

Memorandum

To: Riley-Purgatory-Bluff Creek Watershed District Board of Managers and District Administrator
From: Barr Engineering Co.
Subject: Engineer's Report Summarizing August 2024 Activities for September 11, 2024 Board Meeting
Date: September 3, 2024
Project: 23270053.14 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 August 2024.

General Services

- a. Met virtually with Administrator Jeffery, staff Nicklay, and Counsel Welch on August 6 and 20 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, and St Huberts vegetation management.
- b. Participated in the August 7 Board of Managers EHAP workshop.
- c. Participated in the August 7 regular meeting of the Board of Managers.
- d. Met with Administrator Jeffery and staff Forbes on August 13 to brainstorm opportunities and approach to further development of mission, vision, and goals at an upcoming workshop in October.
- e. Met with Administrator Jeffery and staff Forbes to discuss the vision for the upcoming 10-year planning process on August 21.
- f. Met with Administrator Jeffery, President Pedersen, council Smith, and council Welch on August 28 to review agenda for the September 11 meeting.
- g. Prepared Engineer's Report for engineering services performed during August 2024.
- h. Developed and submitted CWF grant application for the Upper Bluff Creek ecological restoration and North Lotus Lake water quality projects on August 22.
- i. Developed draft task orders for discussion at the September 11 meeting related to watershed and lake diagnostic study and management plans, shoreline and vegetation management, and fisheries management.
- j. Miscellaneous discussions with Administrator Jeffery about Clean Water Fund grant opportunity, task order development, St Hubert restoration project, permits, regulatory program, and ongoing studies.

Permitting Program

- a. *Permit 2023-006: Chestnut Townhomes* – The applicant proposes the development of a new apartment building complex including sidewalks and parking areas. Stormwater management

- includes two subsurface stormwater management facilities and two subsurface cistern facilities to provide volume control, water quality, and rate control. Met with applicant on August 20 to review requirements they need to meet to resubmit the permit including wetland requirements, volume abstraction, and rate control.
- b. *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. Continued working with applicant to resolve conditional approval items.
 - c. *Permit 2024-049: 11609 Leona Rd Redevelopment* – The applicant is proposing to subdivide the existing 3.44 AC parcel into two separate lots to 1) develop a one story, approximately 2,447 square foot building with a drive through, patio, and associated utility, landscape, and parking improvements and 2) demo a portion of the existing retail building and develop an approximately 18,500 square foot building with associated utility, landscape, and parking improvements. The project triggers RPBCWD erosion prevention and sediment control (Rule C and stormwater management rule (Rule J). Reviewed the revised August 20 submittal and provided review comments on August 23 informing the applicant the submittal remained incomplete because of missing permit fee deposit and engineers opinion of probable cost.
 - d. *2024-056 HCRRA Culvert Replacements Mntka 67*– The county applicant proposes relining a failing 24-inch ductile iron pipe culvert under the Minnetonka Light Rail Transit Regional Trail with an ultraviolet-cured liner. The project triggers RPBCWD waterbody crossings and structures rule (Rule G). Drafted the permit report for consideration at the September 11, 2024 regular meeting of the Board of Managers.
 - e. *Permit 2024-058 Total Wine Pavement Repair* – The applicant is proposing the conversion of the pervious parking stalls at Total Wine in Chanhassen to impervious surface because of deteriorated pavement conditions. The project triggers RPBCWD erosion prevention and sediment control (Rule C) and stormwater management rule (Rule J). The applicant proposes to meet rate, water quality, and volume control requirements through the utilization of existing subsurface rock infiltration and one proprietary water quality treatment manhole. Reviewed the July 29 submittal and provided review comments on August 5 informing the applicant the submittal remained incomplete because of missing permit fee deposit, native electronic stormwater models, and engineers opinion of probable cost. Reviewed the revised August 22 submittal and provided review comments on August 27 informing the applicant the submittal remained incomplete because of missing permit fee deposit.
 - f. *Permit 2024-061 Pig Ate My Pizza 2.0* – The applicant is proposing the redevelopment the former fueling station portion of 10700 Bloomington Ferry Road, Bloomington into a restaurant. The project triggers RPBCWD erosion prevention and sediment control (Rule C) and stormwater management rule (Rule J). The applicant proposes to meet rate, water quality, and volume control requirements through the implementing an underground stormwater management facility. Reviewed the July 30 submittal and provided review comments on August 6 informing the applicant the submittal remained incomplete because of missing permit fee deposit, soils information, snowmelt modeling, native electronic models, and engineers opinion of probable cost. Reviewed the revised August 22 submittal and provided review comments on August 27 informing the applicant the submittal remained incomplete because of missing permit fee deposit.

- g. 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 39 RMB Laboratory (RMB) reports to the database.
- b. Submitted 2021, 2022, and 2023 data to the MPCA in agency-specific submittal formats.

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. No activity. Monitoring station is not currently operating due to damaged power line.

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.

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

- a. Stantec conducted a site inspection on August 27th. Numbers of invasives are decreasing and native species are becoming more established.

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 early September.

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. Communicated with Metropolitan Council Environmental Services (MCES) via phone, Teams meeting, and email to discuss permitting requirements for the Upper Riley Creek Project.
- c. Prepared draft application for MCES Encroachment Agreement and will submit in September.

- d. Developed legal descriptions of work areas to assist with the MCES permit application.
- e. RPBCWD permit is planned for submittal after plans have been updated and property owner easements are in process in summer 2024.
- f. Coordinating permitting efforts with decant facility (Task Order 41)
- g. Because property owner coordination, some permitting, the incorporation of the proposed decant facility, and project bidding remains to be complete, Barr is submitting 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 remains on hold pending BWSRs proposed new wetland assessment protocols.

Task Order 036B: Upper Bluff Creek Reach 5 Design

- a. Wetland outlet structure design will likely require excavation of compensatory flood storage. Communicating with property owner on the north side of Bluff Creek to determine feasibility of excavating within the creek corridor where contaminants may be present.
- b. 60% design of stream restoration elements is ongoing.

Task Order 037: Sediment Analysis

- a. Completed and delivered draft memos for District staff review.

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

- a. Continued developing a scope of work for the and enhanced project feasibility and stakeholder engagement process.

Task Order 040B Lotus Lake Alum Administration

- a. Project advertised for 3 weeks via Sun Sailor, Sun Patriot, and QuestCDN.
- b. Let for bid on August 14, 2024 with one bid from Solitude Lake Management.
- c. Recommendation letter sent to Board for Solitude Lake Management as they are a qualified and responsible bidder.

Task Order 41: Chanhassen Decant Facility

- a. Progressed design towards 90% design.
- b. Conducted electrical site visit to support lighting design.
- c. Met with MCES on permitting requirement to work in their sanitary sewer easement.

Task Order 43: Ecosystem Health Action Plan

- a. Made final edits to the EHAP.

- b. Attended the August 7 Board workshop to discuss the plan.
- c. The Barr component of this plan is now complete. Thank you for allowing us to participate with the stakeholders to develop this plan with you.

Task Order 44: Lake Susan Park Pond Reuse Intake Modification

- a. Contractor installed the new intake suction line on August 23.
- b. Coordinating with contractor to complete the handrail installation, revisions to the new suction piping to align with the project specifications, and scheduling the testing and commissioning of the system.

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. The purpose of this task order is to evaluate modifications to the Duck Lake outlet that maintain the existing runout elevation of 913.45 but better approximate the stage-duration curve before the outlet was modified in 2014.
- b. Currently finishing the technical memorandum summarizing the potential outlet modifications, modeling results and potential impacts to Duck Lake.
- c. Project is behind schedule, but the budget spending is on track for the work that has been completed. Anticipate providing a draft of the technical memorandum to RPBCWD staff to review in September.

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%	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%								
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%	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				80%	40%				City provided comments on 60% design which will be incorporated as the project move toward 100% design. Coordinated with MCES on permitting requirement to work in their sanitary sewer easement.
Purgatory Creek									
Purgatory Creek Rec Area- Berm/retention area	100%			50%					
Lotus Lake in-lake phosphorus load control	100%	100%	100%	100%	100%	50%	50%	50%	Project let for bid on August 14, 2024 for second application. Low bid was 2% over engineer's opinion of probable cost, recommended Solitude Lake Management for the fall application.
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, enhance feasibility options, stakeholder engagement, 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.

Ongoing Studies									
Ecological Health Action Plan		100%							Finalize report and discussed at August 7 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		100%							A1
Development of Groundwater Monitoring Network		45%		50%					Location siting and selection underway. Specifications for bids ready to be sent once concurrence of property owners obtained for well locations.
Duck Lake Outlet Modification		75%							Preparing memorandum summarizing potential outlet modifications, model results and impacts to Duck Lake water levels.