

## Memorandum

**To:** Riley-Purgatory-Bluff Creek Watershed District Board of Managers and District Administrator  
**From:** Barr Engineering Co.  
**Subject:** Engineer's Report Summarizing June 2024 Activities for July 10, 2024 Board Meeting  
**Date:** July 3, 2024

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 June 2024.

### General Services

- a. Met with Administrator Jeffery on June 12 to continue the budgeting process for 2025, discuss 2025 capital projects, and 2024 ongoing capital projects.
- b. Met virtually with Administrator Jeffery, staff Nicklay, and Counsel Welch on June 12 to discuss actions on notice of probable violation locations, Upper Bluff Creek cooperative agreement, upper Riley Creek draft cooperative agreement and private property access agreements, permit reviews, quote/bidding process for 2024 Lotus Lake alum application, and upcoming Lotus Lake subwatershed capital projects.
- c. Participated in the June 5 regular Board of Managers.
- d. Prepared Engineer's Report for engineering services performed during June 2024.
- e. Miscellaneous discussions with Administrator Jeffery about Clean Water Fund grant opportunity, task order development, permits, and ongoing studies.
- f. Updated the General Resources Web Map with the most recent high-resolution imagery.

### Permitting Program

- a. *Permit 2023-077 Enclave at Manor Road* - This applicant proposes construction with driveways and patios, utilities, and stormwater management facilities. The stormwater management system includes vegetated swales, preservation of natural areas, and a bioretention basin site to provide runoff volume abstraction, water quality treatment, and rate control. Work with applicant to resolve conditional approval items.
- b. *Permit 2024-008 Chanhassen Apartments* – The proposed project includes the redevelopment of a property into two multi-family/mixed use retail and restaurant buildings and associated onsite and under-building parking areas. The project triggers RPBCWD erosion prevention and sediment control and the stormwater management rules. Answer questions about condition of the May 8 approval.
- c. *Permit 2024-013 Chanhassen 2024 Streets – Chan View Area*– The city is proposing to improve approximately 3 miles of roadway with a mix of full reconstruction and rehabilitation

- in the residential Chan View neighborhood. The project triggers RPBCWD erosion prevention and sediment control rule and the stormwater management rule. Worked with applicant to fulfill conditions of May 8 approval.
- d. *Permit 2024-023 Chanhassen Civic Campus* – The applicant is proposing a new city hall building, parking facilities, public parking, utility design, community site improvements, and stormwater management improvements. The applicant is proposing on-site BMPs and the use of a regional rainwater reuse system in the same subwatershed to provide rate control, volume abstraction, and water quality protection. The project triggers RPBCWD erosion prevention and sediment control rule and the stormwater management rule. Working with applicant to fulfill conditions of June 5 approval.
- e. *Permit 2024-027 Hyland Boat Launch* – The applicant is proposing the reconstruction of the Hyland Lake boat launch in Bloomington. The project is part of a larger scheme of development that was approved under Permit 2018-072. The project triggers RPBCWD floodplain management (Rule B), erosion prevention and sediment control (Rule C), and stormwater management rule (Rule J). Reviewed revised submittal and drafted permit report for consideration at the July 10 manager meeting.
- f. *Permit 2024-038 Lunds & Byerlys Food Holdings Improvement* – The applicant is proposing a building addition and utility improvements at the 7752 Mitchell Road in Eden Prairie. The project triggers RPBCWD erosion prevention and sediment control (Rule C) and stormwater management rule (Rule J). Reviewed the submittal and provided review comments on June 14. Participated in a June 18 meeting to answer questions, reviewed revised submittal and drafted permit report for consideration at the July 10 manager meeting.
- g. *Permit 2024-033 Les Schwab Tire Center* – The applicant is proposing to redevelop a portion of the parking lot at 17555 State Hwy 7 in Minnetonka to construct a new Tire Center building. The project triggers RPBCWD erosion prevention and sediment control (Rule C), wetland and creek buffers (Rule D), and stormwater management rule (Rule J). Reviewed the revised submittal received on June 16 and provided review comments informing the applicant the submittal was incomplete because of missing permit fee deposit, wetland delineation and MNRAM, and engineers opinion of probable cost.
- h. *Permit 2024-044: Southwest Green Line LRT Extension*: This project involves the construction of a light rail transit line between Eden Prairie and downtown Minneapolis. This project was originally permitted under 2016-017 with a 5-year permit term. Because of the lack of availability of pervious bituminous and supplier prices the applicant is requesting a modification involving replacing most of the pervious pavement at the Traction Power Substation Site pads with a 1.5-inch granite aggregate and converting a small portion to impervious surface parking pads. The applicant also requests that permit 2016-017 be reinstated. Worked with applicant to review submittals and draft a permit modification report for the managers to consider at the July 10 regular meeting.
- i. 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. Prepared, loaded, and verified 25 RMB Laboratory (RMB) reports to the database.

### **Task Order 6: WOMP Station Monitoring**

#### ***Purgatory Creek Monitoring Station at Pioneer Trail***

- a. No activity.

#### ***Purgatory Creek Monitoring Station at Valley View Rd***

- a. Assist RPBCWD staff with storm event sampling.

### **Task Order 24B: Silver Lake Water Quality Improvement Project**

- a. Vegetation maintenance contract is underway through December 2025.

### **Task Order 28B: Rice Marsh Lake (RM\_12a) Water Quality Improvement Project**

- a. The year vegetation establishment period is in process and will continue through fall 2025.
- b. Site visit with the District Administrator held on Friday June 28.

### **Task Order 29B: Middle Riley Creek (Reach R3) Stabilization Project Design**

- a. Stantec conducted invasive species management on June 24<sup>th</sup>. The contractors completed herbicide treatment primarily targeting reed canary grass and thistle. Riley creek levels have been high all month and portions of the creek banks have been underwater.

Ongoing vegetation management will continue through July 15, 2025.

### **Task Order 30B: Pioneer Trail Wetland Restoration Project**

- a. The year vegetation establishment period is in process.
- b. Fall will be the next time for herbicide treatment.
- c. Contractor will complete monthly visits per the contract throughout the season. Visits will include mowing and spot spraying, as needed.
- d. Final walkthrough anticipated for late August or early September.
- e. Site visit with the District Administrator held on Friday June 28.

### **Task Order 032B: Upper Riley Creek Ecological Enhancement Project**

- a. Continue working with Administrator Jeffery and RPBCWD legal on revisions to private property agreements and a draft cooperative agreement with the city of Chanhassen.
- b. RPBCWD permit is planned for submittal after plans have been updated and property owner easements are in process in summer 2024.
- c. Coordinating permitting efforts with decant facility (Task Order 41)
- d. Because property owner coordination, some permitting, the incorporation of the proposed decant facility, and project bidding remains to be complete, Barr will coordinate with

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Administrator Jeffery to develop a request for additional engineering and permitting budget.

#### **Task Order 033: Wetland Assessment – Phase 1**

- a. Phase 1 report to define ecosystem services and describe methodology for assessing each service is on hold pending BWSRs proposed new wetland assessment protocols.

#### **Task Order 036B: Upper Bluff Creek Reach 5 Design**

- a. 100% plans, specs, and cost estimate for the riffle/ step pool design at the outlet of the City's proposed Galpin Boulevard culvert replacement were provided to the City on June 17.
- b. SQT site visit (June 3-4) and post-visit analysis have been completed.
- c. Received wetland delineation, tree survey, and soil samples from District on June 14 for review. Wetland delineation awaiting approval by the TEP.
- d. Proposed conditions modeling of the wetland outlet structure is underway. Proposed design seeks to mimic pre-development conditions hydrology through the wetland and downstream creek.
- e. Project Open House will take place the evening of July 29 at the Chanhassen Recreation Center.

#### **Task Order 037: Sediment Analysis**

- a. Completed draft memos for District staff review.
- b. The Lake Susan memo will be delivered to District staff on July 5, 2024
- c. The Lake Susan wetland memos will be delivered on July 8, 2024.

#### **Task Order 039A: Lotus Lake Water Quality Project – Preliminary Engineering**

- a. Continued developing a scope of work for the project design phase.

#### **Task Order 040B Lotus Lake Alum Administration**

- a. Reviewed application options of pairing Lotus Lake with Round Lake. Decided to keep Lotus Lake separate
- b. Finalized application and dosing strategy for alum application.
- c. Finalized draft plans and specifications, sent to attorney to review.
- d. .

#### **Task Order 41: Chanhassen Decant Facility**

- a. Confirmed path forward with City staff (deeper bays with no maintenance path behind facility).
- b. Progressed on 60% design.

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#### **Task Order 43: Ecosystem Health Action Plan**

- a. Continued writing the final chapter of the EHAP which addresses the actions the District will take moving forward. Provided final chapter and executive summary to RPBCWD Administrator for review.
- b. Completed the appendix that describes each of the Advisory Committee workshops and the results. This project is nearly complete.

#### **Task Order 44: Lake Susan Park Pond Reuse Intake Modification**

- a. Contractor completed the installation of the new intake structure, site grading and restoration.
- b. Work remaining includes hand rail installation and the installation of the new suction piping.
- c. Prepared payment application #1 for the managers consideration at the July 10, 2024 meeting.

#### **Task Order 45: Development of District-Wide Groundwater Monitoring Network**

- a. District staff are meeting with property owners regarding potential well locations. After concurrence with property owners on well locations bids will be sought for well installation.

#### **Task Order 46: Duck Lake Outlet Modifications**

- a. Refined the potential outlet modifications to allow the outlet to function more closely to the original 1969 design while maintaining the current normal water level. The potential outlets that most closely replicate the original design consist of small orifices or narrow v-notch weirs with a high-water overflow.
- b. Project is slightly behind schedule but the budget spending is on track for the work that has been completed. Anticipate meeting with RPBCWD staff during July to review the potential outlet modifications.

Capital Project	Project Phase (% Complete)								Comments
	Regional Analysis	Feasibility Study	Project Ordering	Design	Permitting	Construction	Substantial Completion	Final Completion	
<b>Bluff Creek</b>									
Bluff Creek Tributary Restoration	100%	100%	100%	100%	100%	100%	100%	100%	Project Closed-out and Final payment in October 2023
Pioneer Wetland Restoration	100%	100%	100%	100%	100%	100%	100%	60%	3-year vegetation management underway
Bluff Creek Reach 5 Restoration	100%	100%	100%	15%	5%				Cultural and environmental resources report complete, preliminary sheets set up complete, riffle design at Galpin Blvd culvert outlet sent to District and City, updated existing conditions hydrologic model complete, proposed wetland outlet design underway
BT3	100%								
B4	100%								
B3	100%								
<b>Riley Creek</b>									
Lake Riley - Alum Treatment	100%	100%	100%	100%	100%	100%	100%	100%	
Rice Marsh Lake in-lake phosphorus load	100%	100%	100%	100%	100%	33%	33%	33%	The first of three alum doses applied in 2018
Rice Marsh Lake Water Quality Improvement Phase 1	100%	100%	100%	100%	100%	100%	100%	60%	3-year vegetation management underway
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%	99%	50%				DNR and USACE permit received. District permitting pending. Anticipate bidding in later summer after the decant facility is incorporated into the project as directed by the Administrator. Assisting staff with property access agreements (private and public)
Middle Riley Creek Restoration	100%	100%	100%	100%	100%	100%	100%	45%	3-year vegetation management underway
St. Hubert Water Quality Project	100%	100%	100%	100%	100%	100%	100%	45%	3-year vegetation management underway
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%	90%	75%			Contractor completed installation of concrete intake structure, associated pond excavation, and site restoration.
Chanhassen Decant Facility				50%	15%				City conducted research of other facilities in WA state and provided design revisions in mid-June so 60% design is proceeding.
<b>Purgatory Creek</b>									
Purgatory Creek Rec Area- Berm/retention area	100%			50%					
Lotus Lake in-lake phosphorus load control	100%	100%	100%	90%	100%	50%	50%	50%	The first of two alum doses applied in 2018. Developed treatment plans and specification. Waiting for legal review. Requesting Board authorize bid solicitation for a second dose in late 2024.
Silver Lake Water Quality BMP	100%	100%	100%	100%	100%	100%	100%	45%	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%	Three Rivers Park took over project.
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 3 of 5 year financial contributions.
Lotus Lake Watershed Improvement Project (LL_1, LL_3, LL_7, LL_8)	100%	100%							Report Finalized and presented at February 2024 regular meeting. Working with Administrator on scoping design efforts and city coordination.
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%							Incorporated summary into Lotus Lake Water Quality project to assess impact with respect to other BMPs being considered.

<b>Ongoing Studies</b>									
Ecological Health Action Plan		80%							Working on finalizing draft report for discussion at an upcoming Board workshop.
Lotus Lake LVMP		100%						100%	
Eden Prairie Climate Resilience Modeling		100%						100%	
Wetland Assessment Phase 1		95%						95%	
Sediment Analysis - Riley, Rice Marsh, Susan		95%							Lake Susan and Lake Susan wetland memos will be delivered together in July 2024.
Development of Groundwater Monitoring Network		40%		20%					Location siting and selection underway. Specifications for bid in development.
Duck Lake Outlet Modification		50%							Modeling of possible Duck Lake outlet modifications underway.