BROWN'S CREEK WATERSHED DISTRICT

455 HAYWARD AVE N
OAKDALE, MN
55128

651.330.8220

WWW.BCWD.ORG

REGULAR MEETING OF THE BOARD OF MANAGERS
Wednesday, March 19, 2024 at 6:30 PM

NOTE MEETING LOCATION
Meeting will be held at
Stillwater Township Hall
13636 90th Street North, Stillwater, MN 55082

1) Call Regular Meeting to order

2) Approve Regular Meeting Agenda and Discussion Agenda **-Board Action**

3) Public Comments

4) Distribution of technology/basic start up training

5) Consent Agenda – **Board Action** (*all items listed under the consent agenda are considered to be routine by the Board of Managers and will be enacted by one motion. There will be no separate discussion on these items unless a Manager removes an item from the consent agenda for discussion or there is a request to remove the item from the consent agenda, in which event the board will consider whether to remove the item from the consent agenda and consider it separately*.)
   a) Approve Board Meeting Minutes of the February 14, 2024 Regular Meeting
   b) Accept Permit Fee Statement
   c) Approve water monitoring equipment repair scope not to exceed $6,300 from account 300-4640.
   d) Approve scope for 2024 weather station monitoring not to exceed $3,700 from account 957-0000.
   e) Approve scope for rare species outreach plan and materials not to exceed $4,844 from account 910-0000.
   f) Approve scope for vegetation maintenance from EOR and subcontractor Natural Shore Technology not to exceed $12,300 from account 948-0000 CIP Maintenance and $4,000 from account 953-0000 Fen Management.

6) Treasurer's Report
   a) Review Authorized Funds Spreadsheet
   b) Current Items Payable-**Board Action (Roll Call Vote)**

7) Permits
   a) BCWD Permit 24-01 Take 5 Oil Change, Oak Park Heights – Engineer Review – **Board Action**

8) Projects
   a) Brown's Creek Restoration Project – Select Contractor – **Board Action**
   b) Marketplace Reuse Feasibility – Discussion

9) Planning
   a) Management Plan Components:
      (1) Rule review and amendment
      (2) Wetland Function and Value Assessment Update
      (3) Initial Planning Meeting Scale
   b) Enhanced Stakeholder Engagement – interview update and baseline survey scope– **Board Action**
   c) Plan initiation response summary

10) New Business
   a) Apparel Order – **Board Action**

11) Discussion Agenda - No Action Required
   a) Updates
      (1) Administrator
      (2) Legal
      (3) Engineer
      (4) Managers
   b) April 2024 Regular Meeting BCWD Board Agenda

12) Adjournment

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DRAFT Minutes of the regular meeting of the Brown's Creek Watershed District Board of Managers, Wednesday February 14, 2024

ROLL CALL

Managers Present:	**Others Present:**
Klayton Eckles, President	Karen Kill, BCWD administrator
Celia Wirth, Vice President	Camilla Correll, EOR, BCWD engineer
Gerald Johnson, Treasurer	Michael Welch, Smith Partners, BCWD counsel
Chuck LeRoux, Secretary	Brett Stopelstad, Washington Conservation District
	Brett Emmons, EOR, BCWD engineer
	Mike Majeski Brett Emmons, EOR, BCWD engineer
	Jimmy Marty, EOR

1) Call to Order

President Klayton Eckles called the regular meeting to order at 6:32 p.m.

2) Approve Agenda

Manager Wirth moved, seconded by Manager Johnson, to approve the agenda as presented. Motion carried, 4/0

3) Public Comments

There were no public comments.

4) Consent Agenda

President Eckles removed approval of a scope of work for Oak Glen Golf Course groundwater management from the consent agenda. Michael Welch confirmed with the engineer that the scope of work for a drone flight of the creek on the consent agenda includes no subcontracted work.

Manager Johnson moved, seconded by Manager Wirth, to approve the consent agenda:

a) **Approve minutes of the January 10, 2024, annual & regular meeting**
b) **Accept permit fee statement**
c) **Decline to waive monetary limits in Minnesota Statutes section 466.04**
d) **Approve registration and expenses, as well as manager per diem, for Minnesota Watersheds Legislative Briefing and Day at the Capitol March 6-7, 2024**

e) Authorize administrator to execute the Metropolitan Council grant agreement SG-18364 for the watershed outlet monitoring program for 2024-25 monitoring at the Brown's Creek outlet

f) Approve scope for biennial drone flight of Brown's Creek corridor by EOR and administrator notification of landowners within 200 feet of flight path not to exceed $4,700 from account 959-0001

g) Approve scope for 2024 groundwater monitoring and coordination activities not to exceed $3,960 from account 942-0004 and $10,724 from account 942-0011.

i) Approve scope for 2024 trout habitat preservation project (THPP) monitoring not to exceed $6,490 from account 903-0001

j) Approve the Lower St Croix One Watershed One Plan - FY23 Watershed Based Implementation Fund work plan amendment as presented

Motion carried 4/0.

5) Treasurer's Report

a) Review Authorized Funds Spreadsheet

Manager Johnson moved, seconded by Manager Wirth, to approve the authorized funds spreadsheet as presented. Motion carried, 4/0.

b) Current Items Payable – Board Action

Manager Johnson moved, seconded by Manager Wirth, to approve payment of bills as presented in the amount of $149,274.63. Motion carried on a roll call vote, 4/0.

4h) Oak Glen Golf Course groundwater management

President Eckles stated BCWD assistance with groundwater management needs to be closely coordinated with Oak Glen Golf Course and to have applicability to develop best management practices that can be shared with all the golf courses in the watershed district. Karen Kill noted that Oak Glen's proximity to Brown's Creek makes its groundwater management especially important to the health of the creek.

Manager Wirth moved, seconded by Manager Johnson, to approve the scope to develop groundwater management recommendations in coordination with Oak Glen Golf Course not to exceed $13,312 from account 942-0011. Motion carried, 4/0

6) Projects

a) Brown's Creek Restoration Project – downstream of McKusick Road to Brown's Creek State Trail

(1) BCWD Rules Compliance: Ms. Kill noted that the BCWD engineer found that project is compliant with applicable district rules.

(2) City of Stillwater Cooperative Agreement

Manager Johnson moved, seconded by Manager LeRoux, to authorize the president to execute the agreement upon advice of counsel with non-substantive changes as necessary to effectuate the purposes of the agreement. Motion carried, 4/0.

(3) Minnesota Department of Natural Resources Cooperative Agreement
Manager Wirth moved, seconded by Manager Johnson, to authorize the president to execute the agreement upon advice of counsel with changes as necessary to effectuate the purposes of the agreement.
Motion carried, 4/0.

(4) Final Plans – Authorize to Solicit Bids
Manager Wirth moved, seconded by Manager LeRoux, to authorize the administrator to solicit bids for construction of the Brown's Creek restoration project. Motion carried 4/0.

(b) Brown's Creek Restoration Project – upstream of McKusick Road to Millbrook Homeowner Association property
Manager LeRoux moved, seconded by Manager Wirth, to approve a task 1 of the scope of work presented, authorizing landowner outreach not to exceed $2,482 from account 947-0022. Motion carried 4/0.

(c) Marketplace Reuse Feasibility
The managers asked staff to develop information on the issues proposed to be addressed by a regional stormwater reuse system in the Marketplace subwatershed and potential alternative options to solve those same issues for presentation at a later meeting.

7) Projects

a) Stewardship grant and project inspections 2023
Brett Stopelstad reviewed BCWD's 2023 stewardship grant projects. There were 37 site visits to residential properties, which resulted in 19 concept plans and nine stewardship grant applications in 2023. The district has funding for 30 stewardship grant projects in 2024.

Recess 8:55-9:00 p.m.

9) New Business

a) Training – Rare Species Data
Mr. Welch provided training on legal requirement for maintaining not-public rare-species data.

b) Lynch and Goggins Lakes aquatic plants survey results
Jimmy Marty and Mike Majeski presented the results of an aquatic plant survey on Lynch and Goggins Lakes. The managers directed that only general plant survey results be provided to Lynch Lake residents, but noted that staff should work with the Minnesota Department of Natural Resources to develop an outreach plan for individual landowners on Goggins Lake.

c) Replacement iPads

Manager Wirth moved, seconded by Manager Johnson, to approve the purchase of seven iPads and protective cases not to exceed $4,500 from account 200-4001. Motion carried 4/0.

10) Election of officers

Manager Wirth moved, seconded by Manager Johnson, to approve the slate of officers:

Klayton Eckles, President
Celia Wirth, Vice-President
Chuck LeRoux, 2nd Vice President
Gerald Johnson, Treasurer
Debra Sahulka, Secretary

Motion carried 4/0.

8) Planning

a) Initial planning meeting scope

The managers expressed interest in an initial planning meeting that would combine the board, the technical advisory committee, and residents. A revised scope will be presented at an upcoming meeting.

b) Enhanced stakeholder engagement –baseline survey scope

The board requested that the draft survey questions be brought back to the March board meeting for approval.

Manager Wirth moved, seconded by Manager Johnson, to approve baseline survey scope not to exceed $18,500 from account 927-0000. Motion carried 4/0.

11) Adjournment

Manager Wirth moved, seconded by Manager Johnson, to adjourn the meeting at 10:23 p.m. Motion carried 4/0.

Respectfully Submitted by
Karen Kill, BCWD Administrator and Charles LeRoux, Secretary

APPLICANT/PERMIT NO.	RULES							TYPE				FEES OWED	
	2	3	4	5	6	7	Decomp action	GOV	SF RES	RES DEV	COM	EXEMPT	AMT DUE
Bergmann Development/Sanctuary Permit No. 05-12	X	X	X			X				X			$ -
Stillwater Medical Center Parking Permit 13-26	X	X				X					X		$3,039.10
Brown's Creek Cove Permit 15-07	X	X	X			X				X			$8,238.52
Heifort Hills Permit 16-03	X	X	X	X		X				X			$1,327.34
Farms of Grant/White Oaks Savannah Permit 17-01	X	X	X			X				X			$18,652.67
The Lakes of Stillwater Permit 17-04	X	X	X			X					X		$3,368.08
West Ridge Permit 17-17	X	X	X			X	X			X			$701.51
Heifort Hills Estates Permit 18-02	X	X	X			X	X			X			$41,206.46
Boutwell Farms Permit 18-04A	X	X	X			X	X			X			$0.79
Hazel Place/Hertiage Ridge Permit 18-05 (Was 17-09)	X	X	X			X	X			X			($2,445.17)
Nottingham Village Permit 18-06	X	X	X			X				X			$650.03
Ridgecrest Permit 18-11	X	X				X	X				X		$16.68
St Croix Valley Recreation Center Expansion Permit 18-14		X				X	X	X				$6,970.28	
Central Commons Permit 19-05	X	X	X			X	X				X		($5,000.00)
Neal Ave Road Reconstruction Permit 20-05	X	X						X				$19,088.31	
CSAH 15-36 Interchange Permit 20-08		X			X	X		X				$19,233.85	

APPLICANT/PERMIT NO.	RULES							TYPE				FEES OWED	
	2	3	4	5	6	7	Decompaction	GOV	SF RES	RES DEV	COM	EXEMPT	AMT DUE
White Pine Ridge Permit 20-12		X					X			X			($631.32)
Westridge Block 1 Lot 1 Permit 21-09 - NOPV, no permit received		X					x		x				$2,851.61
Maryland Gateway Addition Permit 21-13	x	x				x				x			($854.61)
Schwartz Residence Permit 21-15	x	x							x				($319.38)
Millbrook Park- City of Stillwater Permit 21-21	x	x	x					x				$6,970.18	
Fahey Permit 21-34		x							x				($743.78)
Norell Ave N Improvements Permit 21-45	x	x				x		x				$10,458.63	
Gonyea (8 lots)- White Pine Ridge Permit 22-02		x								x			($679.05)
Wetridge (12 lots) - Sharkey/GreenHalo Permit 22-03 (Transferred 21-30 and 21-31)		x								x			($513.73)
13290 Boutwell Road N - Sharkey/GreenHalo Permit 22-05		x								x			($590.51)
7125 Lone Oak Trail (WOS L106)-weichman Permit 22-11		x							x				$7,277.07
13199 Dellwood Rd Permit 22-15		x							x				$217.83
Read Residence Permit 22-17	x	x							x				$1,246.52
Stillwater Oaks Permit 22-18	x	x								x			$4,293.00
Miller Flood Protection Permit 22-19						x				x		$0.00	
Popeyes OPH Permit 22-20		x									x		($266.26)

APPLICANT/PERMIT NO.	RULES							TYPE				FEES OWED	
	2	3	4	5	6	7	Decompaction	GOV	SF RES	RES DEV	COM	EXEMPT	AMT DUE
Fanberg Residence - Manning Estates L4B3 Permi 22-22		x							x				($729.36)
7138 Lone Oak Trl N (WOS L109) Permit 22-24		x							x				($89.00)
7164 Lone Oak Trl (WOS L113) Permit 22-25		x							x				($138.63)
Wash Co. CSAH 5 Phase II Permit 22-30		x						x				$820.28	
Wash Co. CSAH 57 culverts Permit 22-31		x						x				$0.00	
Cty Rd 61 Re-alignment Permit 23-01	x	x						x				$8,073.47	
WOS L114 - Cates (7211 Lone Oak Trail Tweden) Permit 23-02		x	x			x			x				$8,209.77
Boutwell Farm Lot 1 (2545 Boutwell Farm Rd) Permit 23-03		x							x				$3,472.66
Westridge B1L4 (986 Creekside) Permit 23-04		x							x				($693.54)
Rocket Carwash Permit 23-05	x	x									x		$4,824.00
7239 Lone Oak Trail (WOS L118) Permit 23-07		x							x				$452.78
72nd St Road and Trail Improvements Permit 23-08								x				$3,254.41	
Kirn Residence (McLafferty 8000 Neal Ave) Permit 23-09		x							x				($693.29)
Curio Dance Studio Permit 23-10	x	x									x		$5,267.50
7273 Lone Oak Trail- WOS Lot 122 - Freiroy Residence Permit 23-11		x							x				$769.31
CSAH 9 -Keystone Ave - Culvert Replacement						x		x				$1,525.04	

APPLICANT/PERMIT NO.	RULES							TYPE				FEES OWED	
	2	3	4	5	6	7	Decomp action	GOV	SF RES	RES DEV	COM	EXEMPT	AMT DUE
Permit 23-12													
The Lakes - Phase III/Sandhill Shores Permit 23-13		x								x			($365.44)
Wiskow Berm Permit 23-14		x							x				($868.54)
7085 Lone Oak Trail- WOS L102- Mensah Res/Cates Permit 23-15		x							x				$1,009.56
13294 Boutwell Rd. N Permit 23-16		x							x				($833.29)
Sundance Townhomes Permit 23-17										x			$6,639.25
7285 Lone Oak Trl- WOS L124 Permit 23-18									x				($41.80)
Liberty Classical Academy Expansion Permit 23-19											x		$4,577.75
Lodges of Settler's Glen Pond Excavation Permit 23-20								x				$351.38	
Take 5 Oil Change Permit 24-01											x		$3,588.75
Schuster Residence- 122nd St N Permit 24-02									x				$650.00
WOS L120- 7255 Lone Oak- Hilgert Permit 24-03													$1,540.00
Washington County CSAH 5 - 36 to Croixwood Permit 24-04		x						x				$ 1,071.25	
Swager Residence Permit 24-05		x							x				$ (846.25)
	90	326	34	15	27	160		71	153	13	119		
TOTAL NON-EXEMPT DUE BCWD:													**$134,088.54**
Total due back to applicants if closed:													**($213,016.75)**

WASHINGTON CONSERVATION DISTRICT
455 HAYWARD AVE N
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MEMORANDUM

TO: **BCWD Board of Managers**

FROM: Aaron DeRusha, WCD

DATE: **2/28/2024**

RE: **BCWD Water Monitoring Equipment Replacement Request**

During the course of the 2023 monitoring season, two water stage and velocity sensors were damaged by wildlife chewing the cables at the McKusick Road and Diversion monitoring stations. Additionally, the central wiper for the YSI EXO multiparameter sonde at the Brown's Creek Outlet site was damaged in the field. The stage and velocity sensors are integral to the function and performance of the monitoring stations and pollutant load calculation methods, and the central wiper is critical for keeping the dissolved oxygen, turbidity, pH, and specific conductivity sensors clear of debris and biofouling. I am requesting the BCWD board approve the replacement cost, including extended warranty, of two stage and velocity sensors at $2,317.70 each, and the replacement of the central wiper at $1,375.00, plus applicable shipping. Attached is a quote detailing these costs. The equipment will be purchased and installed by WCD, to be reimbursed by BCWD.

Requested board action: Approve equipment replacement expenditures as described above, and payment not to exceed $6,300 to Washington Conservation District for reimbursement from account 300-4640.

Q U O T A T I O N

Quotation From:

TECH SALES CO.
311 W. 44TH STREET
MINNEAPOLIS MN 55409
Ph: (612) 823-8238 **Fx:** (612) 823-4272

Quotation For:

Washington Conservation District
455 Hayward Ave N
Oakdale MN 55128
Ph: (612) 816-7995 **Fx:** (651) 330-7747

Quotation#: 2240232
Revision#:
Date: 02/22/24

Attn: Aaron DeRusha **E-Mail:** aderusha@mnwcd.org
Ref: Isco 750 AV Sensors & YSI Central Wiper

Please Address Order To:

TECH SALES CO.
311 W. 44TH STREET
MINNEAPOLIS MN 55409

FOB: Factory
Shipment: 3-4 Weeks ARO
Salesman: Travis DeGroot
Validity: 30 Days
Terms: NET 30 DAYS

Item	Qty	Part#/Description	Unit Price	Total Price
1	2	603254021 Low Profile Area Velocity Sensor with 10' range and 25' cable.	2,107.00	4,214.00
2	2	Warranty Additional 1 year Warranty	210.70	421.40
3	1	599090-01 YSI EXO Central Wiper, EXO2, Ti.	1,375.00	1,375.00
			Quote Total:	**6,010.40**

Prices shown do not include freight or sales tax. MasterCard/Visa payments are accepted but may be subject to a 4% surcharge. Please review this quotation and let us know if you have any questions.

By: _____
Travis DeGroot

Project Name |	Weather Station Monitoring Program	**Date** |	2/22/2024
To / Contact info |	BCWD Board of Managers		
Cc / Contact info |	Karen Kill, District Administrator		
From / Contact info |	Mike Majeski, Conservation Biologist		
Regarding |	2023 Weather Summary		

Background

The BCWD Weather Station Monitoring Program was initiated in the spring of 2011 and has been in operation since 2012. Each season the weather station is installed on top of the vegetated berm at the Stillwater Public Works Facility and collects the following data: precipitation, air temperature, relative humidity, dew point, solar radiation, wind speed, gust speed, and wind direction. The weather station is programmed to collect data from spring through fall of each season and is removed during the winter months. This information is being collected to support a variety of District programs such as hydrologic and hydraulic model upgrades and calibration (which require 15-minute precipitation data), thermal modeling efforts, and other projects including the Settlers Glen iron-enhanced sand filter, THPP, and the Biological Monitoring Program. The weather station data is also routinely shared with the Washington Conservation District (WCD).

The objective of this memorandum is to summarize temperature and precipitation data recorded in 2023 and how the data relates to water temperatures in Brown's Creek, particularity in the Brown's Creek gorge where coolwater and coldwater-dependent species occur including rainbow darter, brown trout, and several macroinvertebrates that have specific thermal and dissolved oxygen requirements to survive.

2023 Weather Summary

The BCWD weather station was installed at the Stillwater Public Works Facility (latitude: 45°03'49.86", longitude: 92°51'21.05") on March 27, 2023 and was removed on November 6, 2023. During this timeframe, a total of 24.30" of precipitation was recorded, including seven rain events exceeding 1.0" (Figure 1). Above average monthly precipitation occurred in April (+0.60", total of 3.47"), September (+2.48", total of 6.06") and October (+2.11", total of 4.71"). However, for the third consecutive year, a significant drought occurred during most of the growing season, with the greatest precipitation departures from normal occurring in June (-3.28", total of 1.48"), August (-2.83", total of 2.09"), May (-2.06", total of 1.52"), and July (-0.52", total of 4.17"). Notable dry periods over the course of the monitoring season included: May 15-May 31 (0.28" in 17 days), June 3-June 24 (0.13" in 22 days), July 29-Aug 10 (0.09" in 13 days), and Aug 15-Sept 14 (0.19" in 31 days).

Air temperatures recorded at the weather station fluctuated above and below the average high and low temperatures throughout the monitoring season, and there were 24 days when the maximum air temperature exceeded 90° F (Table 1 and Figure 2). According to the Twin Cities National Weather Service, 2023 was tied for the fourth hottest meteorological summer (June-August) on record with an average temperature of 74.8°F, which is only 0.9°F below the record set in the summer of 2021 at 75.7°F. Despite the near record heat, water temperatures recorded in Brown's Creek at the WOMP station remained relatively cool and never exceeded a maximum water temperature of 70°F at any

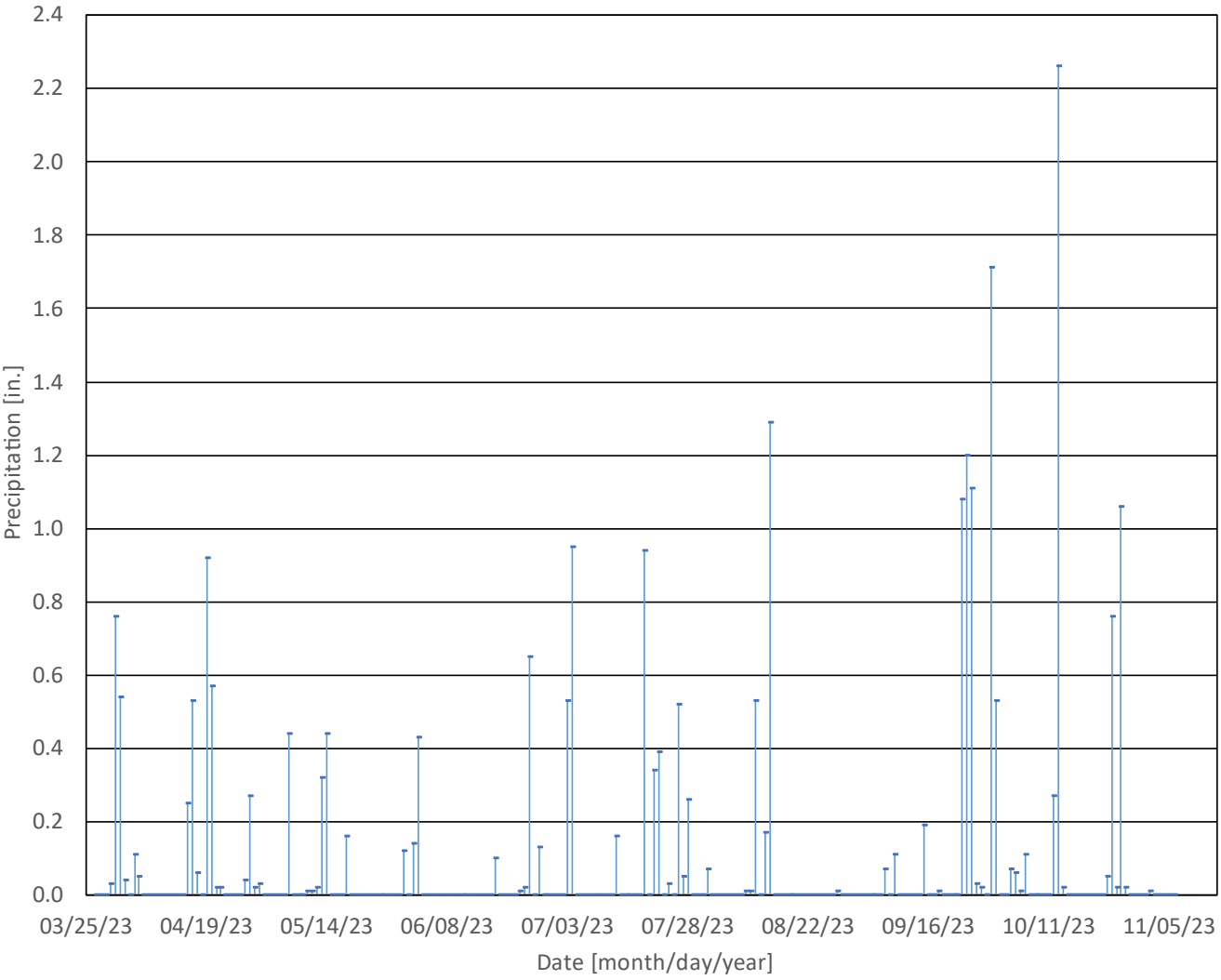


Figure 1. Daily precipitation recorded by the BCWD weather station (Mar 27-Nov 6).

point during the year. This is notable since several aquatic species in Brown's Creek require cool water temperatures to survive. For example, brown trout can become physiologically stressed when water temperatures exceed 65°F, and young trout may stop feeding when water temperatures exceed 71°F (personal comm. MNDNR Fisheries).

Below average precipitation during the summer of 2023 likely influenced the recorded water temperatures at the WOMP station, with cool groundwater discharge supporting the majority of stream flow during the summer. There are multiple factors that influence instream temperatures that require detailed analysis beyond the scope of this project; however, the data summarized in Table 1 suggest that a combination of warm air temperatures with concurrent precipitation events appear to have a greater effect on instream temperatures than warm air temperatures alone. For example, since 2012, 2021 had the greatest number of days above 90°F and the warmest nights (nights when the low air temperature was above the average low), yet there was only one day when water temperatures exceeded 70°F at the WOMP station that year. 2021 was also the second driest

Table 1. Air and water temperature trends for Brown's Creek during warm weather months (May 1-September 1, 2012-2023)

Year	# days with max. air temp above 90° F	# nights with low air temp above average low [°F]	Average low air temp. above average low [°F]	# days when WOMP water temp. exceeded 70° F	Total precip. May 1-Sept 1 [in.]	Total precip. [in.] on days when WOMP water temp. exceeded 70° F
2012	20	43	5.10	21	17.26	5.28
2013	12	34	4.74	11	17.31	2.12
2014	0	25	4.64	7	21.28	0.10
2015	2	25	3.37	4	21.14	1.55
2016	12	38	3.79	10	20.80	4.96
2017	9	16	3.27	0	17.12	0
2018	18	45	4.58	8	15.84	3.10
2019	5	15	2.02	1	22.93	0.83
2020	15	42	4.20	8	21.68	3.14
2021	34	33	7.03	1	12.14	0
2022	16	30	4.69	1	13.30	0
2023	24	34	4.03	0	9.26	0

year (from May 1-Sept.1) since the weather station was installed in 2012. Conversely, the years that had greater amounts of precipitation during warm weather periods had the greater number of days when the WOMP water temperature exceeded 70°F. Since the weather station was installed, 2023 had the second most days above 90°F but was also the driest year (from May 1-Sept.1), and WOMP water temperatures never exceeded 70°F at any point during the monitoring season.

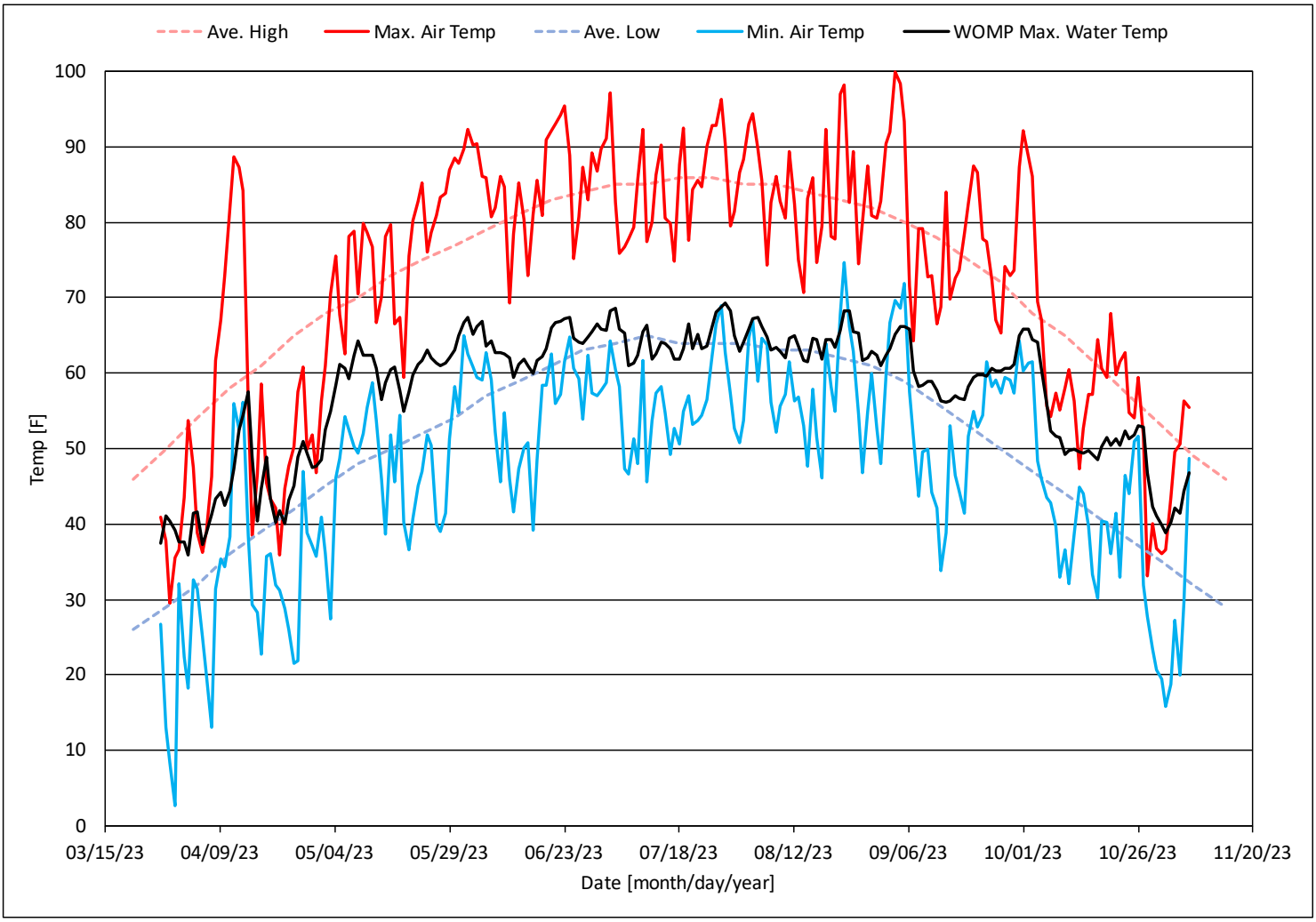


Figure 2. Daily maximum and minimum temperatures recorded by the BCWD weather station and WOMP daily maximum water temperatures recorded by the WCD/ Met Council. Average air temperature data source: https://weather.com/weather/monthly/l/45.067273,-92.854033

Weather Station Maintenance

Prior to equipment installation, the precipitation gauge was calibrated to a simulated one-inch rain event according to the manufacturer's specifications. During the monitoring season, the weather station was visited periodically to download data and check for sensor fouling. All weather sensors were inspected in the fall of 2023 and no upgrades or replacements are needed at this time.

2024 Scope of Services

The following scope identifies the costs associated with equipment preparation, precipitation gauge calibration, data collection, and reporting for the 2024 monitoring season (March to November). All data collected in 2024 will be forwarded to the Washington Conservation District and other entities as requested.

Task	Hours	Estimated Cost
Precipitation Calibration & Installation of Weather Station	5	$745
Monthly Download of Data	7	$938
End of Season Equipment Removal	3	$447
Data QA/QC & Report, Data Storage, & Distribution to the WCD	8	$1,192
Expenses	N/A	$320*
TOTALS	**23**	**$3,642**

* Includes the cost for sensor replacement if needed (temp/ humidity or pyranometer sensor) during the 2023 monitoring season

Requested Action

1. Approve this scope of services from account number 957-0000. All tasks including the annual report will be completed by February 28, 2025.

technical memo

Project Name |	Rare Aquatic Plant Outreach	**Date** |	03/14/2024
To / Contact info |	BCWD Board of Managers		
Cc / Contact info |	Karen Kill, District Administrator		
From / Contact info |	Jimmy Marty, Mike Majeski		
Regarding |	Outreach Plan for Rare Aquatic Plants at Goggins and Lynch Lakes		

Background

Snailseed pondweed (*Potamogeton bicupulatus*) is a state endangered aquatic macrophyte known from only 14 lakes in Minnesota. Surprisingly, this species was discovered in Lynch Lake during an aquatic macrophyte survey conducted by EOR in 2014 as part of the Northern Chain of Lakes Watershed Restoration and Protection Strategy (WRAPS) project. Surveys completed by EOR in summer 2023 documented the status of the Lynch Lake population and identified an additional population of snailseed pondweed at Goggins Lake. A second rare species, slender naiad, was also likely observed at Lynch Lake but has yet to be confirmed. The discoveries at Lynch and Goggins increase the statewide occurrence of snailseed pondweed to 16 lakes out of over 2,000 lakes surveyed for rare plant species.

Recommendations provided in the 2023 survey memo (and shared with the Board at the February 14th Board Meeting) included outreach to landowners with snailseed pondweed present on or adjacent to their lakeshore. Additional outreach opportunities were also discussed with the Board (i.e., newsletters, meetings with lakeshore owners, etc.). The following scope summarizes next steps and costs for the development of an outreach plan, conversation with MNDNR, and the development of specific outreach materials and follow up actions.

Outreach Activities

Task 1: Develop Outreach Plan

Direct, inadvertent impacts to snailseed pondweed were observed along the shoreline of one property on Goggins Lake. No snailseed pondweed was observed within an approximately 100-foot-long area of shoreline where the population was otherwise continuous. This area was being used for storage and launching of multiple small watercraft. For reference, the entire linear shoreline occupied by snailseed pondweed was estimated to be about 700 feet. The 100-foot gap represents a substantial portion of potential habitat that is being disturbed.

Additionally, potential inadvertent impacts were identified on a second property with snailseed pondweed present at Goggins Lake. Though no impacts were evident at the time of the 2023 survey, the area is frequently trafficked and there is risk of future impacts. No impacts or potential direct impacts were observed at the Lynch Lake snailseed pondweed location. However, intensive shoreline development along one parcel was observed outside of the mapped snailseed pondweed population but within potentially suitable habitat near previously mapped locations from 2014.

The development of a targeted outreach plan may help to mitigate these impacts. EOR will work with District staff to develop an outreach plan that targets specific landowner activities as well as increases the public's knowledge about the presence of these unique aquatic resources in the

Brown's Creek watershed. Examples of outreach activities to landowners may include notification of species presence, communication of species importance, identification of practices to minimize/avoid ongoing impacts (e.g. narrowing access points, storing watercraft outside of potential habitat), and communication of general impact avoidance/impact measures (e.g. use of herbicides, mowing practices, avoiding disturbance).

The presence of these unique and sensitive aquatic plant resources is an opportunity to highlight the health and quality of the District's lakes and streams. Not only is it important to target adjacent landowners to address direct impacts to the plant populations but it is also important to let the public know about these rare and sensitive plant species in order to promote awareness about healthy ecosystems and the stewardship of our landscapes. EOR will work with District Staff/WCD to develop an outreach plan that (1) targets specific outreach for adjacent landowners on Goggins Lake and Lynch Lake (2) provides monitoring and management recommendations to WCD staff and (3) informs the public that there are new species being added to the Unique Species Inventory that warrant protection.

Task 2: Review Plan with MNDNR

Once the draft Outreach Plan has been developed, EOR will share it with the MNDNR to solicit their feedback. Coordination with MNDNR will ensure compliance with state statutes regulating rare species, assess risks of disclosing rare species locations (e.g., intentional destruction), and facilitate collaboration with partner agencies engaged in conservation outcomes for snailseed pondweed. This task includes up to 2 virtual meetings, correspondence with MNDNR staff, and revisions to the draft Outreach Plan based on MNDNR feedback.

Task 3: Develop Outreach Materials

Following consultation and plan review with MNDNR, EOR will draft outreach materials for use by District/WCD staff. These materials may include a fact sheet, shoreline management guidelines, newsletter, and/or technical materials required to support outreach by District/WCD staff to specific landowners and the public.

Task 4: Implement the Outreach Plan

District/WCD staff are anticipated to lead plan implementation. This task includes up to 2 meetings for EOR to provide support to staff prior to and following implementation. Ideally, this task would be completed between mid-June to mid-August 2024 when snailseed pondweed is most readily identifiable.

Cost Estimate

Tasks	Hours	Estimated Cost
Develop Outreach Plan	11	$1,856
Review Plan with MNDNR	7	$1,186
Develop Outreach Materials	8	$1,340
Implement the Outreach Plan	3	$462
TOTALS	**29**	**$4,844**

Requested Action

1. Approve this Scope of Services in the amount of $4,844 from account number 910-0000 to develop and implement outreach for rare aquatic plant populations at Goggins and Lynch Lakes.

memo

Project Name |	Multiple Projects: Vegetative Maintenance	**Date** |	3/13/2024
To / Contact info |	BCWD Board of Managers		
Cc / Contact info |	Karen Kill, District Administrator		
From / Contact info |	Pat Conrad; Ryan Fleming, PE; Mike Majeski		
Regarding |	2024 Vegetative Maintenance Scope of Services		

Background

Brown's Creek WD has committed to doing maintenance on vegetation at a number of sites throughout the watershed. The maintenance is conducted to preserve existing high value naturally occurring native vegetation (as is the case for the Grant Fen), to assist in the establishment of native vegetation of recently constructed projects (Brown's Creek Trail, Long Lake Shoreline, Morgan Ave. Sand Filter), or to control invasive and woody vegetation that has sprouted up at previously constructed project sites (THPP and Kismet Basin).

Scope of Services

The following summarizes the work proposed at each project site for 2024. The maintenance work will be conducted by Natural Shores Technologies. Refer to attached map for site locations.

Grant Fen 2024 Maintenance Estimate

Spring Mowing

3-4 Maintenance visits throughout season including:

- Spot herbicide treatments of reed canary grass, thistle, and other non-native weeds
- Regular weed whipping or mowing to prevent weeds from going to seed
- Re-seeding areas with on-site seed sources
- Buckthorn or other undesirable tree removal (ex. Amur maple)

Long Lake Shoreline 2024 Maintenance

Spring Mowing

3-4 Maintenance visits throughout season including:

- Spot herbicide treatments of Reed Canary Grass, Thistle, Cattail, and other non-native weeds
- Regular weed whipping or mowing to prevent weeds from going to seed
- Buckthorn or other undesirable tree removal (ex. Amur Maple)
- Re-seed or re-plant areas where weeds have been removed in sections

Brown's Creek Trail 2024 Maintenance

Spring Mowing

3-4 Maintenance visits throughout season including:

- Spot herbicide treatments of reed canary grass, thistle, sweet clover, and other non-native weeds
- Regular weed whipping or mowing to prevent weeds from going to seed

- Re-seed or re-plant areas where weeds have been removed

THPP 2024 Maintenance

Spring Scouting/Assessment

3-4 Maintenance visits throughout the season including:

- Spring and fall spot herbicide treatments of reed canary grass, purple loosestrife, Canada thistle, and other invasive weed species
- Regular weed whipping or mowing to prevent weeds from going to seed

Morgan Ave. Sand Filter 2024 Maintenance

Spring Mowing

4-5 Maintenance visits throughout the season including:

- 2 herbicide treatments (minimum)
- Prevention of seed maturation by hand pulling or weed whipping
- Removal of volunteer tree species

Kismet Basin 2024 Maintenance

Spring Mowing

3-4 Maintenance visits throughout the season including:

- Spring and fall spot herbicide treatments of reed canary grass, spotted knapweed, and other invasive weeds
- Regular weed whipping or mowing to prevent weeds from going to seed

Site Progress Reports

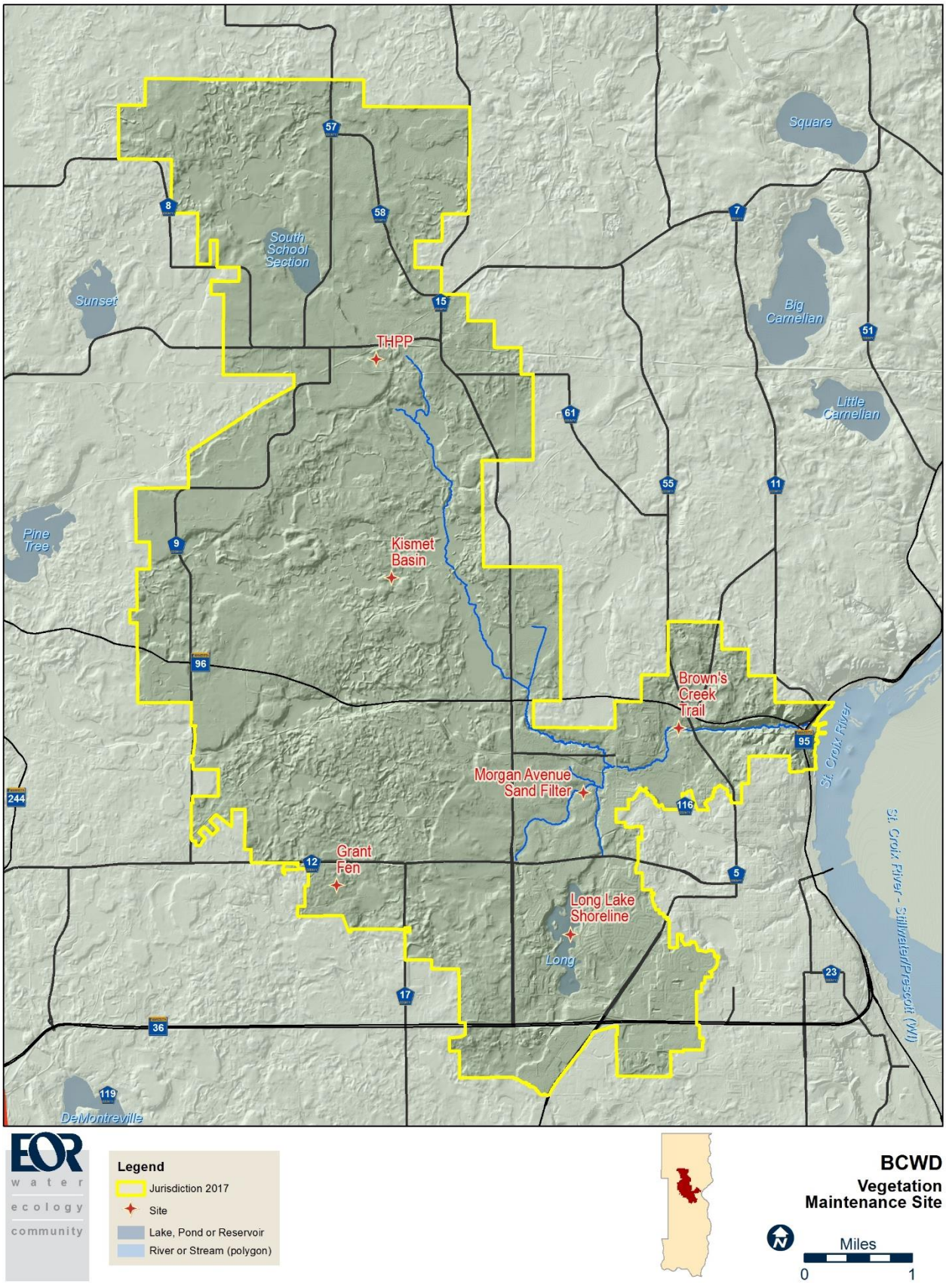
Detailed progress reports for each site will be completed following the maintenance season. Reports will summarize work done during 2024, progress being made toward restoration goals and maintenance recommendations for 2025.

Requested Action

Approve vegetative maintenance for the projects as follows:

Tasks	Estimated Cost	Account Number
Brown's Creek Trail	$1,950	948-0000
Long Lake Shoreline	$2,600	948-0000
THPP	$3,900	948-0000
Kismet	$2,000	948-0000
Morgan Avenue Sand Filter	$1,850	948-0000
Grant Fen	$3,000*	953-0000
Site Progress Reports	$1,000	953-0000
TOTALS	**$16,300**	**NA**

** Includes $500 contractor coordination time*


Square
South School Section
Sunset
Big Carnelian
Little Carnelian
THPP
Pine Tree
Kismet Basin
Brown's Creek Trail
St. Croix River
Morgan Avenue Sand Filter
Grant Fen
Long Lake Shoreline
Long
St. Croix River - Stillwater/Prescott (WI)
DeMontreville
57
8
58
7
15
51
61
55
11
9
96
95
244
116
12
5
17
23
36
119
Legend
Jurisdiction 2017
Site
Lake, Pond or Reservoir
River or Stream (polygon)
BCWD
Vegetation Maintenance Site
Miles
0
1

Brown's Creek Watershed District
2024 Approved Budget- Final Certified Levy
Actual Carry Over from 2023: 3-19-2024

		Estimated 2023 Carry Forward	Revised 2023 Carry Forward for Approval	2024 Grants	2024 Levy	2024 Total Budget (For approval)	Allocated	Available
100-2910	Designated Funds - Management Plan Projects	*$ 1,003,777*	*$ 992,580*			$ 992,580		$ 1,003,777
						$ -		$ -
Revenue						$ -		$ -
100-3700	Interest Income					$ -		$ -
100-3601	Metropolitan Council Outlet Monitoring Grant			$ 5,000		$ 5,000		$ 5,000
100-3630	Washington County Cost-share Applewood Reuse	*$ 66,800*	*$ 66,800*			$ 66,800		$ 66,800
100-3631	MPCA Small Watershed Grant 2023-2026	*$ 320,706*	*$ 320,706*			$ 320,706		$ 320,706
100-3100	Tax Levy				$ 1,180,803	$ 1,180,803		$ 1,180,803
TOTAL, ESTIMATED Sources of Funding		***$ 1,391,283***		***$ 5,000***	***$ 1,180,803***	**$ 2,565,889**		**$ 2,577,086**

ACCT. #	General Expenses	*Estimated 2023 Carry Forward*	Revised 2023 Carry Forward for Approval	2024 Grants	2024 Levy	2024 Total Budget (For approval)	Allocated	Available
200-4000	Manager Per Diem and Expense				$ 10,000	$ 10,000	$ 10,000	$ -
200-4001	Manager Communications/Tablets		*$ 4,350*			$ 4,350	$ 4,350	$ -
200-4220	Secretarial Services	*$ 4,000*	*$ 4,000*		$ (4,000)	$ -		$ -
200-4250	Dues & Subscriptions (MAWD 6500 and LMCIT 2500)				$ 9,000	$ 9,000	$ 9,000	$ -
200-4270	Bonding & Insurance				$ 6,000	$ 6,000	$ 6,000	$ -
200-4280	Postage & Delivery				$ 1,000	$ 1,000		$ 1,000
200-4290	Printing & Notices				$ 1,000	$ 1,000		$ 1,000
200-4330	Accounting				$ 4,560	$ 4,560	$ 4,560	$ -
200-4331	Audit				$ 10,300	$ 10,300	$ 10,300	$ -
200-4949	Misc., Other Expense				$ 2,000	$ 2,000		$ 2,000
200-4320	Wash. Conservation District--Admin				$ 58,670	$ 58,670	$ 58,670	$ -
200-4265	Admin Conference Registrations				$ 2,000	$ 2,000		$ 2,000
200-4410	Legal Fees - General				$ 25,800	$ 25,800	$ 25,800	$ -
200-4500	Staff Engineer				$ 28,445	$ 28,445	$ 28,445	$ (1)
	Diversity, Equity and Inclusion Training				$ 5,000	$ 5,000		$ 5,000
	Contingency Reserve	*$ 50,000*	*$ 50,342*		$ -	$ 50,342		$ 50,342
TOTAL GENERAL FUND EXPENSES:		***$ 54,000***	***$ 58,692***	***$ -***	***$ 159,775***	***$ 218,466***	***$ 157,125***	**$ 61,341**

ACCT. #	MANAGEMENT PLAN EXPENSES	*Estimated 2023 Carry Forward*	Revised 2023 Carry Forward for Approval	2024 Grants	2024 Levy	2024 Total Budget (For approval)	Allocated	Available
300-4320	Wash. Conservation District--Administrator				$ 176,005	$ 176,005	$ 176,005	$ -
300-4410	Legal Fees - Mgmt Plan				$ 60,000	$ 60,000		$ 60,000
300-4501	Staff Engineer				$ 90,474	$ 90,474	$ 90,474	$ 0
300-4702	Permitting, Legal Review				$ 15,000	$ 15,000		$ 15,000
300-4703	Permitting, Engineering Review				$ 55,000	$ 55,000		$ 55,000
300-4704	Permitting, Inspection Database				$ 1,000	$ 1,000		$ 1,000
300-4710-1	Baseline Monitoring			$ 5,000	$ 136,420	$ 141,420	$ 141,420	$ -
300-4640	Equip. Maint. and Upgrades	*$ 15,000*	*$ 15,000*		$ 10,000	$ 25,000	$ 1,100	$ 23,900
300-4810	Shared Educator Position				$ 20,500	$ 20,500	$ 20,500	$ -
300-4950	Management Plan Implementation -future projects				$ -	$ -		$ -
903-0001	Trout Habitat Preservation Project: Monitoring,				$ 6,500	$ 6,500	$ 6,490	$ 10
909-0000	Rules Review/Evaluation	*$ 27,000*	*$ 27,000*		$ 3,000	$ 30,000		$ 30,000
909-0001	Groundwater Dep Nat Resource Inventory update	*$ 10,000*	*$ 10,000*		$ (10,000)	$ -		$ -
909-0002	Permitting Program Internal Procedure updates	*$ 25,000*	*$ 25,000*			$ 25,000		$ 25,000
910-0000	Education & Outreach				$ 15,000	$ 15,000	$ 5,004	$ 9,996
911-0000	Volunteer Stream Monitoring				$ 4,045	$ 4,045	$ 4,045	$ -
912-0000	Grant Preparation		*$ -*			$ -		$ -
914-0000	Homeowner BMP Program				$ 50,000	$ 50,000		$ 50,000
922-0000	Plan Reviews - LGU/LWMP					$ -		$ -
923-0000	H & H Model Maintenance	*$ 10,250*	*$ 3,800*		$ 141,030	$ 144,830		$ 144,830
923-0002	Flood Risk Assessment	*$ 89,316*	*$ 89,316*		$ (73,566)	$ 15,750		$ 15,750
927-0000	Management Plan Update	*$ 127,000*	*$ 127,000*		$ 90,000	$ 217,000	$ 18,500	$ 198,500
929-0000	Long Lake Plan Implementation-shoreline management	*$ -*			$ -	$ -		$ -
929-0010	Long Lake -Implementation - regional treatment	*$ 75,000*	*$ 75,000*		$ (75,000)	$ -		$ -
929-0011	Long Lake - 62nd Street Pond Retrofit Feasibility	*$ 15,000*	*$ 15,000*			$ 15,000		$ 15,000
929-0012	Long Lake - Marketplace Reuse Feasibility	*$ 164,900*	*$ 164,900*		$ 60,220	$ 225,120		$ 225,120
931-0001	Benz Lake Management Plan Implementation	*$ 15,500*	*$ 15,500*		$ (15,500)	$ -		$ -
935-0000	Land Conservation Program	*$ 100,000*	*$ 100,000*		$ 50,000	$ 150,000		$ 150,000
935-0002	110th Street Property Implementation	*$ 48,457*	*$ 45,000*		$ 25,000	$ 70,000		$ 70,000
935-0003	Develop Land Conservation Priorities	*$ 20,000*	*$ 20,000*			$ 20,000		$ 20,000
940-0000	BMP Program – LGU/Community Demonstration Projects	*$ 10,000*	*$ 10,000*			$ 10,000		$ 10,000
942-0004	Measuring Trends in GW Elevations & Flow	*$ 4,000*	*$ 3,960*			$ 3,960	$ 3,960	$ -
942-0007	Groundwater - Browns Creek piezometers	*$ 8,960*	*$ 8,960*			$ 8,960		$ 8,960
942-0011	Groundwater - Coordination with users		*$ 40*		$ 24,000	$ 24,040	$ 24,036	$ 4
942-0012	Groundwater - Install Monitoring Wells	*$ 58,000*	*$ 58,000*		$ (58,000)	$ -		$ -
942-0013	Groundwater - Pump Test	*$ 15,000*	*$ 15,000*		$ (15,000)	$ -		$ -
947-0017	Brown's Creek Implementation - Ecoli site visits/cost-share	*$ 10,000*	*$ 10,000*			$ 10,000		$ 10,000
947-0018	Brown's Creek - Biological Survey (Macroinvert & Fish)	*$ 4,000*	*$ 4,000*			$ 4,000		$ 4,000
947-0022	Brown's Creek - Buffer and Stream Restoration	*$ 330,000*	*$ 330,000*		$ 133,000	$ 463,000	$ 2,482	$ 460,518
947-0023	Brown's Creek - Golf Course Reuse - Oak Glen	*$ -*				$ -		$ -
947-0026	Brown's Creek - Brown's Creek Cove Reach				$ 20,000	$ 20,000		$ 20,000
948-0000	CIP Maintenance	*$ 30,900*	*$ 35,418*		$ 135,000	$ 170,418		$ 170,418
950-0001	South School Curly Leaf Treatment	*$ 1,000*	*$ 1,000*		$ (1,000)	$ -		$ -
951-0001	Woodpile Lake Management Plan Implementation	*$ 10,000*	*$ 10,000*		$ (10,000)	$ -		$ -
953-0000	Fen Management Plan Implementation	*$ -*				$ -		$ -
957-0000	Weather Station	*$ -*			$ 3,700	$ 3,700		$ 3,700
959-0001	Resource Assessment - upstream 110th/Drone flight	*$ -*			$ 4,700	$ 4,700	$ 4,700	$ -
959-0002	Resource Assessment - Diversion Tribs - Head cut Repairs	*$ 60,000*	*$ 60,000*		$ (60,000)	$ -		$ -
959-0003	Resource Assessment - Brown's Creek Gorge Bluff	*$ -*				$ -		$ -
960-0000	St Croix Phosphorus Reduction	*$ 10,000*	*$ 10,000*			$ 10,000		$ 10,000
961-0000	Mendel Wetland Restoration Feasiblity	*$ 20,000*	*$ 20,000*		$ 15,000	$ 35,000		$ 35,000
962-0000	District-Wide Pond Management Planning/Implementation	*$ 10,500*			$ 4,500	$ 4,500	$ 4,500	$ -
963-0000	District-Wide Vegetation Surveys	*$ 10,000*	*$ 10,000*		$ (10,000)	$ -		$ -
964-0000	District-Wide Chloride Source Assessment	*$ 2,500*	*$ 2,500*			$ 2,500		$ 2,500
TOTAL MANAGEMENT PLAN PROJECT EXPENSES:		***$ 1,337,283***	***$ 1,321,394***	***$ 5,000***	***$ 1,021,028***	***$ 2,347,422***		**$ 1,844,206**
TOTAL, OPERATING EXP. & MGMT. PLAN PROJECTS:		***$ 1,391,283***	***$ 1,380,086***	***$ 5,000***	***$ 1,180,803***	***$ 2,565,888***		***$ 1,905,547***

BROWN'S CREEK WATERSHED DISTRICT
3/19/2024
CURRENT ITEMS PAYABLE-PAGE 1 of 2

	YES	NO	ABSTAIN	ABSENT
ECKLES	_____	_____	_____	_____
JOHNSON	_____	_____	_____	_____
LEROUX	_____	_____	_____	_____
WIRTH	_____	_____	_____	_____
SAHULKA	_____	_____	_____	_____

VENDOR		**ACCOUNT #**		ITEMS		TOTAL	**CK NO**
Emmons & Olivier Resources, Inc.	Invoices February 2024						
	Inv. 41-0000-219 Retainer	300-4500	$	7,078.50			
	Inv. 41-0000-219 Retainer	200-4500	$	2,359.50			
	Inv. 41-0001-222 General Permitting	300-4703	$	6,343.70			
	Inv. 41-0307-84 Permits 2017						
	Permitting #17-01 Grant Holdings Subd	300-4703	$	344.25			
	Inv. 41-0402-25 Permits 2022						
	Permitting #22-02 Gonyea at White Pine Ridge	300-4703	$	67.21			
	Inv. 41-0420-14 Permits 2023						
	Permitting #23-02 WOS Lot 114	300-4703	$	146.25			
	Permitting #23-19 Liberty Classical Academy Expansion	300-4703	$	330.75			
	Inv. 41-0438-02 Permits 2024						
	Permitting #24-01 Take 5 Oil Change	300-4703	$	3,091.50			
	Permitting #24-02 Schuster Residence	300-4703	$	795.75			
	Permitting #24-03 WOS L120- Hilgert Residence	300-4703	$	2,790.00			
	Permitting #24-04 Wash Co CSAH 5	300-4703	$	780.00			
	Permitting #24-05 Swager Residence	300-4703	$	153.75			
	Inv. 41-0205-77 CIP Operation and Maintenance	948-4500	$	1,506.00			
	Inv. 41-0284-29 BCWD Education & Outreach	910-0000	$	1,082.75			
	Inv. 41-0418-15 Brown's Ck Pk Restoration	947-0022	$	9,831.72			
	Inv. 41-0421-14 IESF OM 2023	948-4500	$	1,039.50			
	Inv. 41-0424-8 BCWD 2023 Weather Station	957-4500	$	519.00			
	Inv. 41-0432-6 Enhanced Stakeholder Engagement	927-0000	$	1,543.50			
	Inv. 41-0433-5 2024 H&H Model Update	923-0000	$	33.00			
	Inv. 41-0429-4 2023 GW Elevations	942-0004	$	256.50	$	40,093.13	
Xcel Energy	Inv. 866369090- Iron Enhanced Sand Filter pump operation	948-4500	$	8.35	$	8.35	
Washington Conservation District	Inv. 6426 January 2024- BMP Program	914-0000	$	233.00			
	Inv. 6458 February 2024- BMP Program	914-0000	$	666.00			
	Inv. 6423 January 2024- Water Monitoring						
	Baseline Water Monitoring- labor	300-4710	$	10,441.25			
	Baseline Water Monitoring- equipment	300-4640	$	334.90			
	Metropolitan Council- Lab	300-4710	$	1,874.00			
	WCD Credit	914-0000	$	(10.99)	$	13,538.16	
Smith Partners	February 2024 Invoices						
	Inv. 44685 Retainer - Meetings, Preparation	200-4410	$	2,183.55			
	Inv. 44686 General Legal Services	300-4410	$	269.00			

Smith Partners Continued	Inv. 44687 Planning	300-4410	$ 1,103.71				
	Inv. 44688 Contracts	300-4703	$ 0.18				
	Inv. 44689 Rule Making	300-4410	$ 53.80				
	Inv. 44690 Permits	300-4703	$ 215.38				
	Inv. 44691 Capital Project Development	300-4410	$ 108.86				
	Inv. 44692 Brown's Creek Restoration - agreements	300-4410	$ 4,093.79	$	8,028.27		
Washington County	Brown's Creek Restoration Project: Access Permit Application Fee	947-0022	$ 150.00				
	Brown's Creek Restoration Project: Access Permit Security Deposit	947-0022	$ 500.00	$	(650.00)	4614	VOID
Dimke Excavation	IESF Harvest Pond Maintenance Final Payment	948-4500	$ 3,500.00	$	3,500.00		
Anna Shelander	BCWD Stewardship Grant Reimbursement 2024-01	914-0000	$ 248.00	$	248.00		
Dave McCord	Inv. 4177 January 2024 Accounting Services	200-4330	$ 380.00	$	380.00		
League of MN Cities	Inv. Package 1001461-8 Agreement Period 02/23/2024 - 02/23/2025	200-4270	$ 5,207.00	$	5,207.00		
Total Amount Disbursed				**$**	**70,352.91**		

BROWN'S CREEK WATERSHED DISTRICT
3/19/2024
MONTHLY ITEMS DEPOSITED - Page 1 of 1

VENDOR	INVOICE/DESCRIPTION	ACCOUNT #	CK NO	DEPOSIT DATE		TOTAL
J.G. Contracting	#24-05 Permit Deposit	300-4703	9336	2/22/2024	$	1,000.00
4M Fund	Dividend	100-3700	Direct Deposit	2/29/2024	$	3,060.88
TOTAL AMOUNT DEPOSITED:					**$**	**4,060.88**

Brown's Creek Watershed District				
Treasurer's Report				
3/19/24				
	US Bank Accounts			
		Checking 9903	$ -	550,788.44
		Checking 6671	$ -	
		Checking 6614- Permitting	$ -	
	4M Fund		$ -	732,289.46
Total Bank Balance			$ -	1,283,077.90
Less Accounts Payable			$ -	70,352.91
Plus Unrecorded Deposits since			$ -	0
Total Balance			$ -	1,212,724.99

memo

Project Name |	BCWD Permit 24-01 Take 5 Oil Change	**Date** |	03/15/2024
To / Contact info |	BCWD Board of Managers		
Cc / Contact info |	Joseph Bailey; Sambatek, Luke Brodeur; Jarman Development		
Cc / Contact info |	Karen Kill, Administrator / BCWD		
From / Contact info |	Camilla Correll, PE / EOR; John Sarafolean, EOR; Paul Nation, PE / EOR		
Regarding |	Permit Application No. 24-01 Engineer's Report		

The following review of the above-mentioned project located within the legal jurisdiction of the Brown's Creek Watershed District (BCWD) was conducted to determine compliance with the BCWD rules for purposes of the engineer's recommendation to the Board of Managers for its determination of the permit application.

Applicant: Jarman Development
Permit Submittal Date: *2/24/2024*
Completeness Determination: *2/26/2024*
Board Action Required By: *04/26/2024*
Review based on BCWD Rules effective April 1, 2020
Recommendation: Consider variance request and otherwise Approve with Conditions

GENERAL COMMENTS

The applicant proposes an oil change business named Take 5 Oil Change on a 0.53-acre parcel located in Oak Park Heights. The project site includes the Take 5 Oil Change parcel (Outlot A), an existing Goodwill parcel, and retail store parcel shown in Figure 1. The Goodwill parcel is included in the site because the proposed plan involves land-disturbing activities to place storm sewer into the filtration basin on the Goodwill parcel to the south of the project parcel. The retail store is included in the site because the proposed plan involves land-disturbing activities to install curb and gutter, paving, and sidewalk connecting the Take 5 Oil Change parcel and retail store parcel. The total site area is 4.26 acres.

Existing Conditions: The project is located southwest of the intersection of Krueger Lane and 60th Street North. The existing Take 5 Oil Change parcel (Outlot A) is turf grass. 0.17 acres of the parcel flows south to the filtration basin located on the Goodwill parcel that was constructed with the Brackey 4th Addition, 0.37 acres drains north to an existing drainage swale that runs along 60th Street North (eventually discharging to Menards Pond) and 0.02 acres drains east to Krueger Lane where it is picked up by the storm sewer and routed to Menards Pond.

Proposed Conditions: The project site impervious will increase from 2.76 acres to 3.10 acres, an increase of 12 percent. The proposed Take 5 Oil Change will create 0.34 acres of impervious surface and the remaining 0.19 acres of the parcel will consist of pervious surfaces including turf grass and a tree trench stormwater management system. The oil change development will include a drive-thru building, bituminous paved parking lot, concrete curb and gutter, concrete walk, and stormwater management system.

The majority of the stormwater generated from this project will be treated by the tree trench that will provide volume control through evapotranspiration and interception, rate control, and water quality treatment. The site is located within a Drinking Water Supply Management Area classified as having high vulnerability (Minnesota Department of Health Source Water Protection Map Viewer). The site is not, however, in an Emergency Response Area. The state Construction Stormwater General Permit precludes the use of stormwater infiltration in this setting unless a regulated Municipal Separate Storm Sewer System permittee (the City of Oak Park Heights in this case) performs or approves an engineering review sufficient to provide a functioning treatment system and to prevent adverse impacts to groundwater. The City of Oak Park Heights has neither performed nor approved such a review.

Recommendation: The BCWD engineer recommends that the board consider the applicant's variance request in light of the analysis provided below and otherwise approve the application with the conditions outlined in the report

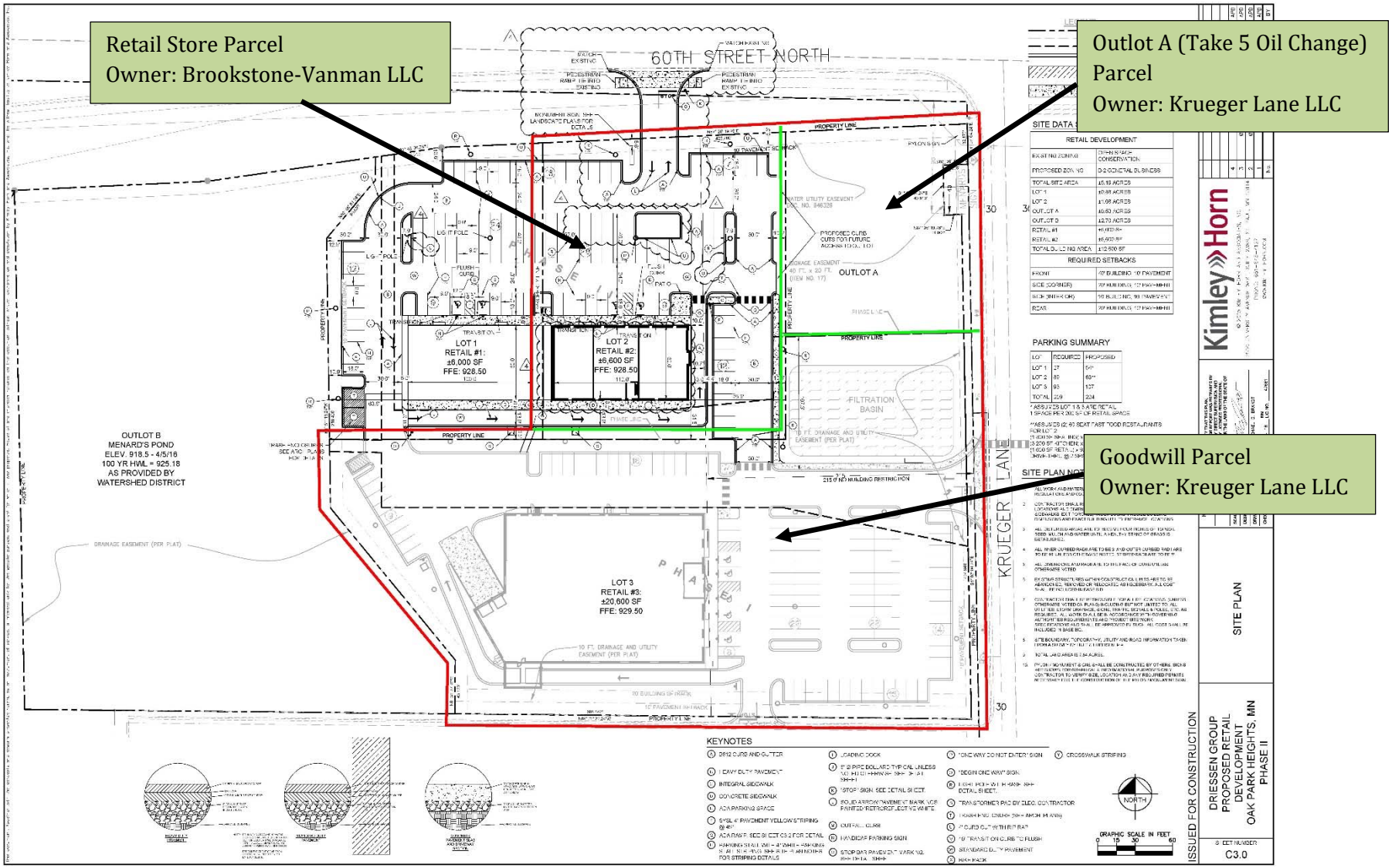


Figure 1: Site Plan

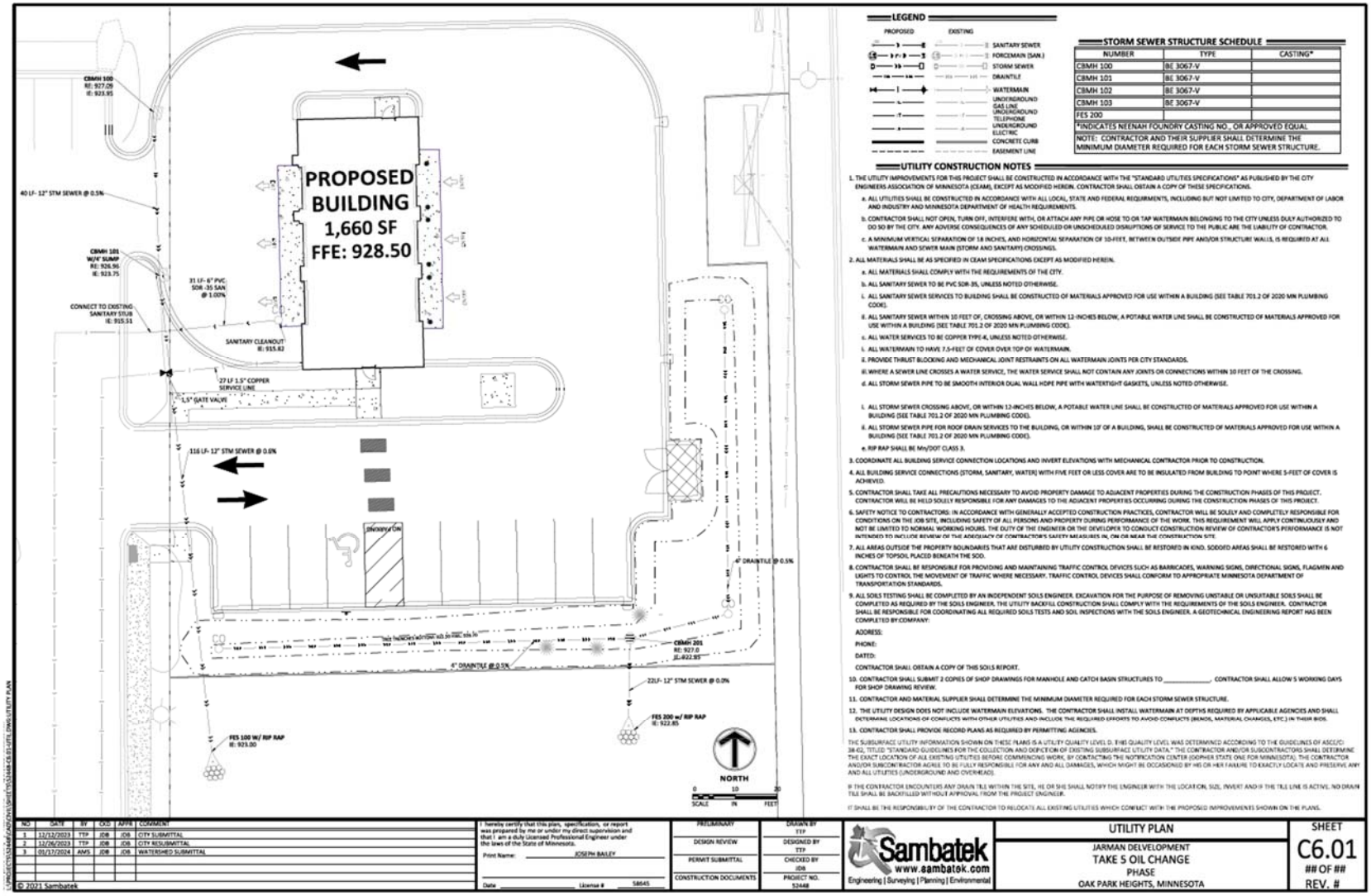


Figure 2: Take 5 Oil Change Parcel and Utility Plan

Rule 2.0—STORMWATER MANAGEMENT

Under 2.2(b) of the rules, the proposed project triggers the application of Rule 2.0 Stormwater Management because it is a redevelopment creating more than 10,000 square feet (sf) of impervious surface. Because the proposed activity will disturb less than 50 percent of existing impervious surface on the site, the criteria will apply only to reconstructed and net additional impervious surface, and all disturbed areas on the project site. The site is located within the Diversion Structure Subwatershed, so the stormwater criteria in subsection 2.4.1(b) apply.

The stormwater management plan for the project includes:

- *A tree trench stormwater management facility planted with nine deciduous trees to provide volume control, rate control, and water quality treatment.*
- *An existing filtration basin constructed with the Brackey 4th Addition.*
- *Tree trench stormwater inlet pretreatment with baffled brick inlets at each curb cut draining into the tree trench stormwater management facility.*
- *A 4-foot sump structure to treat stormwater from the 2S drainage area for water quality before entering the existing filtration basin.*

*Existing drainage from the portion of the site that is being disturbed (Outlot A) consists of three subcatchment areas: 1E, 2E, and 3E (*Figure 4*). The three subcatchments discharge to three discharge points labeled North, South, and East (*Figure 3Figure 4*). The subcatchment areas are 0.37 acres, 0.17 acres, and 0.02 acres respectively. Under existing conditions, the stormwater runoff from subcatchment 1E sheet flows across turf grass discharging to an existing drainage swale located to the north of the property along 60th Street North which routes stormwater runoff to Menard's Pond. Subcatchment 2E sheet flows to the south across turf grass discharging to an existing filtration basin facility constructed with the Brackey 4th Addition. The filtration basin outlet is a storm sewer pipe that discharges into Menards Pond, and this is the regulated discharge point at the site boundary. As this storm sewer flows west it receives runoff from the existing Goodwill building and parking lot. Subcatchment 3E sheet flows to the east across turf grass discharging to Krueger Lane and the storm sewer which routes stormwater runoff to Menards Pond. Additional discharge points from the Retail Store parcel (north to the existing swale or via separate storm sewer to Menards Pond) are not considered as there are no changes from existing to proposed conditions for these areas.*

*Under proposed conditions, there will be four drainage areas: 1S, 2S, 3S, and 4S. The four subcatchments will continue to discharge to the same three points as in the existing conditions: North, South, and East (*Figure 5*). Stormwater in subcatchment 1S will sheet flow to the north over turf grass to the existing drainage swale along 60th Street North and ultimately to Menard's Pond. Subcatchment 2S will sheet flow over bituminous pavement before being collected in catch basins located along the curb and routed via storm sewer to the Brackey 4th Addition filtration basin to the south of the property. Subcatchment 3S will sheet flow east over turf grass to Krueger Lane where it is picked up by an existing catch basin and storm sewer and is routed to Menard's Pond. Stormwater in subcatchment 4S will sheet flow over bituminous pavement before ending up in the tree trench system. Any stormwater runoff that isn't taken up by the trees and/or vegetation will be collected by drain tile and routed to the south into the Brackey 4th Addition filtration basin. All proposed new impervious surface is within subcatchment 2S and 4S.*

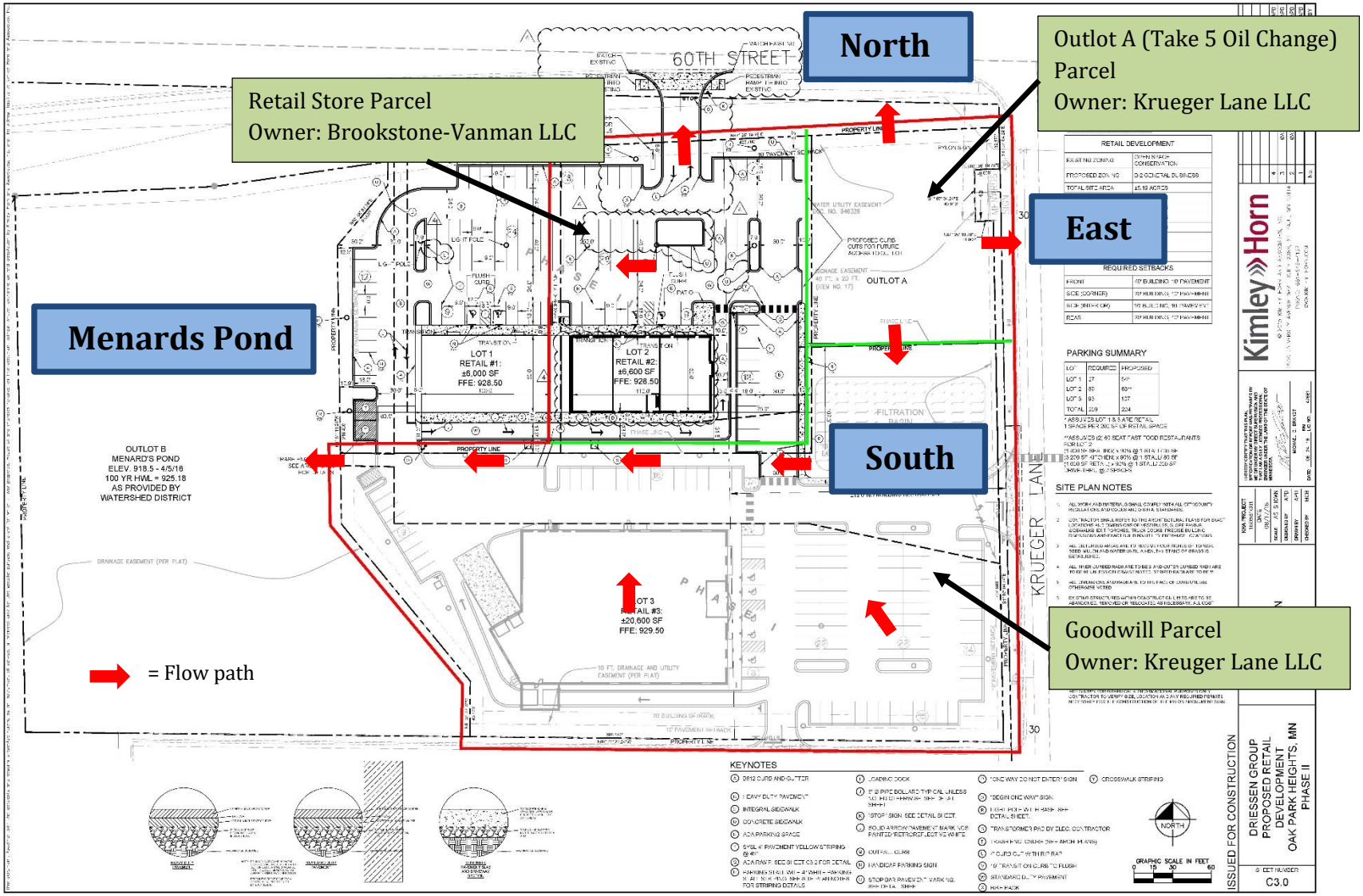


Figure 3: Stormwater discharge points for the entire project area.

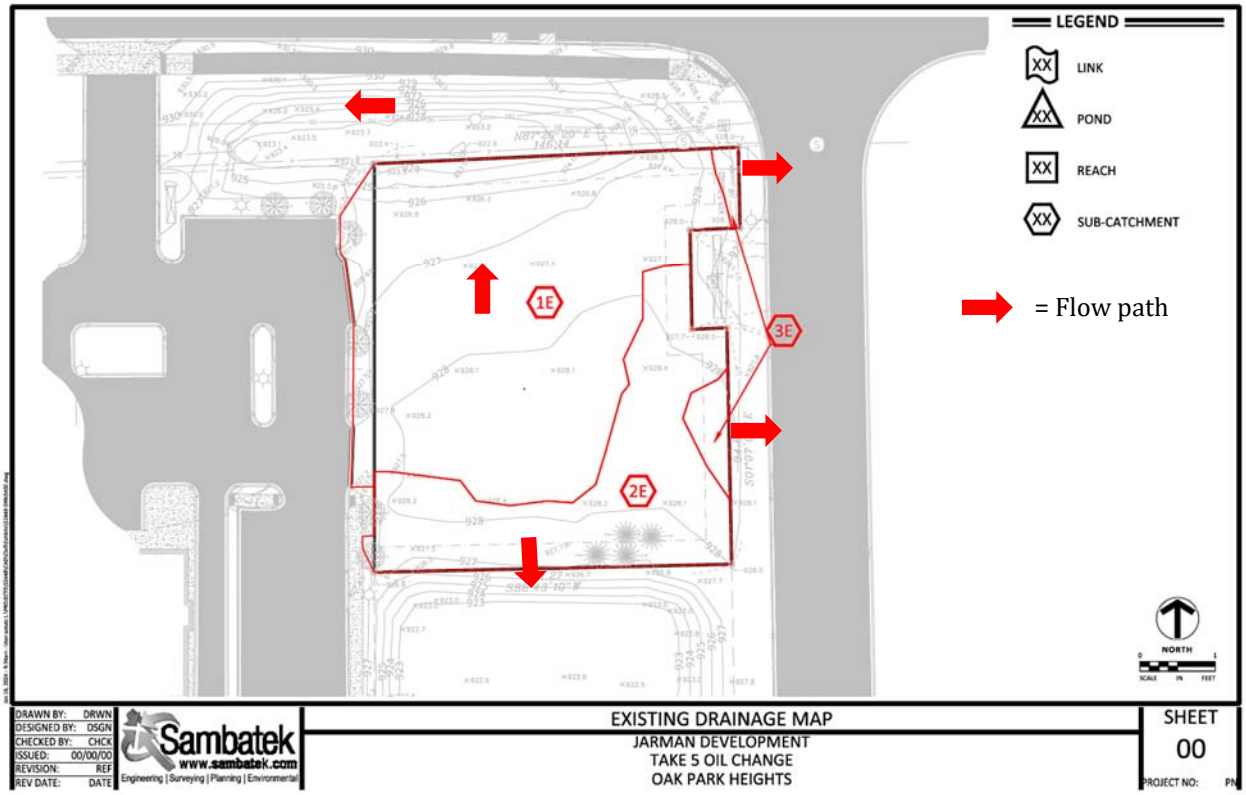


Figure 4: Existing site drainage for Outlot A (Take 5 Oil Change).

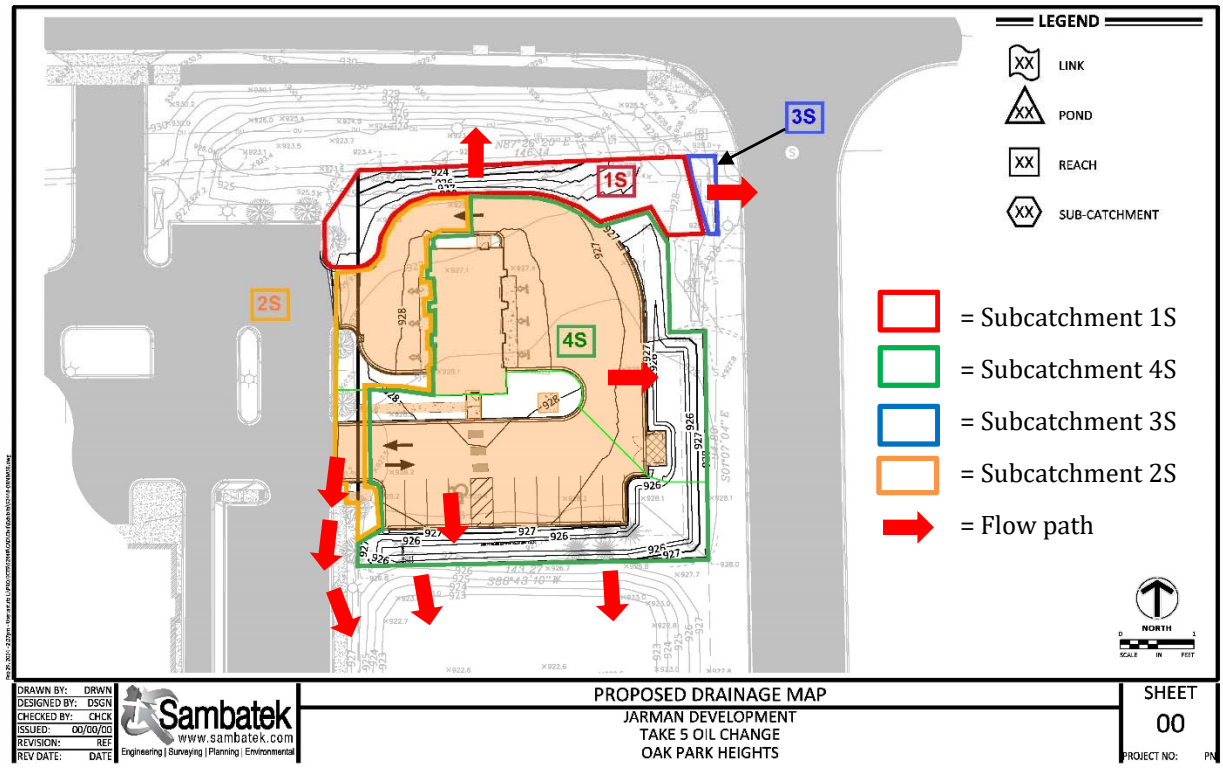


Figure 5: Proposed site drainage for Outlot A (Take 5 Oil Change).

Rate Control

According to BCWD Rule 2.4.1(b)(i), an applicant must submit a stormwater-management plan providing no increase in the existing peak stormwater flow rates from the site for a 24-hour precipitation event with a return frequency of two, 10 or 100 years for all points where discharges leave the site.

☐ Rule Requirement Not Met. *See Rule 10.0 for variance request.*

The stormwater management plan for the site was evaluated using a HydroCAD model of existing and proposed site conditions. A comparison of the modeled peak flow rates from existing to proposed conditions for the North and East discharge points is included in Table 1 and Table 2. These tables demonstrate that the rule requirement is met at these discharge points.

Since the proposed Take 5 Oil Change parcel (Outlot A) discharges to the existing filtration basin, the rate comparison for this portion of the site (2S and 4S) is evaluated at the discharge point to Menards Pond. The rates in Table 3 represent the existing and proposed runoff rates for the Take 5 Oil Change parcel (Outlot A) and the already developed Goodwill parcel. As Table 3 demonstrates, the peak flow rates under proposed conditions exceeds the existing peak flow rates for the 100-year, 24-hour event by 0.3 cfs. For this reason, a variance is being requested and is discussed under Rule 10 (Variances) at the end of the report.

Table 1 – Peak Discharge Rate "North"

Event	*Existing Runoff Rate (cfs)*	*Proposed Runoff Rate (cfs)*
2-year (2.80")	0.1	0.02
10-year (4.17")	0.5	0.1
100-year (7.23")	1.8	0.3

Table 2 – Peak Discharge Rate "East"

Event	*Existing Runoff Rate (cfs)*	*Proposed Runoff Rate (cfs)*
2-year (2.80")	0.01	0.00
10-year (4.17")	0.03	0.01
100-year (7.23")	0.09	0.03

Table 3 – Peak Discharge Rate "South" – Discharge to Menards pond

Event	*Existing Runoff Rate (cfs)*	*Proposed Runoff Rate (cfs)*
2-year (2.80")	8.1	8.1
10-year (4.17")	12.9	12.9
100-year (7.23")	25.7	26.0

Volume Control

According to BCWD Rule 2.4.1(b)(ii), an applicant must submit a stormwater-management plan providing retention onsite of 1.1 inches of stormwater volume from the regulated impervious surface on the site.

Because this site is located in a Drinking Water Supply Management Area classified as having high vulnerability, the permit applicant asserts that retention of stormwater volume onsite via infiltration is not reasonably feasible. The applicant explored alternative methods for achieving volume control as described in the analysis below. The BCWD engineer concurs that it is not reasonably feasible for the applicant to meet the 2.4.1(b)(ii) standard of retention onsite of 1.1 inches of stormwater volume from the regulated impervious surface, and the flexible treatment options in subsection 2.4.3 apply to the project: "… management of volume and water quality from the regulated impervious surface [must be provided] in accordance with the following priority sequence:

(a) Retention onsite of 0.55 inches of runoff and removal of 75 percent of the annual total phosphorus loading;

(b) Retention onsite of stormwater volume to the maximum extent practicable and removal of 60 percent of the annual total phosphorus loading.

☒ Rule Requirement Met

Alternative volume control options summarized in Table 4 were evaluated to identify how much volume control could be provided onsite. The applicant proposes the following practices to provide volume control:

1. ***Evapotranspiration** (ET) and **Interception** from 9 new trees to be planted in the tree trench facility. Stormwater runoff from the building and bituminous pavement on site will be directed to the tree trench system with underdrains. This system will utilize a portion of the stormwater runoff for evapotranspiration. Evapotranspiration was calculated using the MIDS calculator and provides for 152 cubic feet (CF) of volume control. One of the assumptions made in calculating the volume-control achieved from ET is that the vegetation is 100% mature, which will not be the case for the first five to 10 years. Until the trees are fully grown, they will not be providing the assumed volume control. Since the BCWD engineer finds (below) that the project is subject to the maximum extent practicable volume standard, the increasing volume capacity provided over time meets the standard.*

Table 4 – BMPs Evaluated for Volume Control Requirement

BMP	Evaluated?	Utilized?	Why or why not?
Infiltration	Yes	No	DWSMA classified as having high vulnerability; no higher engineering analysis completed.
Harvest and Reuse	Yes	No	Limited green space for irrigation and fueling activities onsite.
Green Roofs	Yes	No	Small building footprint, minimal treatment benefits, and high roof redesign Costs.
ET/Tree Trenches	Yes	Yes	Utilizing ET with nine trees in tree trench system.
Interception	Yes	Yes	Utilized with the nine tree plantings in the tree trench system.

Permeable Pavers/ Pavement	Yes	No	DWSMA classified as having high vulnerability; no higher engineering analysis completed.

Table 5 – Summary of Volume Requirements.

Volume Control Requirement	*Provided Volume (CF)*
2.4.3(a) FTO (b) *Retention onsite of stormwater volume to the maximum extent practicable*	152

The volume retention provided by the Take 5 Oil Change tree trench system equates to 20% of the 0.55 inch retention requirement of flexible treatment option (a). The BCWD engineer agrees this is the maximum extent practicable volume control for the site.

Infiltration Pretreatment

According to BCWD Rule 2.5.2 surface flows to infiltration facilities must be pretreated for long-term removal of at least 50 percent of sediment loads.

☐ Rule Not Applicable to Permit. *There are no infiltration practices proposed.*

Water Quality

According to BCWD Rule 2.4.3, an applicant must submit a stormwater-management plan providing retention onsite of stormwater volume to the maximum extent practicable and removal of 60 percent of the annual total phosphorus loading.

☒ Rule Requirement Met.

The Permit Applicant submitted MIDS Calculator modeling demonstrating compliance with Rule 2.4.3(b). The proposed tree trench system provides removal of 77% of the total phosphorus loading from the areas directed to the BMP (4S). When combined with the remaining subcatchments (1S, 2S, 3S) the average percent removal from all new impervious and disturbed areas is 62% as shown in Table 6. The sump structure provides removal of particulate phosphorus from subcatchment 2S before discharging to the existing filtration basin.

Table 6 – Phosphorus Removal

Annual Load (lb/yr)	*Annual Removal (lb/yr)*	*Outflow Load (lb/yr)*	*Percent Removal (%)*
0.7	0.4	0.3	62%

Lake/Wetland Bounce

According to BCWD Rule 2.4.1(b)(iii), an applicant must submit a stormwater-management plan providing no increase in the bounce in water level or duration of inundation for a 24-hour precipitation event with a return frequency of two, 10 or 100 years in the subwatershed in which the site is located, for any downstream lake or wetland beyond the limit specified in Appendix 2.1.

☐ Rule Not Applicable to Permit. *No wetlands on the property or being discharged to.*

Rule 2.0 Conditions:

2-1. Provide BCWD with the final Civil Plan Set (BCWD 2.7.9).

2-2. The applicant must provide a draft amendment of the stormwater maintenance declaration recorded on the site for BCWD permit 16-08 to provide for alterations to existing facilities that will be maintained (e.g., the filtration basin) and new facilities and features for BCWD approval. After approval, the applicant must provide a receipt from the Washington County recorder demonstrating recordation.

2-3. The Permit Applicant needs to demonstrate that they have notified the adjacent landowner that they will be completing land-disturbing activities to install curb and gutter, paving, and sidewalk connecting the Take 5 Oil Change parcel and retail store parcel and provide documentation that the neighboring landowner has agreed to these land-disturbing activities.

Rule 3.0—EROSION CONTROL

According to BCWD Rule 3.2, all persons undertaking any grading, filling, or other land-altering activities which involve movement of more than fifty (50) cubic yards of earth or removal of vegetative cover on five thousand (5,000) square feet or more of land must submit an erosion control plan to the District, and secure a permit from the District approving the erosion control plan. The proposed project triggers the application of Rule 3.0 Erosion Control because of land altering activities involving movement of more than fifty cubic yards of earth and removal of vegetative cover on five thousand square feet or more of land.

☒ Rule Requirements Met with Conditions

The erosion and sediment control plan includes:

- *Silt fence*
- *Rock construction entrance*
- *Inlet protection*
- *Rip rap at stormwater outflows*
- *Temporary seeding and blanketing*

The following conditions must be addressed in the erosion and sediment control plan to comply with the District's requirements:

Rule 3.0 Conditions:

3-1. Provide the contact information for the erosion and sediment control responsible party during construction once a contractor is selected. Provide the District with contact information for the Erosion Control Supervisor and the construction schedule when available (BCWD 3.3.2).

3-2. Provide documentation showing that existing discharge rates will be maintained throughout construction (BCWD 3.3.2).

3-3. Provide stabilization measures for final restoration of areas that are being seeded. Call out on the landscaping plan which stabilization measures are to be installed along with the two types of seeding (MNDOT seed mixes 25-151 and 33-261) specified in the materials submitted to BCWD.

3-4. Provide erosion perimeter control for the storm sewer installation into the Goodwill filtration basin.

Rule 4.0—LAKE, STREAM, AND WETLAND BUFFER REQUIREMENTS

According to BCWD Rule 4.2.1, Rule 4.0 applies to land that is (a) adjacent to Brown's Creek; a tributary of Brown's Creek designated as a public water (Minnesota Statutes section 103G.005, subdivision 15); a lake, as defined in the rules; a wetland one acre or larger; or a groundwater-dependent natural resource; and (b) that has been either (i) subdivided or (ii) subject to a new primary use for which a necessary rezoning, conditional use permit, special-use permit or variance has been approved on or after April 9, 2007, (for wetlands and groundwater-dependent natural resources other than public waters) or January 1, 2000 (for other waters).

☐ Rule Not Applicable to Permit. *There are no lakes, streams, or wetlands within the applicable buffer width of the site.*

Rule 5.0—SHORELINE AND STREAMBANK ALTERATIONS

According to BCWD Rule 5.2, no person may disturb the natural shoreline or streambank partially or wholly below the ordinary high water mark of a waterbody, without first securing a permit from the District.

☐ Rule Not Applicable to Permit. *There are no proposed shoreline or streambank alterations.*

Rule 6.0—WATERCOURSE AND BASIN CROSSINGS

According to Rule 6.2, no person may use the beds of any waterbody within the District for the placement of roads, highways and utilities without first securing a permit from the District.

☐ Rule Not Applicable to Permit. *There are no proposed watercourse or basin crossings.*

Rule 7.0—FLOODPLAIN AND DRAINAGE ALTERATIONS

According to Rule 7.2, no person may alter or fill land below the 100-year flood elevation of any waterbody, wetland, or stormwater management basin, or place fill in a landlocked basin, without first obtaining a permit from the District. No person may alter stormwater flows at a property boundary by changing land contours, diverting or obstructing surface or channel flow, or creating a basin outlet, without first obtaining a permit from the District.

Rule 7.0 is not triggered because there is no floodplain fill or drainage alterations at the property boundary. The criteria 7.3.2 apply by operation of paragraph 2.5.4 in the stormwater rule. According to BCWD rule 7.3.2 all new and reconstructed buildings must be constructed such that the lowest floor is at least two feet above the 100-year high water elevation or one foot above the emergency overflow (EOF) of a constructed basin.

☐ Rule Requirement Not Met. *See Condition 7-1.*

The 100-year high water elevations, EOFs, and lowest adjacent building elevations were evaluated and do not meet the District's low floor requirement as demonstrated in Table 7. The EOF for the proposed tree trench system does not meet the BCWD definition of an "Emergency Overflow" since it is below the 100-year HWL. Therefore, the lowest proposed floor must be 2 feet above the 100-year HWL. Condition 7-1 has been added to address this issue.

Table 7 - Freeboard Requirement Summary.

Stormwater Facility	*EOF*	*100-Year HWL*	*Allowable Lowest Floor*	*Take 5 Oil Change Lowest Proposed Floor*
Tree Trench System	926.34	926.68	928.68	928.50
Brackey 4th Addition Filtration/ET Facility	927.00	924.66	928.00	928.50

Rule 7.0 Conditions:

7-1 Adjust the low floor to meet BCWD low floor requirements (BCWD 7.3.2)

Rule 8.0—FEES

Fees for this project as outlined below:

1. Stormwater management fee	$3,000.00
2. Erosion control fee for grading	$1,000.00
▪ **TOTAL FEES**	**$4,000.00**

Rule 9.0—FINANCIAL ASSURANCES

Financial assurances for this project are as outlined below:

1. Grading or Alteration (0.56 acres disturbed x $2,000/acre)	$1,120
2. Stormwater Management Facilities (125% of facility cost)	$78,682
▪ **TOTAL FINANCIAL ASSURANCES ($5,000 Minimum Performance Financial Assurance)**	$79,802

Rule 10.0—VARIANCES

According to BCWD Rule 10.0, the Board of Managers may hear requests for variances from the literal provisions of these Rules in instances where their strict enforcement would cause undue hardship because of the circumstances unique to the property under consideration. The Board of Managers may grant variances where it is demonstrated that such action will be in keeping with the spirit and intent of these rules. Variance approval may be conditioned on an applicant's preventing or mitigating adverse impacts from the activity.

The Permit Applicant has submitted a request for a technical variance from the following rule provisions:

1. *BCWD Rule 2.4.1(b)(i) states, "Within the Diversion Structure Subwatershed… an applicant must submit a stormwater-management plan providing: (i) No increase in the existing peak stormwater flow rates from the site for a 24-hour precipitation event with a return frequency of two, 10 or 100 years for all points where discharges leave a site."*

As Table 3 demonstrates, the proposed project does not meet the rate control requirement for the 100-year, 24-hour event at the discharge point to the Menard's Pond. The applicant has requested a variance from this criterion since the existing filtration basin was designed to treat future runoff from Outlot A.

The existing condition includes Outlot A in its current grassed condition, the existing filtration basin and the Goodwill parcel. The proposed project is unable to match this existing condition, because it relies on the filtration basin to treat a portion of the new impervious that can't be routed to the proposed tree trench (subcatchment 2S). This new impervious that drains directly to the filtration basin is the cause of the 0.3 cfs increase in runoff rates for the 100-year storm, measured at the Menards Pond discharge point in Table 3.

Because the filtration basin was designed to treat runoff from Outlot A to a pre-settlement standard and because Outlot A is being developed with less impervious coverage than assumed in the Brackey 4th Addition design, the proposed project will meet the intent of the rate control rule. Based on the findings above, the engineer finds that the applicant provided sufficient factual and analytical basis for the managers to grant this variance request.

RECOMMENDED CONDITIONS OF THE PERMIT:

The following is a summary of the remaining tasks necessary to bring the project into compliance with the BCWD Rules in all respects other than where variances are requested as discussed above:

1. Demonstrate that the plan has received preliminary plat approval (BCWD Rule 1.3a).
2. Address all stormwater management requirements (Conditions 2-1 to 2-3).
3. Address all erosion control requirements (Conditions 3-1 to 3-4).
4. Adress all floodplain and drainage alterations requirements (Condition 7-1).
5. Replenish the Permit fee deposit to $5,000 (BCWD Rule 8.0). If the permit fee deposit is not replenished within 60 days of receiving notice that such deposit is due, the permit application or permit will be deemed abandoned and all prior approvals will be revoked and collection proceedings will begin on unpaid balances.
6. Provide the required financial assurances (BCWD Rule 9.0):
    a. Total grading or alteration assurance 19.16 acres ($1,120).
    b. Stormwater management facilities assurance ($78,682).

STIPULATIONS OF APPROVAL:

1. Note that the permit, if issued, will require that the applicant notify the District in writing at least three business days prior to commencing land disturbance. (BCWD Rule 3.3.1)
2. Provide the District with As-built record drawings showing that the completed grading and stormwater facilities conform to the grading plan.

Project Name |	Brown's Creek Restoration Project	**Date** |	3/15/2024
To / Contact info |	BCWD Board of Managers		
Cc / Contact info |	Karen Kill, District Administrator		
From / Contact info |	Mike Majeski, Dan Mossing, P.E.		
Regarding |	Contractor Award Recommendation		

The purpose of this memorandum is to provide a recommendation for selecting a Contractor to construct the Brown's Creek Restoration Project.

Bid Summary

The Request for Bids was posted on QuestCDN on February 21, 2024. Bids were due March 13, 2024, at 2pm with the bid opening occurring via Zoom; contractors were invited to attend virtually.

A total of six bids were received and the overall lowest bidder is Geomorphic Restoration, Inc., with a Base Bid of $347,361.50, an Alternate Bid of $7,900.00 and Combined Total Bid of $355,261.50. All bid packages were reviewed and determined to be responsive. In order to formulate an award recommendation, EOR verified bid calculations and compared the Total Bid value for each of the contractors. There is one Add Alternate for this project. Base Bids, Add Alternates and Combined Total Bids values and the Engineer's Estimate are summarized below.

CONTRACTOR	BASE BID	ADD ALTERNATE	COMBINED BID TOTAL
Geomorphic Restoration, Inc.	$347,361.50	$7,900.00	$355,261.50
Shoreline Landscaping & Contracting	$356,647.64	$10,985.00	$367,632.64
MNL	$399,957.00	$16,040.00	$415,997.00
Sunram Construction, Inc.	$482,690.00	$11,414.00	$494,104.00
Bituminous Roadways Inc.	$498,304.50	$10,530.00	$508,834.50
Rachel Contracting, LLC	$515,395.60	$24,369.00	$539,764.60
Engineer's Estimate	***$438,191.67***	***$20,510.00***	***$481,636.75****

* The Engineers Estimate Combined Bid Total includes a 5% Contingency

Recommendation

Geomorphic Restoration is a reputable area contractor that has performed numerous large-scale excavation, grading, and stabilization projects. Following our review, we recommend approval of the Base Bid and Add Alternate, and authorization for the District to award the construction contract to the low responsive bidder, Geomorphic Restoration, Inc., in the amount of **$355,261.50.**

In addition, it is recommended that the Board authorizes the District Administrator to execute change orders, if necessary, in an amount not to exceed 5% (in total) of the construction contract to prevent construction delays.

technical memo

BCWD WATERSHED MANAGEMENT PLAN UPDATE

Date |	03/15/2024
To / Contact info |	BCWD Board of Managers; Karen Kill, District Administrator
From / Contact info |	Camilla Correll, EOR
Regarding |	Initial Kick-Off Meeting

Background

At the February Board meeting, EOR presented a scope of services to host a public open house to introduce stakeholders and members of the public to the watershed management plan update. The Board of Managers was concerned with the proposed level of effort given the amount of turnout experienced in the past. They are more interested in reaching out to the contacts they have established as part of the Enhanced Engagement process to solicit feedback on the issues and concerns they think need to be addressed over the next 10-year planning cycle.

Update

As a result of this feedback, District Staff is proposing that the public kick-off meeting be combined with the initial planning meeting which is a requirement of Minnesota Rule 8410. The proposed structure for this meeting is as follows:

1. Hold **Initial Planning Meeting** which must be presided over by the Board of Managers to receive, review, and discuss input. Attendees must include plan review authorities and known stakeholders including affected counties, cities, and towns and the Minnesota Department of Transportation.

   During this part of the meeting, District Staff will share (1) 2017-2026 Plan Accomplishments, (2) existing issues/goals, (3) management expectations of the plan review agencies including priority issues, summaries of relevant water management goals, and water resource information. The goal for this meeting will be to preliminarily identify what will be addressed in the BCWD's 5th Generation Watershed Management Plan.

2. Hold a **Meet-and-Greet** after the Initial Planning Meeting where the CAC, stakeholders identified through the Enhanced Engagement Process and the general public can come to chat about watershed management.

   During this part of the meeting, the Board, District Staff, plan review agency representatives (i.e., MNDNR, MPCA, MDH, MDA, MNDOT), Washington County Staff and City Staff can mingle with the CAC and the public to talk about issues, concerns or ideas they have about the watershed. They can review content in the 2017-2026 plan, or the management expectations identified by the plan review agencies. Ultimately, the goal of this meeting will be to solicit input, build relationships and identify individuals who may like to participate in the plan development process.

It is envisioned that the Initial Planning Meeting would be held in May during the workday (i.e. from 2:00 – 4:00 p.m.) and that the meet-and-greet would follow from 4:00 p.m. to 6:00 p.m. The Initial Planning Meeting and the Meet-and-Greet would take place at a facility that can accomplish both a sit-down meeting and a more relaxed environment where people can grab refreshments and snacks and chat.

If the BCWD Board of Managers agrees with this meeting structure, EOR will include this task in the Watershed Management Plan Update Scope of Work for the April Board Meeting.

SIDMA
Social Indicators
Data Management and Analysis Tool

GREAT LAKES Regional Water Program

Browns Creek Draft Survey

View in MS Word-friendly format

Your Water Resources

1. Do you know where the rain water goes when it runs off of your property?
   - ○ No
   - ○ Yes

2. If you answered 'Yes' above, where does your rain water drain to? _____

Your Opinions

Please indicate your level of agreement or disagreement with the statements below.

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1. The way that I care for my lawn and yard can influence water quality in local streams and lakes.	○	○	○	○	○
2. It is my personal responsibility to help protect water quality.	○	○	○	○	○
3. It is important to protect water quality even if it slows economic development.	○	○	○	○	○
4. My actions have an impact on water quality.	○	○	○	○	○
5. I would be willing to pay more to improve water quality (for example: though local taxes or fees)	○	○	○	○	○
6. I would be willing to change the way I care for my lawn and yard to improve water quality.	○	○	○	○	○
7. The quality of life in my community depends on good water quality in local streams, rivers and lakes.	○	○	○	○	○

Water Impairments

Below is a list of water pollutants and conditions that are generally present in water bodies to some extent. The pollutants and conditions become a problem when present in excessive amounts. In your opinion, how much of a problem are the following water impairments in your area?

	Not a Problem	Slight Problem	Moderate Problem	Severe Problem	Don't Know
1. Sedimentation (dirt and soil) in the water	○	○	○	○	○
2. Phosphorus	○	○	○	○	○

3. Bacteria and viruses in the water (such as E.coli / coliform)	○	○	○	○	○
4. Trash or debris in the water	○	○	○	○	○
5. Salt / TDS / Chlorides	○	○	○	○	○
6. Heavy metals	○	○	○	○	○
7. Habitat alteration harming local fish	○	○	○	○	○

Sources of Water Pollution

The items listed below are sources of water quality pollution across the country. In your opinion, how much of a problem are the following sources in your area?

	Not a Problem	Slight Problem	Moderate Problem	Severe Problem	Don't Know
1. Soil erosion from construction sites	○	○	○	○	○
2. Soil erosion from farm fields	○	○	○	○	○
3. Grass clippings and leaves entering storm drains	○	○	○	○	○
4. Improperly maintained septic systems	○	○	○	○	○
5. Stormwater runoff from rooftops and/or parking lots	○	○	○	○	○
6. Droppings from geese, ducks and other waterfowl	○	○	○	○	○
7. Excessive use of fertilizers for crop production	○	○	○	○	○
8. Residential stormwater runoff	○	○	○	○	○
9. Highway/road/bridge runoff	○	○	○	○	○
10. Groundwater withdrawal	○	○	○	○	○
11. Recreational and tourism activities (non-boating)	○	○	○	○	○
12. Turf management (golf courses, sports fields)	○	○	○	○	○

Consequences of Poor Water Quality

Poor water quality can lead to a variety of consequences for communities. In your opinion, how much of a problem are the following issues in your area?

	Not a Problem	Slight Problem	Moderate Problem	Severe Problem	Don't Know
1. Contaminated drinking water	○	○	○	○	○
2. Contaminated fish	○	○	○	○	○
3. Loss of desirable fish species	○	○	○	○	○
4. Reduced beauty of lakes or streams	○	○	○	○	○
5. Reduced opportunities for water recreation	○	○	○	○	○
6. Excessive aquatic plants or algae	○	○	○	○	○
7. Fish kills	○	○	○	○	○
8. Odor	○	○	○	○	○
9. Lower property values	○	○	○	○	○
10. Lost economic-tourist activity	○	○	○	○	○

Practices to Improve Water Quality

Please indicate which statement most accurately describes your level of experience with each practice listed below.

	Not relevant for my property	Never heard of it	Somewhat familiar with it	Know how to use it; not using it	Currently use it
1. Following the manufacturer's instructions when fertilizing lawn or garden	○	○	○	○	○
2. Use a mulching lawn mower	○	○	○	○	○
3. Keep grass clippings and leaves out of the roads, ditches, and gutters	○	○	○	○	○
4. Follow pesticide application instructions for lawn and garden	○	○	○	○	○
5. Regular servicing of septic system	○	○	○	○	○
6. Properly dispose of pet waste	○	○	○	○	○
7. Manage runoff from roofs	○	○	○	○	○
8. Use prescribed burning	○	○	○	○	○

Specific Constraints of Practices

Rain Garden *: A garden that uses native plants to absorb and filter stormwater collected off a roof, parking lot, sidewalk, or driveway.*

1. How familiar are you with this practice?
   - ○ Not relevant
   - ○ Never heard of it
   - ○ Somewhat familiar with it
   - ○ Know how to use it; not using it
   - ○ Currently use it

2. If the practice is not relevant, please explain why. _____

3. Are you willing to try this practice?
   - ○ Yes or already do
   - ○ Maybe
   - ○ No

How much do the following factors limit your ability to implement this practice?

	Not at all	A little	Some	A lot	Don't Know
4. Don't know how to do it	○	○	○	○	○
5. Time required	○	○	○	○	○
6. Cost	○	○	○	○	○
7. The features of my property make it difficult	○	○	○	○	○
8. Insufficient proof of water quality benefit	○	○	○	○	○
9. Desire to keep things the way they are	○	○	○	○	○
10. Physical or health limitations	○	○	○	○	○
11. Hard to use with my farming system	○	○	○	○	○
12. Lack of equipment	○	○	○	○	○

Rain Barrels *: Devices designed to collect stormwater from roofs and gutters that can later be used to water a garden, lawn, or house plants.*

13. How familiar are you with this practice?

- ◯ Not relevant
- ◯ Never heard of it
- ◯ Somewhat familiar with it
- ◯ Know how to use it; not using it
- ◯ Currently use it

14. If the practice is not relevant, please explain why.

15. Are you willing to try this practice?

- ◯ Yes or already do
- ◯ Maybe
- ◯ No

How much do the following factors limit your ability to implement this practice?

	Not at all	A little	Some	A lot	Don't Know
16. Don't know how to do it	◯	◯	◯	◯	◯
17. Time required	◯	◯	◯	◯	◯
18. Cost	◯	◯	◯	◯	◯
19. The features of my property make it difficult	◯	◯	◯	◯	◯
20. Insufficient proof of water quality benefit	◯	◯	◯	◯	◯
21. Desire to keep things the way they are	◯	◯	◯	◯	◯
22. Physical or health limitations	◯	◯	◯	◯	◯
23. Hard to use with my farming system	◯	◯	◯	◯	◯
24. Lack of equipment	◯	◯	◯	◯	◯

Compacted Soils Restoration*: Restoring known areas of compacted soil to reduce soil erosion.*

25. How familiar are you with this practice?

- ◯ Not relevant
- ◯ Never heard of it
- ◯ Somewhat familiar with it
- ◯ Know how to use it; not using it
- ◯ Currently use it

26. If the practice is not relevant, please explain why.

27. Are you willing to try this practice?

- ◯ Yes or already do
- ◯ Maybe
- ◯ No

How much do the following factors limit your ability to implement this practice?

	Not at all	A little	Some	A lot	Don't Know
28. Don't know how to do it	○	○	○	○	○
29. Time required	○	○	○	○	○
30. Cost	○	○	○	○	○
31. The features of my property make it difficult	○	○	○	○	○
32. Insufficient proof of water quality benefit	○	○	○	○	○
33. Desire to keep things the way they are	○	○	○	○	○
34. Physical or health limitations	○	○	○	○	○
35. Hard to use with my farming system	○	○	○	○	○
36. Lack of equipment	○	○	○	○	○

Making Decisions for my Property

In general, how much does each issue limit your ability to change your management practices?

	Not at all	A little	Some	A lot	Don't Know
1. Personal out-of-pocket expense	○	○	○	○	○
2. My own physical abilities	○	○	○	○	○
3. Not having access to the equipment that I need	○	○	○	○	○
4. Lack of available information about a practice	○	○	○	○	○
5. No one else I know is implementing the practice	○	○	○	○	○
6. Approval of my neighbors	○	○	○	○	○
7. Legal restrictions on my property	○	○	○	○	○
8. Concerns about resale value	○	○	○	○	○
9. Not being able to see a demonstration of the practice before I decide	○	○	○	○	○

About You

1. Do you make the home and lawn care decisions in your household?
   - ○ Yes
   - ○ No

2. What is your age? _____

3. What is the highest grade in school you have completed?
   - ○ Some formal schooling
   - ○ High school diploma/GED
   - ○ Some college
   - ○ 2 year college degree
   - ○ 4 year college degree
   - ○ Post-graduate degree

4. What is the approximate size of your residential lot?

- ◯ 1/4 acre or less
- ◯ More than 1/4 acre but less than 1 acre
- ◯ 1 acre to less than 5 acres
- ◯ 5 acres or more

5. Do you own or rent your home?

- ◯ Own
- ◯ Rent

6. How long have you lived at your current residence (years)?

7. Do you use a professional lawn care service?

- ◯ Yes, just for mowing
- ◯ Yes, for mowing and fertilizing
- ◯ Yes, just for fertilizing and pest control
- ◯ Yes, for mowing, fertilizing, and pest control
- ◯ No

Information Sources

People get information about water quality from a number of different sources. To what extent do you trust those listed below as a source of information about soil and water?

	Not at all	Slightly	Moderately	Very much	Am not familiar
1. Local government	◯	◯	◯	◯	◯
2. U.S. Environmental Protection Agency	◯	◯	◯	◯	◯
3. University Extension	◯	◯	◯	◯	◯
4. State environmental agency	◯	◯	◯	◯	◯
5. Environmental groups	◯	◯	◯	◯	◯
6. Local garden center	◯	◯	◯	◯	◯
7. Lawn care company	◯	◯	◯	◯	◯
8. Local community leader	◯	◯	◯	◯	◯
9. Neighbors / friends	◯	◯	◯	◯	◯
10. County Health department	◯	◯	◯	◯	◯
11. Browns Creek Watershed District	◯	◯	◯	◯	◯
12. Washington Conservation District	◯	◯	◯	◯	◯

Septic Systems

1. Do you have a septic system?

- ◯ No
- ◯ Don't Know
- ◯ Yes

Thank You

1. Please use the space below for any additional comments about this survey or water resources in your community.

BROWN'S CREEK WATERSHED DISTRICT
455 HAYWARD AVE N
OAKDALE, MN
55128
651.330.8220
WWW.BCWD.ORG

MEMORANDUM

TO: BCWD Board of Managers
FROM: Cameron Blake and Karen Kill
RE: BCWD Apparel Order
DATE: March 18, 2024

Background:

To enhance public awareness and present a unified image, BCWD has provided for apparel for board managers and staff with the BCWD. BCWD has not ordered apparel since 2006. Managers and staff selected three items at the April board meeting.

Issue

Heritage Embroidery gave the following cost quote for the selected apparel:

Item	Details
Women's and Men's Polo Shirts	$28
Women's Sleeveless polo shirt	$20
Quarter Zip- long sleeve	$36
Rain Jacket	$63
Insulated Vest	$93

The items would be set up in an online store for order and delivered to a Board meeting for distribution.

Requested Action:

Consider approval of an apparel order from Heritage Embroidery from 200-4949 Miscellaneous Expense.