out requests.
- f. Miscellaneous preapplication calls, emails, and meetings with future applicants with questions about rule applicability and criteria. Also answering questions from existing permit applicants about how to address comments provided during the review process and conditions of approval.

Data Management/Sampling/Equipment Assistance

- a. Successfully submitted revised 2025 field data to the MPCA.

Task Order 6: WOMP Station Monitoring

Purgatory Creek Monitoring Station at Pioneer Trail

- a. No activity in February.

Purgatory Creek Monitoring Station at Valley View Rd

- a. Centurylink (aka. Lumen) phone account transferred from Barr to RPBCWD.

Riley Creek Monitoring Station

- a. No activity in February.

Task Order 30B: Pioneer Trail Wetland Restoration Project

- a. Vegetation establishment period is in process and will end in fall of 2028.

Task Order 32B: Upper Riley Creek Ecological Enhancement Project

- a. Continuing to work with Administrator Jeffery and RPBCWD legal on securing private property agreements. Project bidding will commence once the necessary property rights are secured.

Task Order 36B: Upper Bluff Creek Reach 5 Design

- a. Continued 90% design development including in-stream structure layout updates, grading revisions, and geotechnical design. Anticipate 90% design drawings and construction documents by spring 2026.
- b. Continued planning for permitting process

Task Order 39B: Lotus Lake Water Quality Project – Park Concept

- a. New project phase kicked off with District staff.
- b. A site and topographic survey is underway, which will inform design revisions.
- c. Modeling from the feasibility study is being updated based on the concept design.

Task Order 47: Lucy, Ann and Susan Lake and Watershed Management Plans

- a. Using models to estimate sensitivity to phosphorus, nitrogen, and chloride and develop management strategies.
- b. Developed preliminary project list for watersheds for phosphorus. Currently working on nitrogen and chloride strategy. Compiled a list of previously identified projects and developed a list of constructed projects.
- c. Identifying projects for chloride and phosphorus management.
- d. Continued discussion of policies to guide analysis
- e. Reviewing compiled information relating to road and parking lot deicing

Task Order 48: District-wide Shoreline and Aquatic Plant Management Plan

- a. Barr continued developing reference lakes for plant comparisons.
- b. We are reviewing U of M work developing an Index of Biotic Integrity for aquatic plant communities. We are beginning to develop metrics for aquatic plant communities in RPBCWD. Beginning to visualize what a healthy aquatic plant community looks like.
- c. Compiled data for shoreline conditions and began discussions with District staff on summaries.
- d. Continued discussions of lake classifications for management.
- e. Began development of shoreline strategy for District lakes.

- f. Developing aquatic plant and shoreline report.

Task Order 49: Districtwide Fisheries Management Plan

- a. Developed fisheries strategies for 5 assessment lakes.
- b. Continued reviewing fisheries management plan.

Task Order 50: Mitchell and Red Rock Lake and Watershed Management Plans

- a. Using models to estimate sensitivity to phosphorus, nitrogen, and chloride and develop management strategies.
- b. Developed preliminary project list for watersheds for phosphorus. Currently working on nitrogen and chloride strategy. Compiled a list of previously identified projects and developed a list of constructed projects.
- c. Identifying projects for chloride and phosphorus management.
- d. Continued discussion of policies to guide analysis
- e. Reviewing compiled information relating to road and parking lot deicing

Task Order 52: Wake boat Impacts on Lotus Lake

- a. Developing a data summary for aluminum, P fractions, and release rate data.
- b. Began organizing the data set for statistical analysis.
- c. Reviewed data with SAFL.
- d. Began developing statistical assessment.

Task Order: 53 Lake Riley Sediment Analysis

- a. Continued reviewing draft technical memorandum.

Task Order: 54 Stormwater Model Update and Flood-Risk Area Identification & Prioritization

- a. The purpose of this task order is to update the District's PCSWMM models within the cities of Chanhassen, Chaska, Minnetonka, Deephaven and Shorewood and then use the updated models to identify and prioritize flood-risk areas.
- b. Reviewing and compiling model input data
- c. Assembling and organizing the project team
- d. Preparing data requests to the cities of Chanhassen, Chaska, Deephaven, Shorewood, and Minnetonka.

Capital Project	Project Phase (% Complete)								Comments
	Regional Analysis	Feasibility Study	Project Ordering	Design	Permitting	Construction	Substantial Completion	Final Completion	
Bluff Creek									
Bluff Creek Tributary Restoration	100%	100%	100%	100%	100%	100%	100%	100%	
Pioneer Wetland Restoration	100%	100%	100%	100%	100%	100%	100%	99%	3-year vegetation management and project complete. Vegetation maintenance extended 3 years to 2028
Bluff Creek Reach 5 Restoration	100%	100%	100%	70%	5%				Proposed wetland outlet design and stream restoration element 60% design complete. Working with Administrator on property entry permission and proceeding with design.
BT3	100%								
B4	100%								
B3	100%								
Riley Creek									
Lake Riley - Alum Treatment	100%	100%	100%	100%	100%	100%	100%	100%	
Rice Marsh Lake in-lake phosphorus load	100%	100%	100%	100%	100%	66%	66%	66%	The first of three alum doses applied in 2018. Second dose applied in September 2025.
Rice Marsh Lake Water Quality Improvement Phase 1	100%	100%	100%	100%	100%	100%	100%	100%	3-year vegetation management complete. Project complete with final payment in October 2025. Working with Administrator for additional vegetation established activities beyond existing contract.
Riley Creek Restoration (Reach E and D3) (aka Lower Riley Creek Restoration)	100%	100%	100%	100%	100%	100%	100%	100%	
Upper Riley Creek Stabilization (aka Upper Riley Creek Ecological Enhancement Project)	100%	100%	100%	100%	75%				DNR and USACE permit received. District permitting pending. Project bidding likely in summer 2026 after private property access agreements executed.
Middle Riley Creek Restoration	100%	100%	100%	100%	100%	100%	100%	100%	
St. Hubert Water Quality Project	100%	100%	100%	100%	100%	100%	100%	45%	
Lake Susan Park Pond	100%	100%	100%	100%	100%	100%	100%	100%	
Susan In-Lake	100%								
LU-A1.10c	100%								
LU-A3.4	100%								
Lake Susan Park Pond Reuse Inlet Enhancement				100%	100%	100%	100%	100%	
Round Lake in-lake phosphorus load	0%	100%	100%	100%	100%	100%	100%	100%	Contractor completed alum application in early-September. Pay application approved at December 2025 meeting
Chanhasen Decant Facility				100%	75%				All work is stopped. Removed from Upper Riley Enhancement project.
Purgatory Creek									
Purgatory Creek Rec Area- Berm/retention area	100%			50%					Met with City of Eden Prairie to discuss coordination to complete repair/maintenance activities
Lotus Lake in-lake phosphorus load control	100%	100%	100%	100%	100%	100%	100%	100%	
Silver Lake Water Quality BMP	100%	100%	100%	100%	100%	100%	100%	50%	3-year vegetation management underway
Scenic Heights Forest Restoration	100%	100%	100%	100%	100%	100%	100%	100%	
Hyland Lake in-lake phosphorus load control	100%	100%	100%	100%	100%	100%	100%	100%	
Duck Lake Watershed Load	100%	100%	100%	100%	100%	100%	100%	100%	
Duck Lake Road Partnership (aka bridge)			100%				100%	100%	Partnership project with Eden Prairie. RPBCWD limited to financial contribution. Construction is complete. RPBCWD has fulfilled 4 of 5 year financial contributions.
Lotus Lake Watershed Improvement Project (LL_1, LL_3, LL_7, LL_8)	100%	100%	100%	2%					Coordinating with Chanhasen to synergies project with the city's Fox Hollow street reconstruction project. Initiating design work+A1.
Staring Lake StL_21	100%								
Lotus Lake LL_9	100%								
Staring Lake StL_1	100%								
Red Rock Lake RRL_7	100%								
Staring Lake StL_17	100%								
Mitchell Lake ML_3	100%								
PC_1	100%								
PC_2	100%								
Kerber Ravine	100%	100%							City of Chanahssen incorporated into the Frontier Trail street reconstruction project

Ongoing Studies									
Ecological Health Action Plan		100%							
Lotus Lake LVMP		100%						100%	
Eden Prairie Climate Resilience Modeling		100%						100%	
Wetland Assessment Phase 1		95%						95%	
Sediment Analysis - Riley, Rice Marsh, Susan		100%							
Development of Groundwater Monitoring Network		75%		75%					Waiting for cooperative agreements before proceeding with well installations
Duck Lake Outlet Modification		100%							
Lucy, Ann and Susan Lake and Watershed Management Plans		60%							
Districtwide Shoreline and Aquatic Plant Management Plan		30%							
Districtwide Fisheries Management Plan		75%							Recieved draft plan from staff Maxwell for Barr review
Mitchell and Red Rock Lake and Watershed Management Plans		60%							
Wake boat Impacts on Lotus Lake		50%							Began organizing the data set for statistical analysis
Lake Riley Sediment Analysis		60%							Reviewing lab data to begin analysis and technical memo
Stormwater Model Updates and Flood-Risk Identification & Prioritization	3%								Reviewing and compiling model inputs, organizing project team, preparing data requests