## Riley-Purgatory-Bluff Creek Watershed District

Board of Managers Regular Meeting

## Wednesday, December 9, 2020, 5:00pm Workshop & 7:00pm Regular Meeting Virtual Meeting via ZOOM

https://us02web.zoom.us/j/84580434183

## **Agenda**

1. Call to Order Action

2. CAC Workshop 5-6pm

3. Approval of the agenda Action

4. Rice Marsh Lake Public Hearing Information

5. Identifying and Prioritizing Flood Risk Mitigation Projects
(Bloomington flood mapping and prioritization tool)

6. Budget 2nd meeting Action

7. Matters of general public interest

Information

Welcome to the Board Meeting. Anyone may address the Board on any matter of interest in the watershed. Speakers will be acknowledged by the President; please come to the podium, state your name and address for the record. Please limit your comments to no more than three minutes. Additional comments may be submitted in writing. Generally, the Board of Managers will not take official action on items discussed at this time, but may refer the matter to staff for a future report or direct that the matter be scheduled on a future agenda.

## 8. Reading and approval of minutes

Action

a. Board of Managers Workshop and Regular Meeting, November 4, 2020

## 9. Citizen Advisory Committee

Action

- a. 2021 CAC Application
  - i. Currently have 10 returning members

## 10. Consent Agenda

(The consent agenda is considered as one item of business. It consists of routine administrative items or items where discussion isn't essential to understanding. Any manager may remove an item from the consent agenda for action.)

- a. Accept November Staff Report
- b. Accept November Engineer's Report
- c. Accept November Construction Inspection Report
- d. Approve 2020 Annual Communication

- e. Approve Permit 2020-057 Bluff 25 Culvert Rehab as presented in the proposed board action of the permit report
- f. Approve Permit 2020-065 Terry Pines Coffee as presented in the proposed board action of the permit report

11. Action Items Action

- a. Pulled consent items
- b. Accept October Treasurer's Report
- c. Approve Paying of the Bills
- d. Consider Task Order 34 for the development of a Lotus Lake Vegetation Management Plan

## **12.** Discussion Items

Information

- a. Manager Report
  - i. Personnel Committee
- b. Administrator Report
- c. Plan Amendments Soil
- d. Rule Modification Shoreline Maintenance
- e. Other

## **13.** Upcoming Board Topics

- a. 2021 Task Orders
- b. other

## **14.** Upcoming Events

Information

- Kiss the Ground Documentary Screening, December 10, 6:30pm, online
- Citizens' Advisory Committee meeting December 14, 6pm, virtual
- Personnel Committee Meeting, December 18, 9am, virtual
- Board of Managers monthly meeting, January 9, 7pm, virtual

Please check www.rpbcwd.org for the most current meeting details.

## Public Notice (Official Publication)

## **Notice of Public Hearing**

## Riley Purgatory Bluff Creek Watershed District Rice Marsh Lake Subwatershed RM\_12a Water Quality Improvement Project

PLEASE TAKE NOTICE that the Board of Managers of the Riley Purgatory Bluff Creek Watershed District will hold a public hearing pursuant to Minnesota Statutes §103B.251 on December 9, 2020, at 7:00 p.m. in order to receive public comments to consider whether to order the improvement of the Rice Marsh Lake Subwatershed RM\_12a Water Quality Improvement Project.

The District's (District) 2018 10-Year Watershed Management Plan (Plan) identified proposed projects in the Riley Creek Watershed, including RM\_12a, Rice Marsh Lake, Watershed Phosphorus Load Control. The District engineer completed a feasibility report in May 2020 which recommends the installation of a proprietary device, similar to the Bio Clean Kraken Filter as the most feasibly best management practice to improve water quality in the RM\_12a subwatershed and thereby for Rice Marsh Lake. The District engineer's opinion of probable cost for the project is \$569,000.

Pursuant to Minnesota Statutes §13D.021, due to the COVID-19 health pandemic, this public hearing will be held by alternative electronic means in the form of a Zoom meeting. The link for the participation in the Zoom meeting may be found at the District web site: <a href="www.rpbcwd.org">www.rpbcwd.org</a>

All interested parties are invited to appear at the public hearing via Zoom to offer comments and ask questions in order to advise the Board of Managers on whether to adopt the proposed plan amendment and to order the proposed improvement. Further information is available by contacting the District Administrator, Claire Bleser, <a href="mailto:cbleser@rpbcwd.org">cbleser@rpbcwd.org</a>, 952-607-6512, or by visiting the District website: <a href="https://www.rpbcwd.org">www.rpbcwd.org</a>.

To review the full text of the amendment, please visit the District's website at <u>www.rpbcwd.org</u>.

Dated: November 6, 2020

BY ORDER OF THE BOARD OF MANAGERS

David Ziegler, Secretary









# Flood-Risk Area Identification & Prioritization

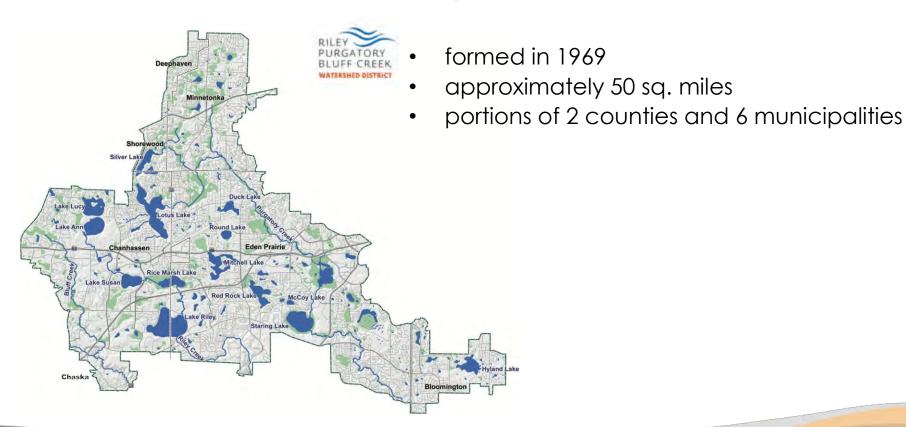
MAWD 2020 Virtual Annual Conference December 2, 2020

## agenda

- RPBCWD background
- floodplain vulnerability evaluation
- flood-risk mitigation prioritization framework
- next steps

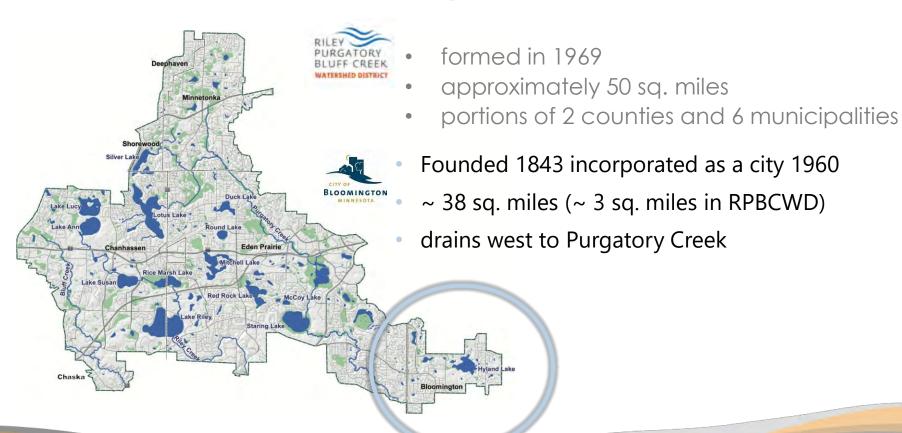


# RPBCWD & Bloomington background



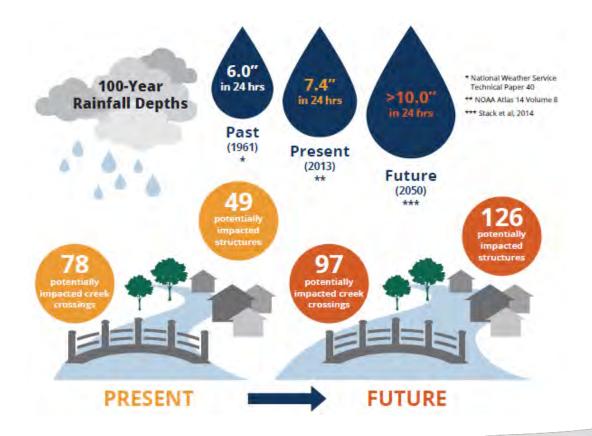


# RPBCWD & Bloomington background





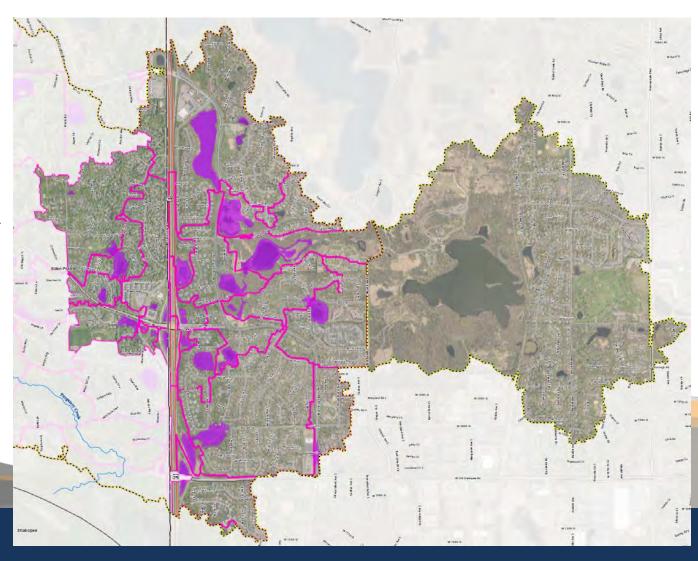
# floodplain vulnerability evaluation





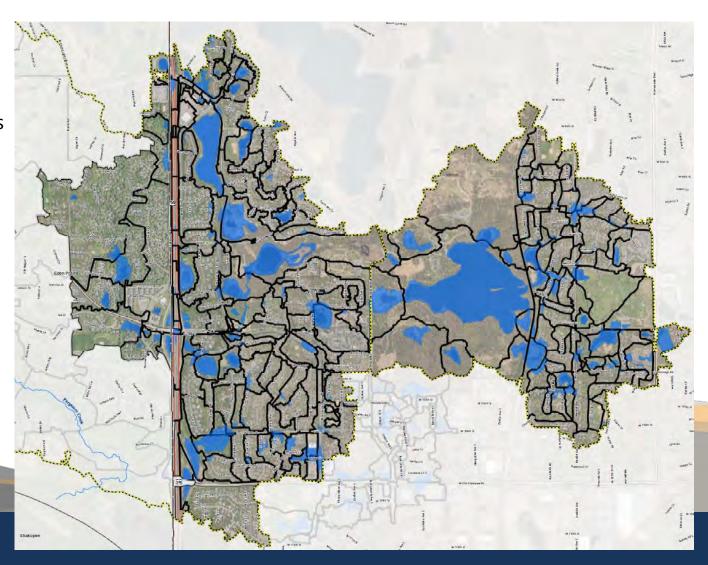
# subwatersheds – RPBCWD model

- level of detail: regional stormwater pond
- 15 subwatersheds
- ~75 acre subwatersheds
- 6 potentially floodprone structures

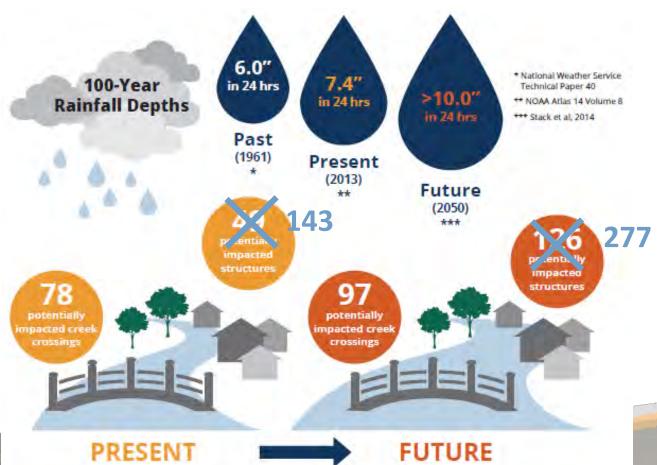


# subwatersheds – updated model

- level of detail: neighborhood stormwater pond
- 128 subwatersheds
- ~8 acres
- 50 potentially flood-prone structures

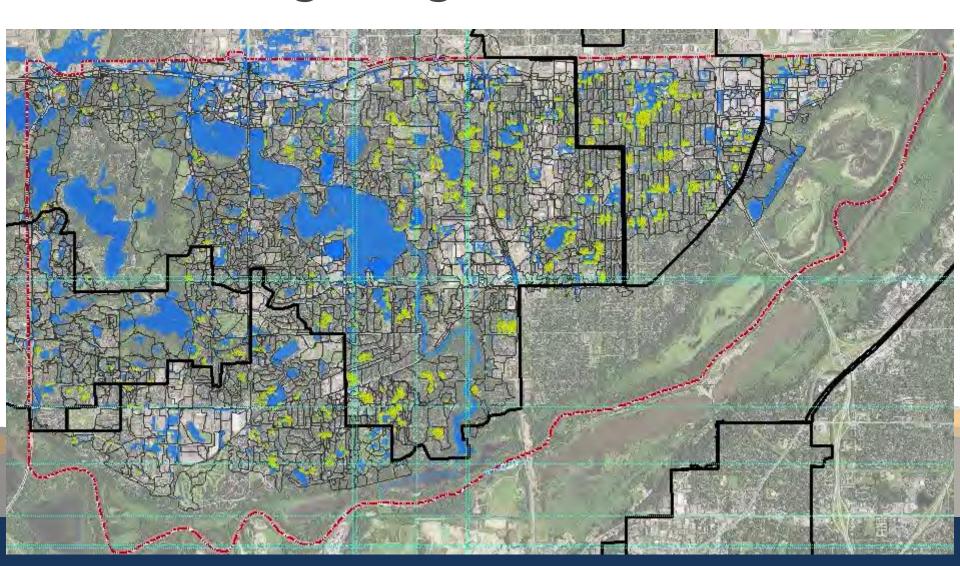


## details do matter...





# where to begin mitigating flood risk....



## guidance from TAC to define priorities

 What is at risk of flooding in your community?









 what are variables of flood risk?





 what is the process to prioritize adaption/mitigation projects?





what can you do to mitigate flood-risk?

















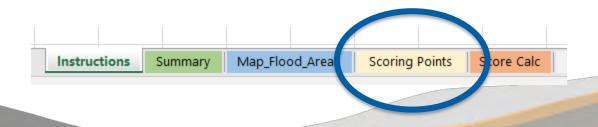
## prioritization categories

- number of floodprone structures
- frequency of flooding
- social vulnerability
- project efficiency
- multiple benefits
- critical infrastructure



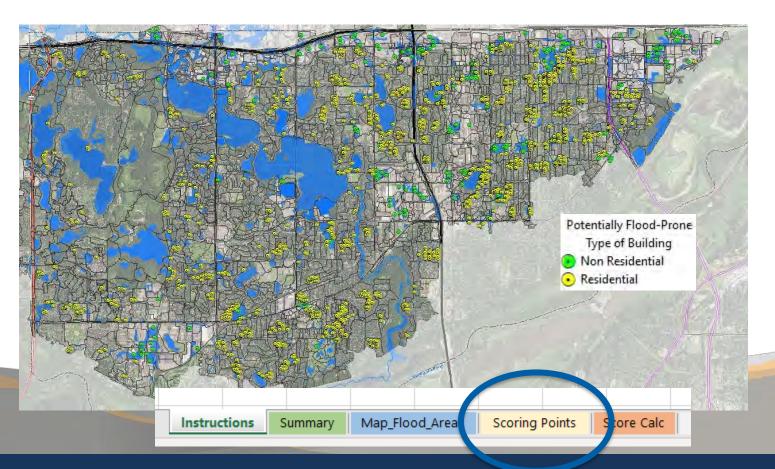
number of potentially flood-prone structures

	Category		Scoring Points				
				Low End of	High End of	Low End of	High End of
				Range -	Range -	Range -	Range -
				Commerical	Commerical	Residential	Residential
	Number of	No impacted structures	0				
Criteria 1	Structures Impacted	Impacts 1-5 commerical structures	1	1	5		
		Impactcs 1-5 residential structures OR >5 commerical structures	3		5	1	5
		Impacts 6-10 residential structures	5	0		6	10
		Impacts >10 residential structures	10				10



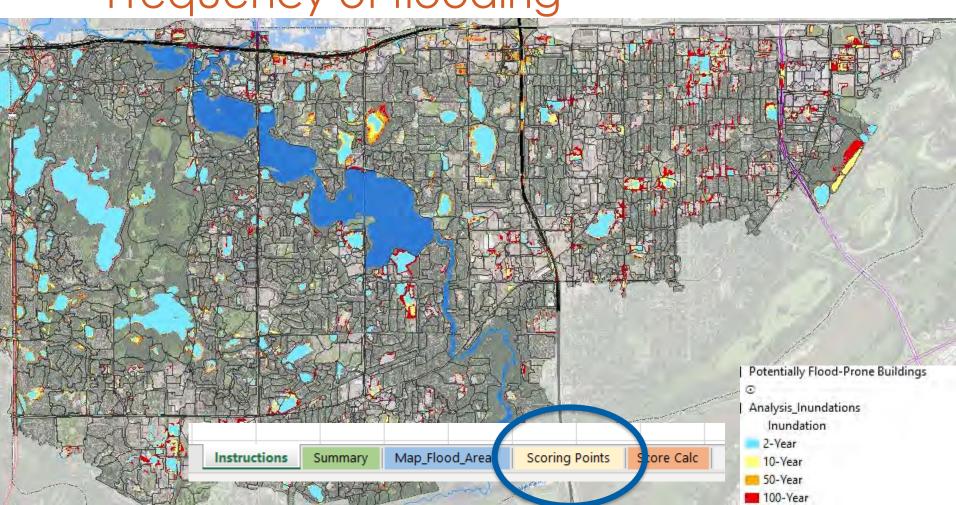


number of potentially flood-prone structures

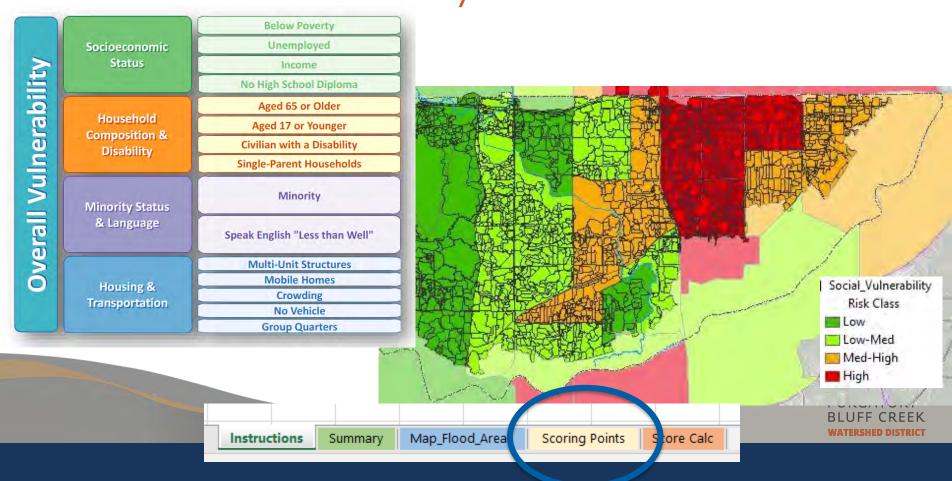




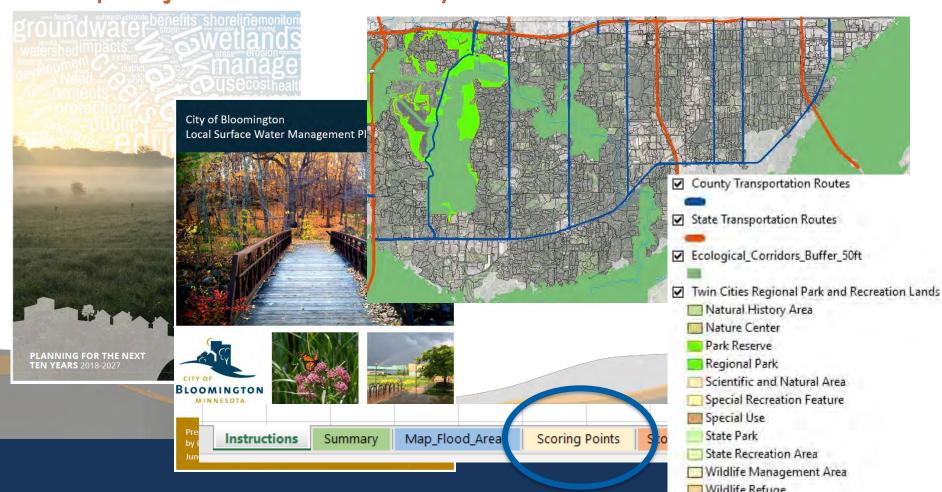
Frequency of flooding



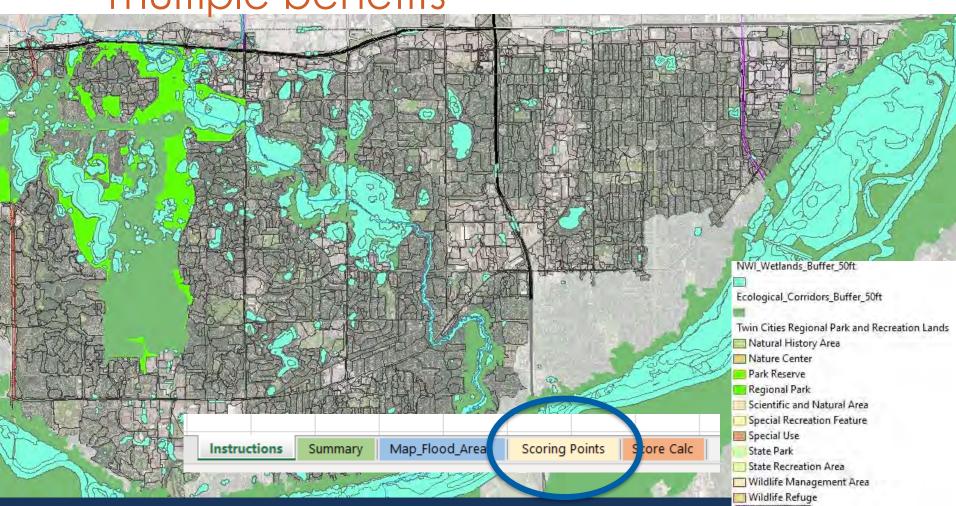
social vulnerability



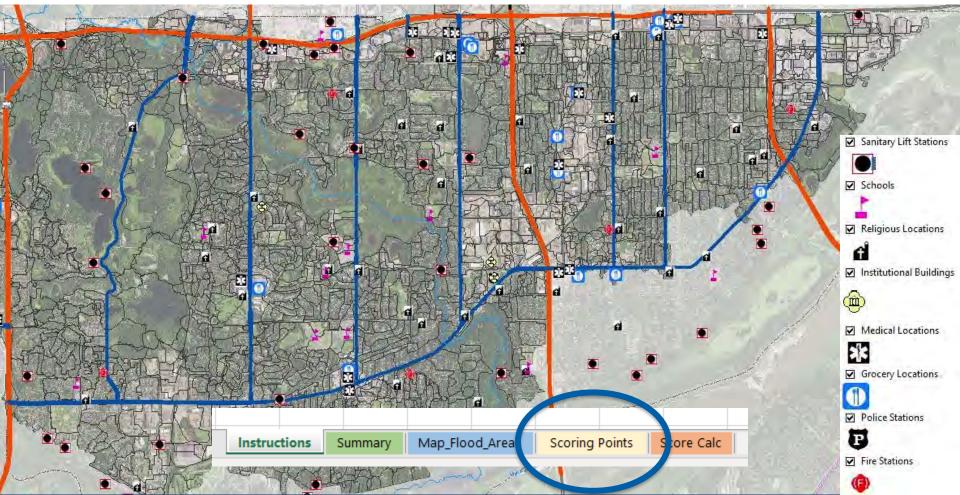
project efficiency



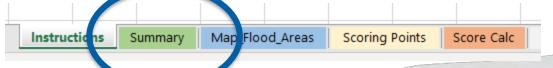
multiple benefits



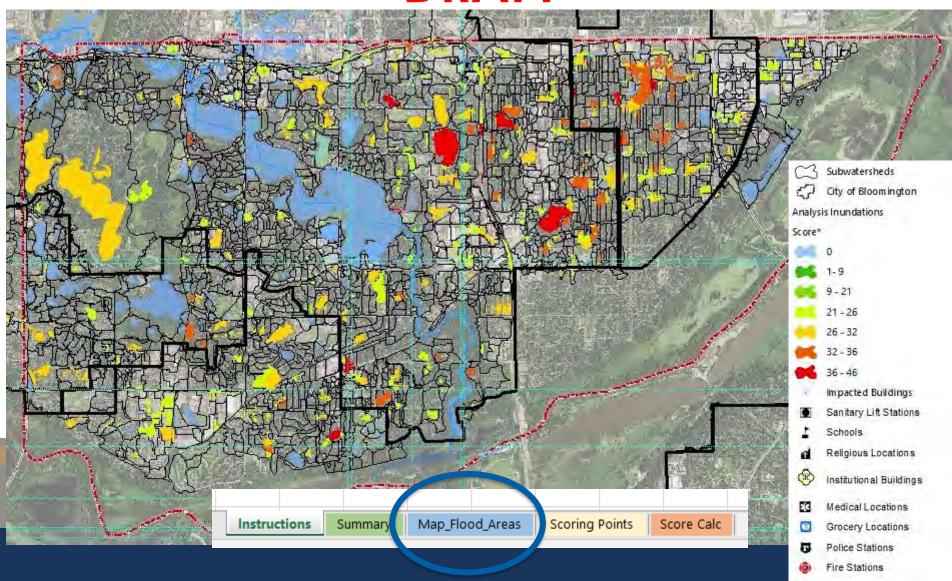
critical infrastructure



H										4		
~	▼	<b>₹</b>	Crit	teria 1 🔻	Criteria 2 ▼	Criteria 3	Crit	teria 4	Cri	iteria 5	Criteria 6	Total Score ▼
'		'	Structures	s Impacted -	1							without filter
	Major SWS	'	up to 100 YR Storm			Social	Project I	Efficeincy	Additonal Service Benefits		Number of Critical	for no flood-
Flood Area		Total Score	2		Return Period Flood Occurance	Vulnerability	Goals Met in				Infrastructure	prone
		'	1	Non-			District/City	'				structures or
1		'	Residentia	residential		Index	Management	Potential	Ecological -	Recreational -	Impacted	critical
		'	I - Total	- Total	1	1	Plans	Partners - Total	Total	Total	1	infrastructure
27T01	Oxboro	46	11	0	10-year	High	3	1	0	0	1	46
29A10-O	Oxboro	44	30	0	2-year	High	3	0	0	0	0	44
3050	Smith	42	17	0	10-year	High	3	0	0	0	0	42
20U22	Oxboro	41	7	0	10-year	High	3	1	1	0	1	41
16S32	Skri Penn	41	11	0	2-year	Med-High	4	0	0	0	0	41
17T06-I	Skri Penn	41	34	0	2-year	Med-High	3	0	0	0	0	41
LL1	York France	41	24	0	2-year	Med-High	3	0	0	0	0	41
4005	Smith	40	26	0	2-year	High	2	1	0	0	1	40
2010B	Smith	40	11	0	2-year	High	2	1	0	0	1	40
10125	Skri Penn	38	34	0	2-year	Low-Med	3	0	0	0	0	38
3013	Smith	38	13	0	10-year	High	2	1	0	0	1	38
53Q52-O	York France	38	11	0	10-year	Low-Med	3	0	0	0	1	38
		-						•	_	•		







## next steps...

- collaboration with other cities within RPBCWD
- feasibility studies for flood-risk mitigation and field verification
- identification of funding sources and project partners
- implementation of flood-risk reduction projects



## Thank you.

Dr Claire Bleser RPBCWD District Administrator cbleser@rpbcwd.org

Scott Sobiech, PE Sr. Water Resources Engineer ssobiech@barr.com

Brandon Barnes, PE Water Resources Engineer bbarnes@barr.com

#### RILEY PURGATORY BLUFF CREEK WATERSHED DISTRICT Fund Performance Analysis - Table 1 December 31, 2019

12/9/20												
	2020 Budget	Fund Transfers	Revised 2020 Budget	July Month	Year-to-Date	Year-to Date Percent of Budget		ticipated End of ear Remaining	Anticipated Carry Over Budget	Proposed 2021 Levy	Proposed 2021 Budget	Total Budget Allocation through 2021
REVENUES	2020 Budget	runu mansiers	2020 Budget	July Workin	Tear-to-Date	reitent of budget	\$	ear Kemaining	\$ -	Levy	Buuget	- tillough 2021
Plan Implementation Levy	\$3,703,000.00	-	\$3,703,000.00	1,916,340.82	1,916,340.82	51.75%	\$	-	\$ -	\$ 3,575,000.00	\$ 3,575,000.00	
Permit	25,000.00	-	25,000.00	6,500.00	40,424.00	161.70%	\$	-	\$ -	\$ 25,000.00	\$ 25,000.00	
Grant Income	346,719.00 75,000.00	-	346,719.00 75.000.00	2 020 07	72,450.00	20.90%	\$	-	\$ -	\$ 50,000.00	\$ 50,000.00 \$ 30.000.00	
Investment Income Past Levies (Carry Overs)	3,699,097.00	-	3,699,097.00	2,038.87	48,172.97	64.23%	\$ \$		\$ - \$ -	\$ 30,000.00	\$ 30,000.00 \$ 3.365.000.00	
Miscellaneous Income	3,033,037.00		3,033,037.00		3,488,84	0.00%	\$		\$ - \$ -		\$ 3,363,000.00	
Reimbursements					119,179.05		,		*		*	
Partner Funds	612,698.00		612,698.00			19.45%	\$	-	\$ -		\$ -	_
TOTAL REVENUE	\$8,461,514.00	\$0.00	\$8,461,514.00	\$1,924,879.69	\$2,200,055.68	26.00%				\$3,680,000.00	\$7,045,000.00	•
EXPENDITURES												
Administration										\$ 15,000,00	\$ - \$ 15.000.00	
Audit Accounting (and Audit)	42.000.00		42.000.00	\$3,730.46	37.942.06	90.34%	\$		s -	\$ 31,000.00	\$ 15,000.00 \$ 31,000.00	
Advisory Committees	5,000.00		5,000.00	\$3,730.40	137.48	2.75%	\$		š -	\$ 7,000.00	\$ 7,000.00	
Insurance and bonds	20,000.00		20,000.00		-	0.00%	\$		\$ -	\$ 18,000.00	\$ 18,000.00	
Engineering Services	109,000.00	-	109,000.00	6,432.00	57,407.69	52.67%	\$	-	\$ -	\$ 112,000.00	\$ 112,000.00	
Legal Services	84,000.00	-	84,000.00	5,964.02	61,142.17	72.79%	\$		\$ -	\$ 84,000.00	\$ 84,000.00	
Manager Per Diem/Expense	20,000.00		20,000.00	3,024.01	10,369.76	51.85%	\$	-	\$ -	\$ 30,000.00	\$ 30,000.00	
Dues and Publications	14,000.00		14,000.00	120.00	9,120.00	65.14%	\$	-	\$ -	\$ 16,000.00	\$ 16,000.00	
Office Cost	150,000.00	-	150,000.00	8,804.82	100,014.91	66.68%	\$	-	\$ -	\$ 190,000.00	\$ 190,000.00	
Permit Review and Inspection Permit and Grant Database	135,000.00 39.900.00		135,000.00 39,900.00	15,677.88	113,883.25	84.36% 0.00%	\$ \$	-	\$ - \$ -	\$ 140,000.00	\$ 140,000.00	
Professional Services	59,900.00		- 39,900.00		4,484.50	0.00%	Ś	-	\$ - \$ -	\$ 10.000.00	\$ 10.000.00	
Recording Services	17,000.00		17,000.00	540.00	6,834.48	40.20%	\$	-	š -	\$ 15,000.00	\$ 15,000.00	
Staff Cost	600,000.00		600,000.00	43,246.32	293,004.86	48.83%	\$		\$ 100,000.00	\$ 700,000.00	\$ 800,000.00	
Subtotal	\$1,235,900.00	\$0.00	\$1,235,900.00	\$87,539.51	\$694,341.16	56.18%				\$ 1,368,000.00	\$ 1,468,000.00	
Programs and Projects District Wide												
10-year Management Plan	5,000.00		5,000.00	1,164.98	11,029.72	220.59%	\$		\$ -	\$ 10,000.00	\$ 10,000.00	
AIS Inspection and early response	85,000.00	-	85,000.00	1,600.96	2,783.52	3.27%	\$	15,000.00	\$ -	\$ 85,000.00	\$ 85,000.00	
Cost-share/ Stewardship Grant	398,723.00	-	398,723.00	16,063.33	48,137.06	12.07%	\$	110,000.00	\$ 110,000.00	\$ 90,000.00	\$ 200,000.00	
Data Collection and Monitoring	192,000.00		192,000.00	30,008.66	97,333.95	50.69%	\$	-	\$ -	\$ 193,000.00	\$ 193,000.00	
Community Resiliency	63,130.00		63,130.00	2,734.50	5,807.00	9.20%	\$	30,000.00	\$ 30,000.00	\$ 75,000.00	\$ 105,000.00	\$ 173,000.00
Education and Outreach	123,000.00	-	123,000.00 58.762.00	13,095.65	63,159.98 13,534.43	51.35%	\$	36,900.00	\$ 43,000.00	\$ 84,000.00	\$ 127,000.00	
Plant Restoration - U of M Repair and Maintenance Fund *	58,762.00 267,730.00		267.730.00	34.00	13,534.43 54,459.58	23.03% 20.34%	\$	22,000.00 210,000.00	\$ 22,000.00 \$ 210,000.00	\$ 40,000.00	\$ 62,000.00 \$ 210,000.00	
Wetland Management*	165,685.00	-	165,685.00	843.03	14,207.56	8.58%	Ś	140,000.00	\$ 140,000.00	\$ -	\$ 140,000.00	
Groundwater Conservation* (150 K Grant and Pilot Project timing)	179,750.00		179,750.00	120.00	120.00	0.07%	\$	150,000.00	\$ 150,000.00	\$ 50,000.00	\$ 200,000.00	
Lake Vegetation Implementation	125,937.00	-	125,937.00	2,672.50	33,526.58	26.62%	\$	75,000.00	\$ 75,000.00	\$ -	\$ 75,000.00	\$ -
Opportunity Project*	287,501.00	-	287,501.00	1,545.25	13,666.29	4.75%	\$	280,000.00	\$ 280,000.00	\$ 50,000.00	\$ 330,000.00	\$ 350,000.00
Stormwater Ponds - U of M	79,985.00	-	79,985.00		31,829.96	39.79%	\$	20,000.00	\$ 20,000.00	\$ 20,000.00	\$ 40,000.00	
Hennepin County Chloride Initiative	114,830.00	-	114,830.00		21,859.46	19.04%	\$	90,000.00	\$ 90,000.00	\$ -	\$ 90,000.00	\$ 120,800.00
Lower Minnesota Chloride Cost-Share Subtotal	217,209.00	\$0.00	217,209.00	\$69,882,86	\$411,455,09	0.00%	\$	175,000.00	\$ 175,000.00	\$ -	\$ 175,000.00	
Subtotal Bluff Creek	\$2,364,242.00	\$0.00	\$2,364,242.00	\$69,882.86	\$411,455.09	17.40%				\$697,000.00	\$2,042,000.00	•
Bluff Creek Tributary*	65.037.00		65,037.00	1,578.00	14,804.65	22.76%	\$	20,000.00	\$ 20,000.00		\$ 20,000.00	\$ 436,750.68
Wetland Restoration at Pioneer					30,835.32							\$ 1.307.820.00
	308,674.00		308,674.00	470.83	30,033.32	9.99%	\$	200,000.00	\$ 200,000.00	\$ 450,000.00	\$ 650,000.00	
Bluff Creek B5 by Galpin	308,674.00	\$0.00	,				\$	200,000.00	\$ 200,000.00	\$ 140,000.00	\$ 140,000.00	\$ 140,000.00
		\$0.00	308,674.00 \$373,711.00	\$2,048.83	\$45,639.97	9.99%		200,000.00				\$ 140,000.00
Bluff Creek B5 by Galpin  Subtotal  Riley Creek  Lake Riley - Alum Treatment*	308,674.00 \$373,711.00 305,000.00	\$0.00	\$373,711.00 305,000.00	\$2,048.83 14,804.65	\$45,639.97 255,654.74	12.21% 83.82%	\$	40,000.00	\$ 40,000.00	\$ 140,000.00	\$ 140,000.00 \$ 810,000.00 \$ 40,000.00	\$ 140,000.00 \$ 560,000.00
Bluff Creek 85 by Galpin Subtotal Riley Creek Lake Riley - Alum Treatment* Rice Marsh Lake ni-lake phosphorus load	308,674.00 \$373,711.00 305,000.00 60,568.00	\$0.00	\$373,711.00 305,000.00 60,568.00	\$2,048.83 14,804.65 30,835.32	\$45,639.97 255,654.74 14,307.26	12.21% 83.82% 23.62%	\$ \$ \$	40,000.00 45,000.00	\$ 40,000.00 \$ 45,000.00	\$ 140,000.00 \$590,000.00 \$ - \$ -	\$ 140,000.00 \$ 810,000.00 \$ 40,000.00 \$ 45,000.00	\$ 140,000.00 \$ 560,000.00 \$ 150,000.00
Bluff Creek 85 by Galpin  Subtotal  Riley Creek  Lake Riley - Alum Treatment* Rice Marsh Lake in-lake phosphorus load Rice Marsh Lake Water Quality Improvement Phase 1	308,674.00 \$373,711.00 305,000.00 60,568.00 300,000.00	\$0.00 - - -	\$373,711.00 305,000.00 60,568.00 300,000.00	\$2,048.83 14,804.65 30,835.32 14,804.65	\$45,639.97 255,654.74 14,307.26 15,742.50	12.21% 83.82% 23.62% 5.25%	\$ \$ \$ \$	40,000.00	\$ 40,000.00	\$ 140,000.00 \$590,000.00 \$ - \$ - \$ 350,000.00	\$ 140,000.00 \$ 810,000.00 \$ 40,000.00 \$ 45,000.00 \$ 575,000.00	\$ 140,000.00 \$ 560,000.00 \$ 150,000.00 \$ 650,000.00
Bluff Creek 85 by Galpin Subtotal Riley Creek Lake Riley - Alum Treatment* Rice Marsh Lake Niley - Alum Treatment* Rice Marsh Lake Water Quality Improvement Phase 1 Riley Creek Restoration (Reach E and D 3)	\$373,711.00 \$373,711.00 305,000.00 60,568.00 300,000.00 1,773,623.00	\$0.00	\$373,711.00 305,000.00 60,568.00 300,000.00 1,773,623.00	\$2,048.83 14,804.65 30,835.32 14,804.65 30,835.32	\$45,639.97 255,654.74 14,307.26 15,742.50 1,936,098.31	83.82% 23.62% 5.25% 109.16%	\$ \$ \$ \$ \$	40,000.00 45,000.00	\$ 40,000.00 \$ 45,000.00	\$ 140,000.00 \$590,000.00 \$ - \$ -	\$ 140,000.00 \$ 810,000.00 \$ 40,000.00 \$ 45,000.00	\$ 140,000.00 \$ 560,000.00 \$ 150,000.00 \$ 650,000.00 \$ 2,208,148.00
Bluff Creek 85 by Galpin  Subtotal  Riley Creek  Lake Riley - Alum Treatment* Rice Marsh Lake in-lake phosphorus Ioad Rice Marsh Lake Water Quality Improvement Phase 1  Riley Creek Restoration (Reach E and D3) Lake Riley & Rice Marsh Lake Subwatershed Assessment	308,674.00 \$373,711.00 305,000.00 60,568.00 300,000.00 1,773,623.00 29,961.00	- - - - -	\$373,711.00 305,000.00 60,568.00 300,000.00 1,773,623.00 29,961.00	\$2,048.83 14,804.65 30,835.32 14,804.65 30,835.32 14,804.65	\$45,639.97 255,654.74 14,307.26 15,742.50 1,936,098.31 28,739.97	83.82% 23.62% 5.25% 109.16% 95.92%	\$ \$ \$ \$ \$ \$	40,000.00 45,000.00 225,000.00	\$ 40,000.00 \$ 45,000.00 \$ 225,000.00 \$ - \$ -	\$ 140,000.00 \$590,000.00 \$ - \$ - \$ 350,000.00 \$ 40,000.00 \$ -	\$ 140,000.00 \$ 810,000.00 \$ 40,000.00 \$ 45,000.00 \$ 575,000.00 \$ 40,000.00	\$ 140,000.00 \$ 560,000.00 \$ 150,000.00 \$ 650,000.00 \$ 2,208,148.00 \$ 72,500.00
Bluff Creek 85 by Galpin  Subtotal  Riley Creek  Lake Riley -Alum Treatment*  Rice Marsh Lake Lake Rulley Subsphorus Isoad  Rice Marsh Lake Water Quality Improvement Phase 1  Riley Creek Resoration (Reach E and D3)  Lake Riley & Rice Marsh Lake Subwatershed Assessment  Upper Riley Forek Stabilization	308,674.00 \$373,711.00 305,000.00 60,568.00 300,000.00 1,773,623.00 29,961.00 1,100,000.00	- - - - (250,000.00)	\$373,711.00 305,000.00 60,568.00 300,000.00 1,773,623.00	\$2,048.83 14,804.65 30,835.32 14,804.65 30,835.32 14,804.65 30,835.32	\$45,639.97 255,654.74 14,307.26 15,742.50 1,936,098.31 28,739.97 30,566.52	83.82% 23.62% 5.25% 109.16% 95.92% 3.60%	\$ \$ \$ \$ \$ \$	40,000.00 45,000.00 225,000.00	\$ 40,000.00 \$ 45,000.00 \$ 225,000.00 \$ - \$ - \$ 800,000.00	\$ 140,000.00 \$590,000.00 \$ - \$ - \$ 350,000.00	\$ 140,000.00 \$ 810,000.00 \$ 40,000.00 \$ 45,000.00 \$ 575,000.00 \$ 40,000.00 \$ 900,000.00	\$ 140,000.00 \$ 560,000.00 \$ 150,000.00 \$ 650,000.00 \$ 2,208,148.00 \$ 72,500.00 \$ 950,000.00
Bluff Creek 85 by Galpin  Subtotal  Riley Creek  Lake Riley - Alum Treatment* Rice Marsh Lake in-lake phosphorus Ioad Rice Marsh Lake Water Quality Improvement Phase 1  Riley Creek Restoration (Reach E and D3) Lake Riley & Rice Marsh Lake Subwatershed Assessment	308,674.00 \$373,711.00 305,000.00 60,568.00 300,000.00 1,773,623.00 29,961.00	- - - - -	\$373,711.00 305,000.00 60,568.00 300,000.00 1,773,623.00 29,961.00 850,000.00	\$2,048.83 14,804.65 30,835.32 14,804.65 30,835.32 14,804.65	\$45,639.97 255,654.74 14,307.26 15,742.50 1,936,098.31 28,739.97	83.82% 23.62% 5.25% 109.16% 95.92%	\$ \$ \$ \$ \$ \$	40,000.00 45,000.00 225,000.00	\$ 40,000.00 \$ 45,000.00 \$ 225,000.00 \$ - \$ -	\$ 140,000.00 \$590,000.00 \$ - \$ - \$ 350,000.00 \$ 40,000.00 \$ -	\$ 140,000.00 \$ 810,000.00 \$ 40,000.00 \$ 45,000.00 \$ 575,000.00 \$ 40,000.00	\$ 140,000.00 \$ 560,000.00 \$ 150,000.00 \$ 650,000.00 \$ 2,208,148.00 \$ 72,500.00 \$ 950,000.00 \$ 40,000.00
Bluff Creek 85 by Galpin  Subtotal  Riley Creek  Lake Riley - Alum Treatment* Rice Marsh Lake In-lake phosphorus load Rice Marsh Lake Water Quality Improvement Phase 1 Riley Creek Restoration (Reach E and D 3)  Lake Riley & Rice Marsh Lake Subwatershed Assessment Upper Riley Creek Stabilization Middle Riley Creek  Lake Ann Wetland Restoration St Hubert Water Quality Project	308,674.00 \$373,711.00 305,000.00 60,568.00 300,000.00 1,773,623.00 29,961.00 1,100,000.00 150,000.00	- - - (250,000.00) 268,900.00 (100,000.00)	\$373,711.00 305,000.00 60,568.00 300,000.00 1,773,623.00 29,961.00 850,000.00 268,900.00 50,000.00 100,000.00	\$2,048.83 14,804.65 30,835.32 14,804.65 30,835.32 14,804.65 30,835.32 14,804.65 30,835.32 4,042.63	\$45,639.97 255,654.74 14,307.26 15,742.50 1,936,098.31 28,739.97 30,566.52 53,986.55 25,646.31	12.21% 83.82% 23.62% 5.25% 109.16% 95.92% 3.60% 20.08% 0.00% 25.65%	\$ \$ \$ \$ \$ \$	40,000.00 45,000.00 225,000.00 - - 800,000.00 40,000.00	\$ 40,000.00 \$ 45,000.00 \$ 225,000.00 \$ - \$ - \$ 800,000.00 \$ 40,000.00	\$ 140,000.00 \$590,000.00 \$ - \$ - \$ 350,000.00 \$ 40,000.00 \$ 100,000.00	\$ 140,000.00 \$ 810,000.00 \$ 40,000.00 \$ 45,000.00 \$ 575,000.00 \$ 40,000.00 \$ 900,000.00 \$ 40,000.00 \$ 50,000.00 \$ 260,000.00	\$ 140,000.00 \$ 560,000.00 \$ 150,000.00 \$ 650,000.00 \$ 2,208,148.00 \$ 72,500.00 \$ 950,000.00 \$ 40,000.00 \$ 50,000.00 \$ 260,000.00
Bluff Creek 85 by Galpin  Subtotal  Riley Creek  Lake Riley - Alum Treatment* Rice Marsh Lake in-lake phosphorus load Rice Marsh Lake Water Quality Improvement Phase 1 Riley Creek Restoration (Reach E and 03) Lake Riley & Rice Marsh Lake Subwatershed Assessment Upper Riley Creek Stabilization Middle Riley Creek  Lake Ann Wetland Restoration St Hubert Water Quality Project  Subtotal	308,674.00 \$373,711.00 305,000.00 60,568.00 1,773,623.00 29,961.00 1,100,000.00 1,50,000.00	- - - - (250,000.00) 268,900.00 (100,000.00)	\$373,711.00 305,000.00 60,568.00 300,000.00 1,773,623.00 29,961.00 850,000.00 268,900.00 50,000.00	\$2,048.83 14,804.65 30,835.32 14,804.65 30,835.32 14,804.65 30,835.32 14,804.65 30,835.32	\$45,639.97 255,654.74 14,307.26 15,742.50 1,936,098.31 28,739.97 30,566.52 53,986.55	12.21% 83.82% 23.62% 5.25% 109.16% 95.92% 3.60% 20.08% 0.00%	\$ \$ \$ \$ \$ \$ \$ \$	40,000.00 45,000.00 225,000.00 - - 800,000.00 40,000.00 50,000.00	\$ 40,000.00 \$ 45,000.00 \$ 225,000.00 \$ - \$ - \$ 800,000.00 \$ 40,000.00 \$ 50,000.00	\$ 140,000.00 \$590,000.00 \$ - \$ 350,000.00 \$ 40,000.00 \$ 100,000.00	\$ 140,000.00 \$ 810,000.00 \$ 40,000.00 \$ 45,000.00 \$ 575,000.00 \$ 900,000.00 \$ 900,000.00 \$ 40,000.00 \$ 5,000.00	\$ 140,000.00 \$ 560,000.00 \$ 650,000.00 \$ 650,000.00 \$ 2,208,148.00 \$ 72,500.00 \$ 950,000.00 \$ 40,000.00 \$ 50,000.00 \$ 260,000.00
Bluff Creek 85 by Galpin  Subtotal  Riley Creek  Lake Riley - Alum Treatment* Rice Marsh Lake Under Quality Improvement Phase 1 Rice Marsh Lake Water Quality Improvement Phase 1 Riley Creek Resoration (Reach E and D3)  Lake Riley & Rice Marsh Lake Subwatershed Assessment Upper Riley Creek Stabilization Middle Riley Creek  Lake Ann Wetland Restoration  St Hubert Water Quality Project  Subtotal  Purgatory Creek	308,674.00  \$373,711.00  305,000.00 60,568.00 300,000.00 1,773,623.00 29,961.00 1,100,000.00 0.00 0.00 \$3,719,152.00	- - - (250,000.00) 268,900.00 (100,000.00)	\$373,711.00 305,000.00 60,568.00 300,000.00 1,773,623.00 29,961.00 850,000.00 50,000.00 100,000.00 \$3,738,052.00	\$2,048.83 14,804.65 30,835.32 14,804.65 30,835.32 14,804.65 30,835.32 14,804.65 30,835.32 4,042.63	\$45,639.97 255,654.74 14,307.26 15,742.50 1,936,098.31 28,739.97 30,566.52 53,986.55 25,646.31 2,360,742.16	12.21%  83.82% 23.62% 5.25% 109.16% 95.92% 3.60% 20.08% 0.00% 25.65% 63.15%	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	40,000.00 45,000.00 225,000.00 - - 800,000.00 40,000.00 50,000.00	\$ 40,000.00 \$ 45,000.00 \$ 225,000.00 \$ - \$ - \$ 800,000.00 \$ 50,000.00 \$ 50,000.00	\$ 140,000.00 \$590,000.00 \$ - \$ - \$ 350,000.00 \$ 40,000.00 \$ 100,000.00	\$ 140,000.00 \$ 810,000.00 \$ 40,000.00 \$ 45,000.00 \$ 575,000.00 \$ 40,000.00 \$ 900,000.00 \$ 40,000.00 \$ 50,000.00 \$ 260,000.00	\$ 140,000.00 \$ 560,000.00 \$ 650,000.00 \$ 650,000.00 \$ 2,208,148.00 \$ 72,500.00 \$ 950,000.00 \$ 40,000.00 \$ 50,000.00 \$ 260,000.00
Bluff Creek 85 by Galpin  Subtotal  Riley Creek  Lake Riley - Alum Treatment* Rice Marsh Lake in-lake phosphorus load Rice Marsh Lake in-lake phosphorus load Rice Marsh Lake Water Quality Improvement Phase 1 Riley Creek Restoration (Reach E and D3)  Lake Riley & Rice Marsh Lake Subwatershed Assessment Upper Riley Creek Sublitation Middle Riley Creek  Lake Ann Wetland Restoration St Hubert Water Quality Project  Subtotal  Purgatory Creek Purgatory Creek Re Area-Bern/retention area - feasibility/design	308,674.00 \$373,711.00 305,000.00 60,568.00 300,000.00 1,773,623.00 29,961.00 1,100,000.00 0.00 \$3,719,152.00	- - - (250,000.00) 268,900.00 (100,000.00)	\$373,711.00 305,000.00 60,568.00 300,000.00 1,773,623.00 29,961.00 850,000.00 268,900.00 50,000.00 100,000.00	\$2,048.83 14,804.65 30,835.32 14,804.65 30,835.32 14,804.65 30,835.32 14,804.65 30,835.32 4,042.63	\$45,639.97 255,654.74 14,307.26 15,742.50 1,936,098.31 28,739.97 30,566.52 53,986.55 25,646.31 2,360,742.16	12.21% 83.82% 23.62% 5.25% 109.16% 95.92% 3.60% 20.08% 0.00% 25.65%	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	40,000.00 45,000.00 225,000.00 - 800,000.00 40,000.00 50,000.00	\$ 40,000.00 \$ 45,000.00 \$ 225,000.00 \$ 5 \$ 800,000.00 \$ 40,000.00 \$ 50,000.00	\$ 140,000.00 \$590,000.00 \$ - \$ 5 \$ 350,000.00 \$ 40,000.00 \$ 100,000.00 \$ 100,000.00 \$ 590,000.00	\$ 140,000.00 \$ 810,000.00 \$ 40,000.00 \$ 45,000.00 \$ 575,000.00 \$ 40,000.00 \$ 900,000.00 \$ 40,000.00 \$ 50,000.00 \$ 260,000.00 \$ 260,000.00	\$ 140,000.00 \$ 560,000.00 \$ 150,000.00 \$ 650,000.00 \$ 2,208,148.00 \$ 72,500.00 \$ 950,000.00 \$ 40,000.00 \$ 50,000.00 \$ 260,000.00
Bluff Creek 85 by Galpin  Subtotal  Riley Creek  Lake Riley - Alum Treatment* Rice Marsh Lake Under Quality Improvement Phase 1 Rice Marsh Lake Water Quality Improvement Phase 1 Riley Creek Resoration (Reach E and D3)  Lake Riley & Rice Marsh Lake Subwatershed Assessment Upper Riley Creek Stabilization Middle Riley Creek  Lake Ann Wetland Restoration  St Hubert Water Quality Project  Subtotal  Purgatory Creek	308,674.00  \$373,711.00  305,000.00 60,568.00 300,000.00 1,773,623.00 29,961.00 1,100,000.00 0.00 0.00 \$3,719,152.00	- - - (250,000.00) 268,900.00 (100,000.00)	\$373,711.00 305,000.00 60,568.00 300,000.00 1,773,623.00 29,961.00 850,000.00 268,900.00 50,000.00 50,000.00 \$3,738,052.00	\$2,048.83 14,804.65 30,835.32 14,804.65 30,835.32 14,804.65 30,835.32 14,804.65 30,835.32 4,042.63	\$45,639.97 255,654.74 14,307.26 15,742.50 1,936,098.31 28,739.97 30,566.52 53,986.55 25,646.31 2,360,742.16	12.21%  83.82% 23.62% 5.25% 109.16% 95.92% 3.60% 20.08% 0.00% 25.65% 63.15%	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	40,000.00 45,000.00 225,000.00 - - 800,000.00 40,000.00 50,000.00	\$ 40,000.00 \$ 45,000.00 \$ 225,000.00 \$ - \$ - \$ 800,000.00 \$ 50,000.00 \$ 50,000.00	\$ 140,000.00 \$590,000.00 \$ - \$ - \$ 350,000.00 \$ 40,000.00 \$ 100,000.00	\$ 140,000.00 \$ 810,000.00 \$ 40,000.00 \$ 45,000.00 \$ 575,000.00 \$ 40,000.00 \$ 900,000.00 \$ 40,000.00 \$ 50,000.00 \$ 260,000.00	\$ 140,000.00 \$ 560,000.00 \$ 150,000.00 \$ 650,000.00 \$ 2,208,148.00 \$ 72,500.00 \$ 950,000.00 \$ 40,000.00 \$ 260,000.00 \$ 260,000.00
Bluff Creek 85 by Galpin  Riley Creek  Lake Riley - Alum Treatment* Rice Marsh Lake Nate Quality Improvement Phase 1 Riley Creek Exact State Sta	308,674.00  \$373,711.00  305,000.00 60,568.00 300,000.00 1,773,622.00 29,961.00 0.00 0.00 0.50 53,719,152.00 104,106.00 255,931.00 55,459.00	- - - (250,000.00) 268,900.00 (100,000.00)	\$373,711.00  305,000.00 60,568.00 300,000.00 1,773,623.00 850,000.00 50,000.00 50,000.00 50,000.00 104,106.00 255,459.00	\$2,048.83 14,804.65 30,835.32 14,804.65 30,835.32 14,804.65 30,835.32 14,804.65 30,835.32 4,042.63 186,602.51	\$45,639.97  255,654.74 14,307.26 15,742.00 1,936,098.31 28,739.97 30,566.52 25,646.31 2,360,742.16 12,359.28 24,880.41	83.82% 23.62% 5.25% 109.16% 95.92% 3.60% 20.08% 0.00% 25.65% 63.15% 24.72% 23.90% 8.51% 4.23%	\$ \$ \$ \$ \$ \$ \$ \$	40,000.00 45,000.00 225,000.00 - - 800,000.00 40,000.00 50,000.00	\$ 40,000.00 \$ 45,000.00 \$ 225,000.00 \$ -25 \$ -5 \$ 800,000.00 \$ 50,000.00 \$ 50,000.00	\$ 140,000.00 \$590,000.00 \$ 350,000.00 \$ 40,000.00 \$ 100,000.00 \$ 100,000.00 \$ 590,000.00 \$ 5 \$ 5 \$ 5 \$ 5 \$ 5 \$ 5 \$ 5 \$ 5	\$ 140,000.00 \$ 810,000.00 \$ 40,000.00 \$ 45,000.00 \$ 45,000.00 \$ 40,000.00 \$ 40,000.00 \$ 40,000.00 \$ 50,000.00 \$ 260,000.00 \$ 20,000.00 \$ 20,000.00 \$ 20,000.00	\$ 140,000.00 \$ 560,000.00 \$ 150,000.00 \$ 650,000.00 \$ 2,208,148.00 \$ 72,500.00 \$ 950,000.00 \$ 40,000.00 \$ 50,000.00 \$ 260,000.00 \$ 345,000.00 \$ 268,013.00 \$ 260,000.00
Bluff Creek 85 by Galpin  Subtotal  Riley Creek  Lake Riley - Alum Treatment* Rice Marsh Lake in-lake phosphorus load Rice Marsh Lake Water Quality Improvement Phase 1 Riley Creek Restoration (Reach E and D.3)  Lake Riley & Rice Marsh Lake Subwatershed Assessment Upper Riley Creek Stabilization Middle Riley Creek  Lake Ann Wetland Restoration St Hubert Water Quality Project  Subtotal  Purgatory Creek Re-Purgatory Creek Purgatory Cre	308,674.00  \$373,711.00  305,000.00 60,568.00 300,000.00 1,773,623.00 29,961.00 0.00 0.00 50,000.00 50,000.00 104,106.00 255,931.00 55,459.00 1,388.00	- - - (250,000.00) 268,900.00 (100,000.00)	\$373,711.00  305,000.00 60,568.00 300,000.00 1,773,623.00 29,961.00 850,000.00 50,000.00 100,000.00 53,738,052.00  50,000.00 104,106.00 255,931.00 55,459.00 1,388.00	\$2,048.83 14,804.65 30,835.32 14,804.65 30,835.32 14,804.65 30,835.32 14,804.65 30,835.32 4,042.63 186,602.51	\$45,639.97 255,654.74 14,307.26 15,742.50 1,936,098.31 28,739.7 30,566.52 53,986.55 25,646.31 2,360,742.16 12,359.28 24,880.41 21,791.68 2,347.50	33.82% 23.62% 5.25% 109.16% 95.92% 3.60% 20.08% 0.00% 25.65% 63.15% 24.72% 23.90% 8.51% 4.23% 0.00%	* ******** ****	40,000.00 45,000.00 225,000.00 	\$ 40,000.00 \$ 45,000.00 \$ 225,000.00 \$ -25 \$ 800,000.00 \$ 40,000.00 \$ 50,000.00 \$ 50,000.00 \$ 80,000.00	\$ 140,000.00 \$590,000.00 \$ 590,000.00 \$ 40,000.00 \$ 100,000.00 \$ 100,000.00 \$ 590,000.00 \$ - \$ 5	\$ 140,000.00 \$ 810,000.00 \$ 40,000.00 \$ 45,000.00 \$ 575,000.00 \$ 40,000.00 \$ 40,000.00 \$ 50,000.00 \$ 260,000.00 \$ 220,000.00 \$ 220,000.00 \$ 220,000.00	\$ 140,000.00 \$ 150,000.00 \$ 150,000.00 \$ 650,000.00 \$ 2,208,148.00 \$ 72,500.00 \$ 950,000.00 \$ 40,000.00 \$ 50,000.00 \$ 260,000.00 \$ 268,013.00 \$ 268,013.00 \$ 260,000.00
Bluff Creek 85 by Galpin  Rilley Creek  Lake Rilley - Alum Treatment**  Rice Marsh Lake water Quality improvement Phase 1  Rilley Creek Restoration (Reach E and D3)  Lake Rilley & Rice Marsh Lake Subwatershed Assessment  Upper Rilley Creek Stabilization  Middle Rilley Creek  Lake Ann Wetland Restoration  St Hubert Water Quality Project  Subtotal  Purgatory Creek  Purgatory Creek Rec Area-Berm/retention area - feasibility/design  Lotus Lake in-lake phosphorus load control  Silver Lake Restoration	308,674.00  \$373,711.00  305,000.00 60,568.00 300,000.00 1,773,623.00 0.00 0.00 150,000.00 150,000.00 53,719,152.00 50,000.00 104,106.00 255,931.00 55,495.00 13,388.00 125,422.00	- - - (250,000.00) 268,900.00 (100,000.00)	\$373,711.00  305,000.00 60,568.00 300,000.00 1,773,623.00 29,961.00 850,000.00 50,000.00 100,000.00 \$3,738,052.00  50,000.00 104,106.00 55,459.00 1,388.00 125,422.00	\$2,048.83 14,804.65 30,835.32 14,804.65 30,835.32 14,804.65 30,835.32 14,804.65 30,835.32 4,042.63 186,602.51	\$45,639.97 255,654.74 14,307.26 15,742.50 1,936,098.13 28,739.97 30,566.52 53,986.55 25,646.31 2,360,742.16 12,359.28 24,880.41 21,791.68 2,347.50 70,921.15	12.21%  83.82% 23.62% 5.25% 109.16% 95.92% 3.60% 20.08% 0.00% 25.65% 63.15% 24.72% 2.3.90% 8.51% 4.23% 0.00% 56.55%		40,000.00 45,000.00 225,000.00 - - 800,000.00 40,000.00 50,000.00	\$ 40,000.00 \$ 45,000.00 \$ 225,000.00 \$ -25 \$ 800,000.00 \$ 40,000.00 \$ 50,000.00 \$ 50,000.00 \$ 220,000.00 \$ 40,000.00	\$ 140,000.00 \$590,000.00 \$ 350,000.00 \$ 40,000.00 \$ 100,000.00 \$ 100,000.00 \$ 590,000.00 \$ 5 \$ 20,000.00 \$	\$ 140,000.00 \$ 810,000.00 \$ 40,000.00 \$ 45,000.00 \$ 45,000.00 \$ 40,000.00 \$ 40,000.00 \$ 40,000.00 \$ 50,000.00 \$ 260,000.00 \$ 20,000.00 \$ 20,000.00 \$ 20,000.00	\$ 140,000.00 \$ 560,000.00 \$ 150,000.00 \$ 650,000.00 \$ 2,208,148.00 \$ 72,500.00 \$ 950,000.00 \$ 40,000.00 \$ 50,000.00 \$ 260,000.00 \$ 268,013.00 \$ 269,000.00 \$ 260,000.00 \$ 260,000.00 \$ 260,000.00
Bluff Creek 85 by Galpin  Subtotal  Riley Creek  Lake Riley - Alum Treatment* Rice Marsh Lake In-lake phosphorus load Rice Marsh Lake Water Quality Improvement Phase 1 Riley Creek Restoration (Reach E and D.3)  Lake Riley & Rice Marsh Lake Subwatershed Assessment Upper Riley Creek Stabilization Middle Riley Creek  Lake Ann Wetland Restoration St Hubert Water Quality Project Subtotal  Purgatory Creek Pergatory Creek Purgatory Creek Re-Pergatory Creek Restoration Scenic Heights William Lake In-lake phosphorus load control Duck Lake watershed load Mitchel Lake Subwatershed Assessment	308,674.00 305,000.00 60,568.00 300,000.00 1,773,623.00 0.00 1,000,000 0.00 150,000.00 104,106.00 25,991.00 104,106.00 25,9931.00 162,1388.00 125,422.00 46,203.00	- - - (250,000.00) 268,900.00 (100,000.00)	\$373,711.00  305,000.00 60,568.00 300,000.00 1,773,623.00 29,961.00 850,000.00 50,000.00 50,000.00 53,738,052.00 50,000.00 104,106.00 255,931.00 55,459.00 125,422.00 46,203.00	\$2,048.83 14,804.65 30,835.32 14,804.65 30,835.32 14,804.65 30,835.32 14,804.65 30,835.32 4,042.63 186,602.51 1,576.00 1,337.50 339.00 10,651.09 5,060.00	\$45,639.97 255,654.74 14,307.26 15,742.50 1,936,098.13 28,739.97 30,565.25 25,646.31 2,360,742.16 12,359.28 24,880.41 21,791.68 2,347.50 70,921.15 48,593.47	83.82% 23.62% 5.25% 109.16% 95.92% 3.60% 20.08% 0.00% 25.65% 63.15% 24.72% 23.90% 8.51% 4.23% 0.00% 56.55% 105.55%	* ******* ****	40,000.00 45,000.00 225,000.00 	\$ 40,000.00 \$ 45,000.00 \$ 225,000.00 \$ 225,000.00 \$ 5 \$ 800,000.00 \$ 40,000.00 \$ 50,000.00 \$ \$ 80,000.00 \$ 220,000.00 \$ 40,000.00 \$ 220,000.00	\$ 140,000.00 \$590,000.00 \$ 590,000.00 \$ 40,000.00 \$ 100,000.00 \$ 100,000.00 \$ 590,000.00 \$ - \$ 5	\$ 140,000.00 \$ 810,000.00 \$ 40,000.00 \$ 45,000.00 \$ 575,000.00 \$ 40,000.00 \$ 40,000.00 \$ 50,000.00 \$ 260,000.00 \$ 220,000.00 \$ 220,000.00 \$ 220,000.00	\$ 140,000.00  \$ 150,000.00  \$ 150,000.00  \$ 650,000.00  \$ 2,208,148.00  \$ 72,500.00  \$ 950,000.00  \$ 40,000.00  \$ 50,000.00  \$ 260,000.00  \$ 268,013.00  \$ 268,013.00  \$ 260,000.00  \$ 170,000.00
Bluff Creek 85 by Galpin  Rilley Creek  Lake Rilley - Alum Treatment**  Rice Marsh Lake water Quality improvement Phase 1  Rilley Creek Restoration (Reach E and D3)  Lake Rilley & Rice Marsh Lake Subwatershed Assessment  Upper Rilley Creek Stabilization  Middle Rilley Creek  Lake Ann Wetland Restoration  St Hubert Water Quality Project  Subtotal  Purgatory Creek  Purgatory Creek Rec Area-Berm/retention area - feasibility/design  Lotus Lake in-lake phosphorus load control  Silver Lake Restoration	308,674.00  \$373,711.00  305,000.00 60,568.00 300,000.00 1,773,623.00 0.00 0.00 150,000.00 150,000.00 53,719,152.00 50,000.00 104,106.00 255,931.00 55,495.00 13,388.00 125,422.00	- - - (250,000.00) 268,900.00 (100,000.00)	\$373,711.00  305,000.00 60,568.00 300,000.00 1,773,623.00 29,961.00 850,000.00 50,000.00 100,000.00 \$3,738,052.00  50,000.00 104,106.00 55,459.00 1,388.00 125,422.00	\$2,048.83 14,804.65 30,835.32 14,804.65 30,835.32 14,804.65 30,835.32 14,804.65 30,835.32 4,042.63 186,602.51	\$45,639.97 255,654.74 14,307.26 15,742.50 1,936,098.13 28,739.97 30,566.52 53,986.55 25,646.31 2,360,742.16 12,359.28 24,880.41 21,791.68 2,347.50 70,921.15	12.21%  83.82% 23.62% 5.25% 109.16% 95.92% 3.60% 20.08% 0.00% 25.65% 63.15% 24.72% 2.3.90% 8.51% 4.23% 0.00% 56.55%		40,000.00 45,000.00 225,000.00 	\$ 40,000.00 \$ 45,000.00 \$ 225,000.00 \$ -25 \$ 800,000.00 \$ 40,000.00 \$ 50,000.00 \$ 50,000.00 \$ 220,000.00 \$ 40,000.00	\$ 140,000.00 \$590,000.00 \$ 350,000.00 \$ 40,000.00 \$ 100,000.00 \$ 100,000.00 \$ 590,000.00 \$ 5 \$ 20,000.00 \$	\$ 140,000.00 \$ 810,000.00 \$ 40,000.00 \$ 45,000.00 \$ 575,000.00 \$ 40,000.00 \$ 40,000.00 \$ 50,000.00 \$ 260,000.00 \$ 220,000.00 \$ 220,000.00 \$ 220,000.00	\$ 140,000.00 \$ 560,000.00 \$ 150,000.00 \$ 650,000.00 \$ 2,208,148.00 \$ 72,500.00 \$ 950,000.00 \$ 40,000.00 \$ 50,000.00 \$ 260,000.00 \$ 268,013.00 \$ 269,000.00 \$ 260,000.00 \$ 260,000.00 \$ 260,000.00 \$ 260,000.00
Bluff Creek 85 by Galpin  Rilley Creek Lake Rilley - Alum Treatment** Rice Marsh Lake Lake Rulley Freek Lake Rilley - Alum Treatment** Rice Marsh Lake Water Quality Improvement Phase 1 Rilley Creek Restoration (Reach E and D3) Lake Rilley & Rice Marsh Lake Subwatershed Assessment Upper Rilley Creek Stabilization Middle Rilley Creek Lake Ann Wetland Restoration St Hubert Water Quality Project Subtotal  Purgatory Creek Rec Area-Berm/retention area - feasibility/design Lotus Lake in-lake phosphorus load control Silver Lake Restoration Scenic Height Hylland Lakein-lake phosphorus load control Duck Lake watershed load Mitchell Lake Subwatershed Assessment Lotus Lotus Lotus Lotus Lake Subwatershed Assessment Lotus Lotus Leke Ferber Pond	308,674.00 305,000.00 60,568.00 300,000.00 1,773,623.00 0.00 1,000,000 0.00 150,000.00 104,106.00 25,991.00 104,106.00 25,9931.00 162,1388.00 125,422.00 46,203.00	- - - (250,000.00) 268,900.00 (100,000.00)	\$373,711.00  305,000.00 60,568.00 300,000.00 1,773,623.00 29,961.00 850,000.00 50,000.00 50,000.00 53,738,052.00 50,000.00 104,106.00 255,931.00 55,459.00 125,422.00 46,203.00	\$2,048.83 14,804.65 30,835.32 14,804.65 30,835.32 14,804.65 30,835.32 14,804.65 30,835.32 4,042.63 186,602.51 1,576.00 1,337.50 339.00 10,651.09 5,060.00	\$45,639.97 255,654.74 14,307.26 15,742.50 1,936,098.13 28,739.97 30,565.25 25,646.31 2,360,742.16 12,359.28 24,880.41 21,791.68 2,347.50 70,921.15 48,593.47	83.82% 23.62% 5.25% 109.16% 95.92% 3.60% 20.08% 0.00% 25.65% 63.15% 24.72% 23.90% 8.51% 4.23% 0.00% 56.55% 105.55%	* ******* ****	40,000.00 45,000.00 225,000.00 	\$ 40,000.00 \$ 45,000.00 \$ 225,000.00 \$ 225,000.00 \$ 5 \$ 800,000.00 \$ 40,000.00 \$ 50,000.00 \$ \$ 80,000.00 \$ 220,000.00 \$ 40,000.00 \$ 220,000.00	\$ 140,000.00  \$590,000.00  \$ 350,000.00  \$ 40,000.00  \$ 100,000.00  \$ 100,000.00  \$ 20,000.00  \$ 20,000.00  \$ 20,000.00  \$ 20,000.00  \$ 20,000.00  \$ 3 20,00	\$ 140,000.00 \$ 810,000.00 \$ 40,000.00 \$ 45,000.00 \$ 45,000.00 \$ 40,000.00 \$ 40,000.00 \$ 50,000.00 \$ 50,000.00 \$ 200,000.00 \$ 220,000.00 \$ 20,000.00 \$ 20,000.00	\$ 140,000.00 \$ 560,000.00 \$ 150,000.00 \$ 650,000.00 \$ 2,208,148.00 \$ 72,500.00 \$ 950,000.00 \$ 40,000.00 \$ 50,000.00 \$ 260,000.00 \$ 268,013.00 \$ 269,000.00 \$ 260,000.00 \$ 260,000.00 \$ 260,000.00 \$ 260,000.00
Bluff Creek 85 by Galpin  Subtotal  Riley Creek  Lake Riley - Alum Treatment* Rice Marsh Lake Under Quality Improvement Phase 1 Rice Marsh Lake Water Quality Improvement Phase 1 Riley Creek Restoration (Reach E and D3)  Lake Riley & Rice Marsh Lake Subwatershed Assessment Upper Riley Creek Stabilization Middle Riley Creek  Lake Ann Wetland Restoration Si Hubert Water Quality Project  Subtotal  Purgatory Creek Purgatory Creek Re-Area Berm/retention area - feasibility/design Lotus Lake in-Take phosphorus load control Silvet Lake Restoration Scenic Heights Hyland Lakein-Take phosphorus load control Duck Lake watershed load Mitchel Lake Subwatershed Assessment Lotus Lake Kerber Pond Duck Lake Partnership  Subtotal  Reserve	308,674.00  \$373,711.00  305,000.00 60,568.00 300,000.00 1,773,623.00 29,961.00 0.00 150,000.00 53,719,152.00 50,000.00 104,106.00 255,931.00 125,422.00 46,203.00 30,000.00 \$668,509.00 \$500.000.00	(250,000.00) 268,390.00 (100,000.00) 100,000.00 18,900.00	\$373,711.00 305,000.00 60,568.00 300,000.00 29,961.00 29,961.00 268,900.00 50,000.00 100,000.00 33,738,052.00 104,106.00 255,931.00 115,422.00 30,000.00 36,000.00 255,422.00 36,000.00 36,68,509.00 5668,509.00	\$2,048.83 14,804.65 30,835.32 14,804.65 30,835.32 14,804.65 30,835.32 14,804.65 30,835.32 4,042.63 186,602.51 1,576.00 1,337.50 339.00 10,651.09 5,060.00 4,585.00 \$23,548.59	\$45,639.97 255,654.74 14,307.26 15,742.50 1,936,098.13 28,739.97 30,566.55 25,646.31 2,360,742.16 12,359.28 24,880.41 21,791.68 2,347.50 70,921.15 48,593.47 6,697.50	83.82% 23.62% 5.25% 109.16% 95.92% 3.60% 20.08% 0.00% 25.65% 63.15% 24.72% 23.90% 8.51% 4.23% 0.00% 56.55% 105.17% 22.33%	* ******* ****	40,000.00 45,000.00 225,000.00 	\$ 40,000.00 \$ 45,000.00 \$ 225,000.00 \$ 225,000.00 \$ 5 \$ 800,000.00 \$ 40,000.00 \$ 50,000.00 \$ \$ 80,000.00 \$ 220,000.00 \$ 40,000.00 \$ 220,000.00	\$ 140,000.00 \$590,000.00 \$ 350,000.00 \$ 40,000.00 \$ 100,000.00 \$ 20,000.00 \$ 20,000.00 \$ 20,000.00 \$ 5 \$ 20,000.00 \$ 235,000.00 \$ 235,000.00 \$ 180,000.00	\$ 140,000.00 \$ 810,000.00 \$ 40,000.00 \$ 45,000.00 \$ 575,000.00 \$ 40,000.00 \$ 40,000.00 \$ 50,000.00 \$ 260,000.00 \$ 220,000.00 \$ 220,000.00 \$ 40,000.00 \$ 50,000.00 \$ 50,000.00 \$ 50,000.00 \$ 50,000.00 \$ 50,000.00 \$ 50,000.00	\$ 140,000.00 \$ 560,000.00 \$ 150,000.00 \$ 650,000.00 \$ 2,208,148.00 \$ 72,500.00 \$ 950,000.00 \$ 40,000.00 \$ 50,000.00 \$ 260,000.00 \$ 268,013.00 \$ 269,000.00 \$ 260,000.00 \$ 260,000.00 \$ 260,000.00 \$ 260,000.00
Bluff Creek 85 by Galpin  Subtotal  Riley Creek  Lake Riley - Alum Treatment* Rice Marsh Lake in-lake phosphorus load Rice Marsh Lake in-lake phosphorus load Rice Marsh Lake Water Quality Improvement Phase 1 Riley Creek Restoration (Reach E and D.3)  Lake Riley & Rice Marsh Lake Subwatershed Assessment Upper Riley Creek Stabilization Middle Riley Creek  Lake Ann Wetland Restoration Subtotal  Purgatory Creek Purgatory Creek Rec Area-Berm/retention area - feasibility/design Lotus Lake in-lake phosphorus load control Sliver Lake Restoration Scenic Heights Hyland Lakein-lake phosphorus load control Duck Lake watershed load Mitchel Lake Subwater shed Assessment Lotus Lake Kerber Pond Duck Lake Purnership  Subtotal  Reserve  TOTAL EXPRINDITURE	308,674.00  \$373,711.00  305,000.00  60,568.00  1,773,623.00  1,000.00  1,000.00  150,000.00  53,719,152.00  50,000.00  14,106.00  150,000.00  150,000.00  510,000.00  54,22.00  46,203.00  \$668,509.00  \$100,000.00	(250,000.00) 268,900.00 (100,000.00) 100,000.00 18,900.00	\$373,711.00  305,000.00 60,568.00 300,000.00 1,773,623.00 29,961.00 850,000.00 50,000.00 100,000.00 53,738,052.00  50,000.00 104,106.00 255,931.00 55,459.00 125,422.00 46,203.00 30,000.00 \$668,509.00 81,100.00 \$8,461,514.00	\$2,048.83 14,804.65 30,835.32 14,804.65 30,835.32 14,804.65 30,835.32 14,804.65 30,835.32 4,042.63 186,602.51 1,576.00 1,337.50 339.00 1,0551.09 5,060.00 4,585.00 \$23,548.59 \$369,622.30	\$45,639.97  255,654.74  14,307.26  15,742.50  30,566.52  53,986.55  25,646.31  2,360,742.16  12,359.28  24,880.41  21,791.68  2,347.50  70,921.15  48,593.47  6,697.50  \$5187,590.99  \$33,699,769.37	12.21%  83.82% 23.62% 5.25% 109.16% 95.92% 3.60% 20.08% 0.00% 25.65% 63.15% 24.72% 23.90% 8.51% 4.23% 0.00% 56.55% 105.17% 22.33% 28.06%	* ******* ****	40,000.00 45,000.00 225,000.00 	\$ 40,000.00 \$ 45,000.00 \$ 225,000.00 \$ 225,000.00 \$ 5 \$ 800,000.00 \$ 40,000.00 \$ 50,000.00 \$ \$ 80,000.00 \$ 220,000.00 \$ 40,000.00 \$ 220,000.00	\$ 140,000.00 \$590,000.00 \$ 350,000.00 \$ 40,000.00 \$ 100,000.00 \$ 100,000.00 \$ 20,000.00 \$ 20,000.00 \$ 20,000.00 \$ 235,000.00 \$ 3,560,000.00 \$ 3,660,000.00	\$ 140,000.00 \$ 810,000.00 \$ 40,000.00 \$ 45,000.00 \$ 575,000.00 \$ 40,000.00 \$ 40,000.00 \$ 260,000.00 \$ 260,000.00 \$ 220,000.00 \$ 220,000.00 \$ 220,000.00 \$ 220,000.00 \$ 235,000.00 \$ 235,000.00 \$ 235,000.00 \$ 235,000.00 \$ 235,000.00	\$ 140,000.00 \$ 560,000.00 \$ 150,000.00 \$ 650,000.00 \$ 2,208,148.00 \$ 72,500.00 \$ 950,000.00 \$ 40,000.00 \$ 50,000.00 \$ 260,000.00 \$ 268,013.00 \$ 269,000.00 \$ 260,000.00 \$ 260,000.00 \$ 260,000.00
Bluff Creek 85 by Galpin  Subtotal  Riley Creek  Lake Riley - Alum Treatment* Rice Marsh Lake Under Quality Improvement Phase 1 Rice Marsh Lake Water Quality Improvement Phase 1 Riley Creek Restoration (Reach E and D3)  Lake Riley & Rice Marsh Lake Subwatershed Assessment Upper Riley Creek Stabilization Middle Riley Creek  Lake Ann Wetland Restoration Si Hubert Water Quality Project  Subtotal  Purgatory Creek Purgatory Creek Re-Area Berm/retention area - feasibility/design Lotus Lake in-Take phosphorus load control Silvet Lake Restoration Scenic Heights Hyland Lakein-Take phosphorus load control Duck Lake watershed load Mitchel Lake Subwatershed Assessment Lotus Lake Kerber Pond Duck Lake Partnership  Subtotal  Reserve	308,674.00  \$373,711.00  305,000.00 60,568.00 300,000.00 1,773,623.00 29,961.00 0.00 150,000.00 53,719,152.00 50,000.00 104,106.00 255,931.00 125,422.00 46,203.00 30,000.00 \$668,509.00 \$500.000.00	(250,000.00) 268,390.00 (100,000.00) 100,000.00 18,900.00	\$373,711.00 305,000.00 60,568.00 300,000.00 29,961.00 29,961.00 268,900.00 50,000.00 100,000.00 33,738,052.00 104,106.00 255,931.00 115,422.00 30,000.00 36,000.00 255,422.00 36,000.00 36,68,509.00 5668,509.00	\$2,048.83 14,804.65 30,835.32 14,804.65 30,835.32 14,804.65 30,835.32 14,804.65 30,835.32 4,042.63 186,602.51 1,576.00 1,337.50 339.00 10,651.09 5,060.00 4,585.00 \$23,548.59	\$45,639.97 255,654.74 14,307.26 15,742.50 1,936,098.13 28,739.97 30,566.55 25,646.31 2,360,742.16 12,359.28 24,880.41 21,791.68 2,347.50 70,921.15 48,593.47 6,697.50	83.82% 23.62% 5.25% 109.16% 95.92% 3.60% 20.08% 0.00% 25.65% 63.15% 24.72% 23.90% 8.51% 4.23% 0.00% 56.55% 105.17% 22.33%	* ******* ****	40,000.00 45,000.00 225,000.00 	\$ 40,000.00 \$ 45,000.00 \$ 225,000.00 \$ 225,000.00 \$ 5 \$ 800,000.00 \$ 40,000.00 \$ 50,000.00 \$ \$ 80,000.00 \$ 220,000.00 \$ 40,000.00 \$ 220,000.00	\$ 140,000.00 \$590,000.00 \$ 350,000.00 \$ 40,000.00 \$ 100,000.00 \$ 20,000.00 \$ 20,000.00 \$ 20,000.00 \$ 5 \$ 20,000.00 \$ 235,000.00 \$ 235,000.00 \$ 180,000.00	\$ 140,000.00 \$ 810,000.00 \$ 40,000.00 \$ 45,000.00 \$ 575,000.00 \$ 40,000.00 \$ 40,000.00 \$ 50,000.00 \$ 260,000.00 \$ 220,000.00 \$ 220,000.00 \$ 40,000.00 \$ 50,000.00 \$ 50,000.00 \$ 50,000.00 \$ 50,000.00 \$ 50,000.00 \$ 50,000.00	\$ 140,000.00 \$ 560,000.00 \$ 150,000.00 \$ 650,000.00 \$ 2,208,148.00 \$ 72,500.00 \$ 950,000.00 \$ 40,000.00 \$ 50,000.00 \$ 260,000.00 \$ 268,013.00 \$ 269,000.00 \$ 260,000.00 \$ 260,000.00 \$ 260,000.00
Bluff Creek 85 by Galpin  Subtotal  Riley Creek  Lake Riley - Alum Treatment* Rice Marsh Lake in-lake phosphorus load Rice Marsh Lake in-lake phosphorus load Rice Marsh Lake Water Quality Improvement Phase 1 Riley Creek Restoration (Reach E and D.3)  Lake Riley & Rice Marsh Lake Subwatershed Assessment Upper Riley Creek Stabilization Middle Riley Creek  Lake Ann Wetland Restoration St Hubert Water Quality Project  Subtotal  Purgatory Creek Purgatory Creek Rec Area-Berm/retention area - feasibility/design Lotus Lake in-lake phosphorus load control Sliver Lake Restoration Scenic Heights Hyland Lake Subwatershed Assessment Lotus Lake Kerber Pond Duck Lake Watershed Load Mitchel Lake Subwatershed Assessment Lotus Lake Kerber Pond Duck Lake Purtnership  Subtotal Reserve  TOTAL EXPENDITURE	308,674.00  \$373,711.00  305,000.00  60,568.00  1,773,623.00  1,000.00  1,000.00  150,000.00  53,719,152.00  50,000.00  14,106.00  150,000.00  150,000.00  510,000.00  54,22.00  46,203.00  \$668,509.00  \$100,000.00	(250,000.00) 268,900.00 (100,000.00) 100,000.00 18,900.00	\$373,711.00  305,000.00 60,568.00 300,000.00 1,773,623.00 29,961.00 850,000.00 50,000.00 100,000.00 53,738,052.00  50,000.00 104,106.00 255,931.00 55,459.00 125,422.00 46,203.00 30,000.00 \$668,509.00 81,100.00 \$8,461,514.00	\$2,048.83 14,804.65 30,835.32 14,804.65 30,835.32 14,804.65 30,835.32 14,804.65 30,835.32 4,042.63 186,602.51 1,576.00 1,337.50 339.00 1,0551.09 5,060.00 4,585.00 \$23,548.59 \$369,622.30	\$45,639.97  255,654.74  14,307.26  15,742.50  30,566.52  53,986.55  25,646.31  2,360,742.16  12,359.28  24,880.41  21,791.68  2,347.50  70,921.15  48,593.47  6,697.50  \$5187,590.99  \$33,699,769.37	83.82% 23.62% 5.25% 109.16% 95.92% 3.60% 20.08% 0.00% 25.65% 63.15% 24.72% 23.90% 8.51% 4.23% 0.00% 56.55% 105.17% 22.33%	* ******* ****	40,000.00 45,000.00 225,000.00 	\$ 40,000.00 \$ 45,000.00 \$ 225,000.00 \$ 225,000.00 \$ 5 \$ 800,000.00 \$ 40,000.00 \$ 50,000.00 \$ \$ 80,000.00 \$ 220,000.00 \$ 40,000.00 \$ 220,000.00	\$ 140,000.00 \$590,000.00 \$ 350,000.00 \$ 40,000.00 \$ 100,000.00 \$ 100,000.00 \$ 20,000.00 \$ 20,000.00 \$ 20,000.00 \$ 235,000.00 \$ 255,000.00 \$ 3,680,000.00 \$ 3,680,000.00	\$ 140,000.00 \$ 810,000.00 \$ 40,000.00 \$ 45,000.00 \$ 575,000.00 \$ 40,000.00 \$ 40,000.00 \$ 260,000.00 \$ 260,000.00 \$ 220,000.00 \$ 220,000.00 \$ 220,000.00 \$ 220,000.00 \$ 235,000.00 \$ 235,000.00 \$ 235,000.00 \$ 235,000.00 \$ 235,000.00	\$ 140,000.00  \$ 560,000.00  \$ 150,000.00  \$ 650,000.00  \$ 2,208,148.00  \$ 72,500.00  \$ 40,000.00  \$ 40,000.00  \$ 50,000.00  \$ 260,000.00  \$ 268,013.00  \$ 268,013.00  \$ 260,000.00  \$ 27,500.00  \$ 345,000.00  \$ 345,000.00  \$ 37,500.00  \$ 37,500.00
Bluff Creek 85 by Galpin  Subtotal  Riley Creek  Lake Riley - Alum Treatment* Rice Marsh Lake Water Quality Improvement Phase 1 Riley Creek Restoration (Reach Eard D.3)  Lake Riley & Rice Marsh Lake Subwatershed Assessment Upper Riley Creek Stabilization Middle Riley Creek Lake Ann Wetland Restoration St Hubert Water Quality Project  Subtotal  Purgatory Creek Rec Area Berm/retention area - feasibility/design Lotus Lake in-Jake phosphorus load control Siver Lake Restoration Scenic Heights Hyland Lake in-Jake phosphorus load control Duck Lake watershed load Mitchell Lake Subwatershed Assessment Lotus Lake in-Jake phosphorus Subtotal Reserve  TOTAL EXPENDITURE  EXCESS REVENUES OVER (UNDER) EXPENDITURES	308,674.00  \$373,711.00  305,000.00  60,568.00  1,773,623.00  1,000.00  1,000.00  150,000.00  53,719,152.00  50,000.00  14,106.00  150,000.00  150,000.00  510,000.00  54,22.00  46,203.00  \$668,509.00  \$100,000.00	(250,000.00) 268,900.00 (100,000.00) 100,000.00 18,900.00	\$373,711.00  305,000.00 60,568.00 300,000.00 1,773,623.00 29,961.00 850,000.00 50,000.00 100,000.00 53,738,052.00  50,000.00 104,106.00 255,931.00 55,459.00 125,422.00 46,203.00 30,000.00 \$668,509.00 81,100.00 \$8,461,514.00	\$2,048.83 14,804.65 30,835.32 14,804.65 30,835.32 14,804.65 30,835.32 14,804.65 30,835.32 4,042.63 186,602.51 1,576.00 1,337.50 339.00 1,0551.09 5,060.00 4,585.00 \$23,548.59 \$369,622.30	\$45,639.97  255,654.74  14,307.26  15,742.50  30,566.52  53,986.55  25,646.31  2,360,742.16  12,359.28  24,880.41  21,791.68  2,347.50  70,921.15  48,593.47  6,697.50  \$5187,590.99  \$33,699,769.37	83.82% 23.62% 5.25% 109.16% 95.92% 3.60% 20.08% 0.00% 25.65% 63.15% 24.72% 23.90% 8.51% 4.23% 0.00% 56.55% 105.17% 22.33%	\$ \$	40,000.00 45,000.00 225,000.00 - - 800,000.00 40,000.00 50,000.00 50,000.00 - - 40,000.00	\$ 40,000.00 \$ 45,000.00 \$ 225,000.00 \$ 225,000.00 \$ 5 \$ 800,000.00 \$ 50,000.00 \$ 50,000.00 \$ 20,000.00 \$ 220,000.00 \$ 3	\$ 140,000.00 \$590,000.00 \$ 40,000.00 \$ 40,000.00 \$ 100,000.00 \$ 20,000.00 \$ 20,000.00 \$ 20,000.00 \$ 3,680,000.00 \$ 3,680,000.00 \$ 3,680,000.00	\$ 140,000.00 \$ 40,000.00 \$ 45,000.00 \$ 45,000.00 \$ 575,000.00 \$ 40,000.00 \$ 40,000.00 \$ 50,000.00 \$ 260,000.00 \$ 220,000.00 \$ 220,000.00 \$ 220,000.00 \$ 30,000.00	\$ 140,000.00 \$ 560,000.00 \$ 150,000.00 \$ 650,000.00 \$ 2,208,148.00 \$ 72,500.00 \$ 950,000.00 \$ 40,000.00 \$ 50,000.00 \$ 260,000.00 \$ 268,013.00 \$ 268,013.00 \$ 260,000.00 \$ 170,000.00 \$ 27,500.00 \$ 28,013.00 \$ 260,000.00 \$ 260,000.00
Bluff Creek 85 by Galpin  Subtotal  Riley Creek  Lake Riley - Alum Treatment* Rice Marsh Lake Water Quality Improvement Phase 1 Riley Creek Restoration (Reach Eard D.3)  Lake Riley & Rice Marsh Lake Subwatershed Assessment Upper Riley Creek Stabilization Middle Riley Creek Lake Ann Wetland Restoration St Hubert Water Quality Project  Subtotal  Purgatory Creek Rec Area Berm/retention area - feasibility/design Lotus Lake in-Jake phosphorus load control Siver Lake Restoration Scenic Heights Hyland Lake in-Jake phosphorus load control Duck Lake watershed load Mitchell Lake Subwatershed Assessment Lotus Lake in-Jake phosphorus Subtotal Reserve  TOTAL EXPENDITURE  EXCESS REVENUES OVER (UNDER) EXPENDITURES	308,674.00  \$373,711.00  305,000.00  60,568.00  1,773,623.00  1,000.00  1,000.00  150,000.00  53,719,152.00  50,000.00  14,106.00  150,000.00  150,000.00  510,000.00  54,22.00  46,203.00  \$668,509.00  \$100,000.00	(250,000.00) 268,900.00 (100,000.00) 100,000.00 18,900.00	\$373,711.00  305,000.00 60,568.00 300,000.00 1,773,623.00 29,961.00 850,000.00 50,000.00 100,000.00 53,738,052.00  50,000.00 104,106.00 255,931.00 55,459.00 125,422.00 46,203.00 30,000.00 \$668,509.00 81,100.00 \$8,461,514.00	\$2,048.83 14,804.65 30,835.32 14,804.65 30,835.32 14,804.65 30,835.32 14,804.65 30,835.32 4,042.63 186,602.51 1,576.00 1,337.50 339.00 1,0551.09 5,060.00 4,585.00 \$23,548.59 \$369,622.30	\$45,639.97  255,654.74  14,307.26  15,742.50  30,566.52  53,986.55  25,646.31  2,360,742.16  12,359.28  24,880.41  21,791.68  2,347.50  70,921.15  48,593.47  6,697.50  \$5187,590.99  \$33,699,769.37	83.82% 23.62% 5.25% 109.16% 95.92% 3.60% 20.08% 0.00% 25.65% 63.15% 24.72% 23.90% 8.51% 4.23% 0.00% 56.55% 105.17% 22.33%	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	40,000.00 45,000.00 225,000.00 	\$ 40,000.00 \$ 45,000.00 \$ 225,000.00 \$ -25,000.00 \$ 40,000.00 \$ 50,000.00 \$ 50,000.00 \$ 220,000.00 \$ -20,000.00	\$ 140,000.00 \$ \$90,000.00 \$ \$ 40,000.00 \$ \$ 100,000.00 \$ \$ 100,000.00 \$ \$ 20,000.00 \$ \$ 235,000.00 \$ \$ 235,000.00 \$ 180,000.00 \$ 180,000.00 \$ 180,000.00 \$ 180,000.00 \$ 180,000.00 \$ 180,000.00 \$ 180,000.00 \$ 180,000.00 \$ 3,680,000.00 \$ 180,000.00 \$ 3,680,000.00 \$ 180,000.00 \$ 3,680,000.00	\$ 140,000.00 \$ 40,000.00 \$ 45,000.00 \$ 45,000.00 \$ 575,000.00 \$ 40,000.00 \$ 40,000.00 \$ 50,000.00 \$ 260,000.00 \$ 220,000.00 \$ 220,000.00 \$ 220,000.00 \$ 30,000.00	\$ 140,000.00 \$ 560,000.00 \$ 150,000.00 \$ 650,000.00 \$ 2,208,148.00 \$ 72,500.00 \$ 950,000.00 \$ 40,000.00 \$ 50,000.00 \$ 260,000.00 \$ 268,013.00 \$ 268,013.00 \$ 260,000.00 \$ 170,000.00 \$ 27,500.00 \$ 28,013.00 \$ 260,000.00 \$ 260,000.00
Bluff Creek 85 by Galpin  Subtotal  Riley Creek  Lake Riley - Alum Treatment* Rice Marsh Lake in-lake phosphorus load Rice Marsh Lake Water Quality Improvement Phase 1 Riley Creek Restoration (Reach Eard D.3)  Lake Riley & Rice Marsh Lake Subwatershed Assessment Upper Riley Creek Stabilization Middle Riley Creek  Lake Ann Wetland Restoration St Hubert Water Quality Project  Subtotal  Purgatory Creek Rec Area-Berm/retention area - feasibility/design Lotus Lake in-lake phosphorus load control Siver Lake Restoration Scenic Heights Hyland Laker in-lake phosphorus load control Duck Lake watershed load Mitchel Lake Subwatershed Assessment Lotus Lake Kerber Pond Duck Lake Partnership Subtotal  Reserve  TOTAL EXPENDITURE  EXCESS REVENUES OVER (UNDER) EXPENDITURES	308,674.00  \$373,711.00  305,000.00  60,568.00  1,773,623.00  1,000.00  1,000.00  150,000.00  53,719,152.00  50,000.00  14,106.00  150,000.00  150,000.00  510,000.00  54,22.00  46,203.00  \$668,509.00  \$100,000.00	(250,000.00) 268,900.00 (100,000.00) 100,000.00 18,900.00	\$373,711.00  305,000.00 60,568.00 300,000.00 1,773,623.00 29,961.00 850,000.00 50,000.00 100,000.00 53,738,052.00  50,000.00 104,106.00 255,931.00 55,459.00 125,422.00 46,203.00 30,000.00 \$668,509.00 81,100.00 \$8,461,514.00	\$2,048.83 14,804.65 30,835.32 14,804.65 30,835.32 14,804.65 30,835.32 14,804.65 30,835.32 4,042.63 186,602.51 1,576.00 1,337.50 339.00 1,0551.09 5,060.00 4,585.00 \$23,548.59 \$369,622.30	\$45,639.97  255,654.74  14,307.26  15,742.50  30,566.52  53,986.55  25,646.31  2,360,742.16  12,359.28  24,880.41  21,791.68  2,347.50  70,921.15  48,593.47  6,697.50  \$5187,590.99  \$33,699,769.37	83.82% 23.62% 5.25% 109.16% 95.92% 3.60% 20.08% 0.00% 25.65% 63.15% 24.72% 23.90% 8.51% 4.23% 0.00% 56.55% 105.17% 22.33%	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	40,000.00 45,000.00 225,000.00 - - 800,000.00 40,000.00 50,000.00 50,000.00 - - 40,000.00	\$ 40,000.00 \$ 45,000.00 \$ 225,000.00 \$ 225,000.00 \$ 5 \$ 800,000.00 \$ 50,000.00 \$ 50,000.00 \$ 20,000.00 \$ 220,000.00 \$ 3	\$ 140,000.00 \$590,000.00 \$ 40,000.00 \$ 40,000.00 \$ 100,000.00 \$ 20,000.00 \$ 20,000.00 \$ 20,000.00 \$ 3,680,000.00 \$ 3,680,000.00 \$ 3,680,000.00 \$ 3,680,000.00	\$ 140,000.00 \$ 40,000.00 \$ 45,000.00 \$ 45,000.00 \$ 575,000.00 \$ 40,000.00 \$ 40,000.00 \$ 50,000.00 \$ 260,000.00 \$ 220,000.00 \$ 220,000.00 \$ 220,000.00 \$ 30,000.00	\$ 140,000.00  \$ 560,000.00  \$ 150,000.00  \$ 650,000.00  \$ 2,208,148.00  \$ 72,500.00  \$ 40,000.00  \$ 40,000.00  \$ 50,000.00  \$ 260,000.00  \$ 268,013.00  \$ 268,013.00  \$ 260,000.00  \$ 27,500.00  \$ 345,000.00  \$ 345,000.00  \$ 37,500.00  \$ 37,500.00
Bluff Creek 85 by Galpin  Subtotal  Riley Creek  Lake Riley - Alum Treatment* Rice Marsh Lake Water Quality Improvement Phase 1 Riley Creek Restoration (Reach Eard D.3)  Lake Riley & Rice Marsh Lake Subwatershed Assessment Upper Riley Creek Stabilization Middle Riley Creek Lake Ann Wetland Restoration St Hubert Water Quality Project  Subtotal  Purgatory Creek Rec Area Berm/retention area - feasibility/design Lotus Lake in-Jake phosphorus load control Siver Lake Restoration Scenic Heights Hyland Lake in-Jake phosphorus load control Duck Lake watershed load Mitchell Lake Subwatershed Assessment Lotus Lake in-Jake phosphorus Subtotal Reserve  TOTAL EXPENDITURE  EXCESS REVENUES OVER (UNDER) EXPENDITURES	308,674.00  \$373,711.00  305,000.00  60,568.00  1,773,623.00  1,000.00  1,000.00  150,000.00  53,719,152.00  50,000.00  14,106.00  150,000.00  150,000.00  510,000.00  54,22.00  46,203.00  \$668,509.00  \$100,000.00	(250,000.00) 268,900.00 (100,000.00) 100,000.00 18,900.00	\$373,711.00  305,000.00 60,568.00 300,000.00 1,773,623.00 29,961.00 850,000.00 50,000.00 100,000.00 53,738,052.00  50,000.00 104,106.00 255,931.00 55,459.00 125,422.00 46,203.00 30,000.00 \$668,509.00 81,100.00 \$8,461,514.00	\$2,048.83 14,804.65 30,835.32 14,804.65 30,835.32 14,804.65 30,835.32 14,804.65 30,835.32 4,042.63 186,602.51 1,576.00 1,337.50 339.00 1,0551.09 5,060.00 4,585.00 \$23,548.59 \$369,622.30	\$45,639.97  255,654.74  14,307.26  15,742.50  30,566.52  53,986.55  25,646.31  2,360,742.16  12,359.28  24,880.41  21,791.68  2,347.50  70,921.15  48,593.47  6,697.50  \$5187,590.99  \$33,699,769.37	83.82% 23.62% 5.25% 109.16% 95.92% 3.60% 20.08% 0.00% 25.65% 63.15% 24.72% 23.90% 8.51% 4.23% 0.00% 56.55% 105.17% 22.33% 28.06% 0.00%	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	40,000.00 45,000.00 225,000.00 225,000.00 40,000.00 50,000.00 50,000.00 220,000.00 40,000.00	\$ 40,000.00 \$ 45,000.00 \$ 225,000.00 \$ - 25,000.00 \$ 5 .0.00 \$ 40,000.00 \$ 50,000.00 \$ 50,000.00 \$ 220,000.00 \$ 220,000.00 \$ - 20,000.00 \$	\$ 140,000.00 \$ \$90,000.00 \$ \$ 40,000.00 \$ \$ 100,000.00 \$ \$ 100,000.00 \$ \$ 20,000.00 \$ \$ 235,000.00 \$ \$ 235,000.00 \$ 180,000.00 \$ 180,000.00 \$ 180,000.00 \$ 180,000.00 \$ 180,000.00 \$ 180,000.00 \$ 180,000.00 \$ 180,000.00 \$ 3,680,000.00 \$ 180,000.00 \$ 3,680,000.00 \$ 180,000.00 \$ 3,680,000.00	\$ 140,000.00 \$ 40,000.00 \$ 45,000.00 \$ 45,000.00 \$ 575,000.00 \$ 40,000.00 \$ 40,000.00 \$ 50,000.00 \$ 260,000.00 \$ 220,000.00 \$ 220,000.00 \$ 220,000.00 \$ 30,000.00	\$ 140,000.00 \$ 150,000.00 \$ 150,000.00 \$ 2,208,148.00 \$ 275,500.00 \$ 950,000.00 \$ 40,000.00 \$ 40,000.00 \$ 260,000.00 \$ 268,013.00 \$ 268,013.00 \$ 260,000.00 \$ 275,000.00 \$ 285,000.00 \$ 285,000.00 \$ 285,000.00 \$ 285,000.00 \$ 285,000.00 \$ 275,000.00 \$ 275,000.00

#### **MEMORANDUM**

TO: Board of Managers

FROM: Claire Bleser, District Administrator

Date: 09 December 20

RE: 2021 Budget and Levy

## Managers,

As requested at the September Board Meeting, I have reviewed with the Personnel Committee staffing needs and organizational growth now and for 2021. The attached Organizational Chart includes the proposed hiring of an Inspections and Soil Technician. The job description is attached to this memo as well as justification for the position. This position would allow for more frequent inspections and evaluations of sites while still being cost effective.

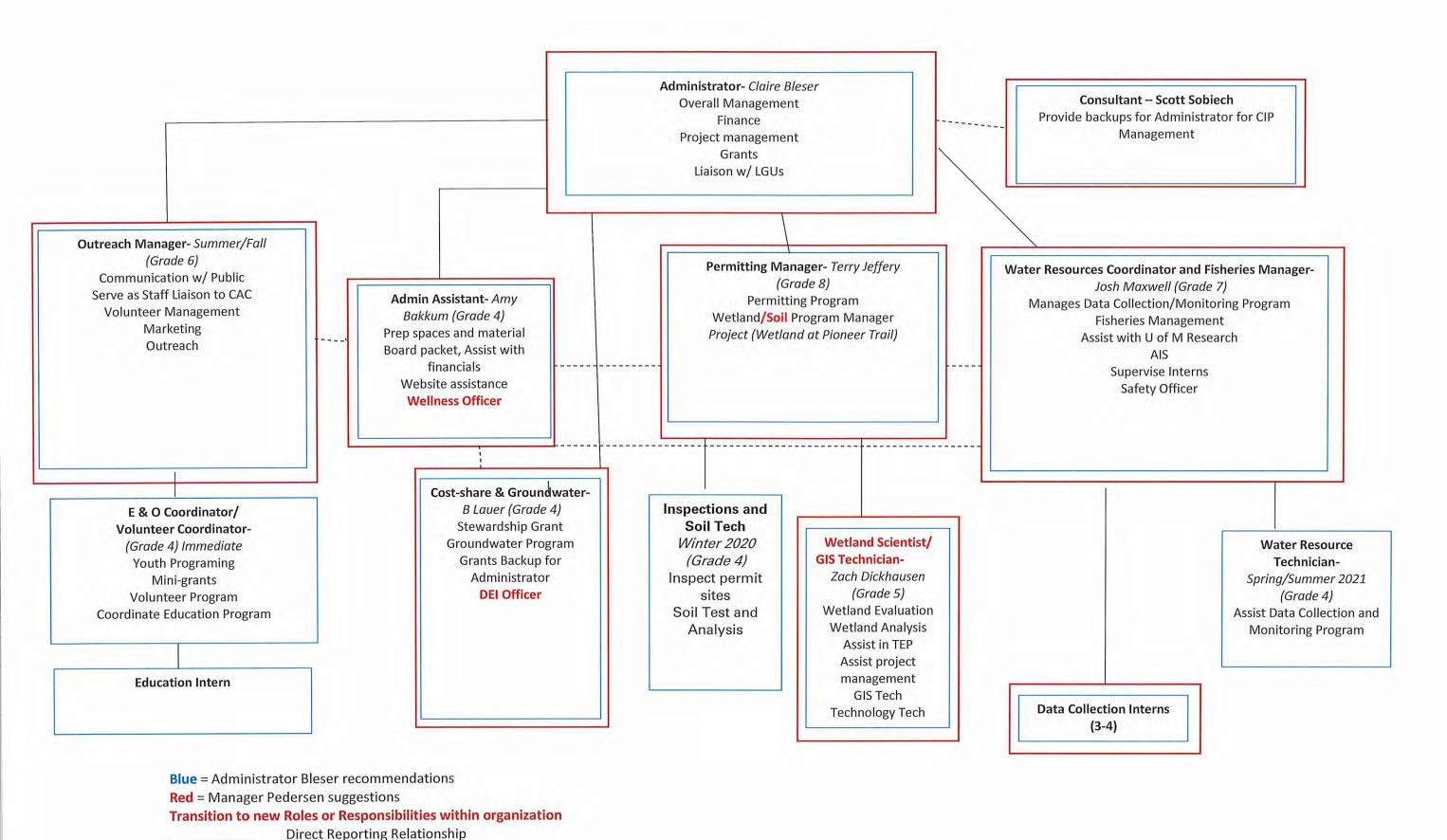
In addition, the Personnel Committee has discussed the Outreach Manager position and Education Outreach Coordinator position. After evaluation of both positions, the personnel recommended to move forward in the backfilling of the Education and Outreach position (job description attached) and to wait until Summer/Fall for the hire of the Outreach Manager. It is also recommended that a Water Resources Technician be hired in the Spring/Summer time frame.

Based on this timeline and additional roles, it is anticipated that the cost of staff for 2021 will be close to \$760,000 with no merit increase. This calculation is based on a 1.4 multiplier which accounts for health, PERA, and payroll taxes. The personnel committee is recommending a freeze on merit increases to be reevaluated in Spring. Proposed Budget for 2021 is \$800,000 for staff cost which allows room merit increase if the board to chooses to do so.

Based on discussions with the personnel committee and proposed organizational changes with a merit freeze to reevaluated in Spring, I recommend no changes to the budget and thus keep the District's levy as proposed in September at \$3,575,000 with a total budget of \$7,045,000.

Sincerely,

Claire Bleser District Administrator



------ Key collaboration relationships



#### MEMORANDUM

TO: Personal Committee

FROM: Terry Jeffery, Watershed Planning Manager

DATE: 09 December 2020

RE: Fulltime Construction Inspection and Soil Technician Position

The RPBCWD currently relies on Barr Engineering to provide construction site inspections. These are performed only one time per month and, because of the sheer volume of open permits, only inspects sediment control practices. Further, they only inspect permits within Hennepin County. RPBCWD staff inspect those sites within Carver County but on a similar frequency and schedule.

Further, the current inspections performed by the consultant do not review topsoil placement, soil decompaction, or stormwater BMP installation. The former two inspections are done by staff as requested by applicants and the inspection of BMP installation is reliant upon the contractor and, if applicable, a manufacturer representative.

For the regulatory program to maximize the protection of water resources it can provide it should follow an inspection frequency consistent with the National Pollution Discharge Elimination System Construction Permit (NPDES) recommendations. The NPDES permit suggests sites should be inspected at least weekly and within 24-hours of a rain event one-half inch or greater. It also follows that, if a site is found to be in noncompliance, a follow up inspection should occur at the time the site is told it must return to compliance. This does not currently happen as there is inadequate staffing to inspect with such frequency.

The hire of a fulltime construction inspection and soil technician will not only provide greater protection for the District resources, but it will also come at less expense than is currently born by the District. Depending upon the number of active sites and the time of the year, monthly inspection costs range from \$7,856 to \$17,004 each month under the current system with an average monthly cost of \$12,680 and an annual cost exceeding \$144,000.

The base salary of a fulltime inspector will fall within a range of \$42,400 to \$63,600 plus benefits. For the reasons stated above, I recommend the hire of a fulltime Construction Inspector and Soils Technician at the above pay range.

**POSITION TITLE:** Permit and Soils Technician

**POSITION STATUS:** Full Time

**REPORTS TO:** Watershed Planning Manager

**STATUS**: Exempt FLSA

**SALARY:** 42,400 - \$63,600, depending on qualifications, plus paid benefits package

#### POSITION OBJECTIVE

The Permit and Soils Technician is responsible for the inspection of active construction sites within the RPBCWD for compliance with erosion prevention and sediment control regulations and best practices, the installation of stormwater management BMPs in compliance with approved plans, and final inspection of sites prior to permit closeout.

#### JOB DUTIES AND RESPONSIBILITIES

## 1. Erosion Control Inspections (60%)

- a. Inspect active construction sites for compliance with RPBCWD erosion prevention and sediment control (EPSC) rules as well as industry best practices.
- b. Maintain database of inspection dates, findings, corrective actions, and follow up measures.
- c. Prepare inspection reports.
- d. Communicates and inspection findings and expectations with cities, builders, contractors, engineers, and the public concerning District permit related activities.
- e. Prepare and provide inspection reports.
- f. Attends pre-construction meetings and other interim meetings related to construction activities.
- g. Perform final site inspection to close out permit.

## 2. Stormwater Management/BMP Inspections (20%)

- a. Inspects construction of stormwater best management practices to assure construction to approved plan.
- b. Measure or otherwise confirm infiltration rate and draw down time of stormwater practices reliant upon infiltration to assure compliance.
- c. Measure green space areas for application of appropriate topsoil placement and decompaction.

### **3. Other Duties (20%)**

- a. Assist with wetland assessment program as assigned.
- b. Assist with other field work as assigned.

MINIMUM QUALIFICATIONS: A degree in Natural Resources/Environmental Science, Construction Management, or related field is required, with at least three (3) years of related work experience. Must be proficient in written and oral communication skills. Must possess excellent organizational skills and demonstrate an ability to work independently with limited supervision. Must be willing to travel throughout the watershed and organize/attend occasional evening and weekend meetings. Must possess valid driver's license and ability to operate a motor vehicle. Perform outdoor activities that require walking in diverse field conditions, exposures not limited to heat and wet conditions, and position changes, lifting, pushing, and pulling requirement up to 50 pounds on a regular basis.

### KNOWLEDGE, SKILLS AND ABILITIES

- 1. Knowledge of Microsoft products.
- 2. Ability to read civil engineering plans.
- 3. A familiarity with water quality models P8 and MIDS Calculator.
- 4. A knowledge of soil science and soil health.
- 5. A knowledge of public process in government, watershed planning, stormwater management, and urban resource management.
- 6. Ability to analyze technical reports.
- 7. Completion of the University of Minnesota's Erosion and Sediment Control Construction Site Management certification or ability to complete within six (6) months of hire.

## **SALARY**

The salary range for this position is \$42,400 – \$63,600 annually, depending on qualifications and experience, plus benefits.

## **APPLICATION**

Please send cover letter with resume along with the name of 3 references to:

Claire Bleser District Administrator Riley-Purgatory Bluff Creek Watershed District

cbleser@rpbcwd.org

**POSITION TITLE:** Permit and Soils Technician

**POSITION STATUS:** Full Time

**REPORTS TO:** Watershed Planning Manager

**STATUS**: Exempt FLSA

**SALARY:** 42,400 - \$63,600, depending on qualifications, plus paid benefits package

## **POSITION OBJECTIVE**

The Permit and Soils Technician is responsible for the inspection of active construction sites within the RPBCWD for compliance with erosion prevention and sediment control regulations and best practices, the installation of stormwater management BMPs in compliance with approved plans, and final inspection of sites prior to permit closeout.

## JOB DUTIES AND RESPONSIBILITIES

## 1. Erosion Control Inspections (60%)

- a. Inspect active construction sites for compliance with RPBCWD erosion prevention and sediment control (EPSC) rules as well as industry best practices.
- b. Maintain database of inspection dates, findings, corrective actions, and follow up measures.
- c. Prepare inspection reports.
- d. Communicates and inspection findings and expectations with cities, builders, contractors, engineers, and the public concerning District permit related activities.
- e. Prepare and provide inspection reports.
- f. Attends pre-construction meetings and other interim meetings related to construction activities.
- g. Perform final site inspection to close out permit.

## 2. Stormwater Management/BMP Inspections (20%)

- a. Inspects construction of stormwater best management practices to assure construction to approved plan.
- b. Measure or otherwise confirm infiltration rate and draw down time of stormwater practices reliant upon infiltration to assure compliance.
- c. Measure green space areas for application of appropriate topsoil placement and decompaction.

#### 3. Other Duties (20%)

- a. Assist with wetland assessment program as assigned.
- b. Assist with other field work as assigned.

MINIMUM QUALIFICATIONS: A degree in Natural Resources/Environmental Science, Construction Management, or related field is required, with at least three (3) years of related work experience. Must be proficient in written and oral communication skills. Must possess excellent organizational skills and demonstrate an ability to work independently with limited supervision. Must be willing to travel throughout the watershed and organize/attend occasional evening and weekend meetings. Must possess valid driver's license and ability to operate a motor vehicle. Perform outdoor activities that require walking in diverse field conditions, exposures not limited to heat and wet conditions, and position changes, lifting, pushing, and pulling requirement up to 50 pounds on a regular basis.

## KNOWLEDGE, SKILLS AND ABILITIES

- 1. Knowledge of Microsoft products.
- 2. Ability to read civil engineering plans.
- 3. A familiarity with water quality models P8 and MIDS Calculator.
- 4. A knowledge of soil science and soil health.
- 5. A knowledge of public process in government, watershed planning, stormwater management, and urban resource management.
- 6. Ability to analyze technical reports.
- 7. Completion of the University of Minnesota's Erosion and Sediment Control Construction Site Management certification or ability to complete within six (6) months of hire.

### **SALARY**

The salary range for this position is \$42,400 – \$63,600 annually, depending on qualifications and experience, plus benefits.

## APPLICATION

Please send cover letter with resume along with the name of 3 references to:

Claire Bleser District Administrator Riley-Purgatory Bluff Creek Watershed District

cbleser@rpbcwd.org

**Organization:** Riley-Purgatory-Bluff Creek Watershed District

**Position Title:** Education & Outreach Coordinator

**Reports To:** District Administrator

**Type of Position:** Full-time, exempt from the provisions of the Fair Labor Standards Act

Salary Range: \$42,400 - \$63,600, depending on qualifications, plus paid benefits package

## **POSITION OBJECTIVE**

This position coordinates the water resource education and outreach programs of the Riley-Purgatory-Bluff Creek Watershed District, under the direction of the Communications & Project Manager and the District Administrator. The primary objective of this position is to assist in the improvement and protection of the water resources of the Riley-Purgatory-Bluff Creek Watershed by providing water resource education and outreach programs and resources to citizens, community leaders, municipal staff, landowners, schools and others in the Riley-Purgatory-Bluff Creek Watershed District. Additionally, this position supports the communications program and works to build District capacity through the implementation and management of a volunteer program.

## JOB DUTIES AND RESPONSIBILITIES Outreach (90%)

- 1. Coordinate, design and implement formal and informal education and outreach programs and activities. Programs can include but are not limited to:
  - a. School presentations, fieldtrips, community tabling events, such as city open houses and sustainability fairs, and presentations to nonprofits groups and other organizations
  - b. Strategies for non-structural, non-point source pollution control, e.g. Water Festivals, storm drain marking projects
  - c. Professional trainings for maintenance, operations, and public works staff in both the public and private sector (e.g., snow and ice removal training)
  - d. Develop educational materials and literature for the District
  - e. Coordinate registration and logistics for a wide variety of programs and events

## 2. Communicate with target audiences via formal and informal communication efforts.

- a. Manage District social media accounts to promote district work and goals, via Facebook, Instagram, and Twitter
- b. Work to effectively reach, understand, and engage diverse and/or underserved audiences
- c. Assist with website updates
  - i. Update website with monthly agenda, meeting minutes, public notices, and other information as required.
  - ii. Manage online public calendar of upcoming events and meetings
  - iii. Assist with generation of web content

- d. Contribute newsletter articles and other content to the District's e-newsletter
- e. Assist with the District's Annual Report and other written communications
- f. Assist with project-specific communications of District projects

## 3. Manage and grow volunteer program at the District

- a. Recruit, coordinate, and manage volunteer participants for Adopt-a-Dock, Master Water Stewards, service learners, and other programs.
- b. Provide and manage opportunities for volunteers
- c. Organize one-time volunteer events, such as tree-plantings
- d. Grow and formalize volunteer program by fostering new partnerships and improving structure of current programs
- e. Act as staff liaison to Citizen Advisory Committee and coordinates activities

## 4. Coordinate education and outreach partnering opportunities.

a. Develop and maintain positive relationships with other entities—cities, schools, universities, agencies, organizations and associations—to promote the RPBCWD's mission and goals through outreach activities

## 5. Other duties and responsibilities (10%)

- a. Participates as a member of the staff team for District projects and programs by cooperating with other staff and consultants, contributing ideas, providing comments when requested, and helping where needed
- b. Provides educational materials and literature reviews as needed for staff, to clients, to the public, for website development, or for program evaluation
- c. Works collaboratively with and provides directions as needed to consultants and interns or volunteers
- d. Researches and stays up to date with developments in the field of water resources
- e. Other duties include but are not limited to:
  - i. Effectively represents water and watershed issues at meetings, conferences, and to other local units of government, City Departments, the Riley-Purgatory-Bluff Creek Watershed District Board of Managers, partner organizations, and the public
  - ii. Prepares reports and summaries for the Communication and Project Manager, District Administrator and Board of Managers as needed

MINIMUM QUALIFICATIONS: 3 years of experience preferred implementing water resource and/or environmental education, outreach and communications programs to a variety of audiences, managing and recruiting volunteers. Bachelor's degree in natural resources with an emphasis in communication, bachelor's degree in Education with experience in natural resources. A graduate degree in a related field may be considered in lieu of work experience. Knowledge of technical and regulatory water quality and storm water issues. Demonstrated written, verbal, and presentation skills. Demonstrated networking, team-building, research, coordination, and multi-tasking skills. Ability to work with a diverse public audience. Must have a reliable vehicle and a valid US driver's license with no recent suspensions.

**DESIRED QUALIFICATIONS:** Understanding of social marketing and behavioral change strategies. Experience with non-formal, non-traditional teaching settings (e.g., outside of classroom, adult learners). Training in volunteer management. Knowledge of Adobe Suites other similar publishing software, and experience in web updates and content design. Previous experience with local units of government and stormwater education or urban environmental education.

## KNOWLEDGE, SKILLS AND ABILITIES

- 1. Proficiency with a personal computer and Microsoft software packages for word processing, spreadsheet, database management and computer generated graphics, specifically, but not limited to, Microsoft Office, Excel, Word, Access, PowerPoint, Adobe InDesign, Illustrator and Photoshop.
- 2. Ability to effectively use email and Internet applications and other common software applications.
- 3. Ability to take direction, work independently with a minimum of supervision, use good time management practices, possess the ability to set priorities and balance large volumes of diverse work.
- 4. Ability to work collaboratively to develop education and outreach programming with local and agency staff, consultants and associates.
- 5. Ability to develop and maintain effective working relationships with the District Administrator, the Community Outreach Coordinator, RPBCWD Board of Managers, Citizens Advisory Committee, city and agency staff, members of the public, and other interested parties.
- 6. Ability to effectively communicate verbally and in written form to a wide variety of audiences ranging from elected officials to K12 students.
- 7. Creativity in developing and presenting educational information and exhibits.

(The above is intended to describe the general content of and requirements for the performance of this job. It is not to be construed as an exhaustive statement of duties, responsibilities or requirements and does not imply a contract.)

#### **MEETING MINUTES**

#### Riley-Purgatory-Bluff Creek Watershed District

## November 4, 2020, RPBCWD Board of Managers Monthly Meeting and CAC Workshop

PRESENT:

Managers: Jill Crafton, Treasurer

Larry Koch

Dorothy Pedersen, Vice President

Dick Ward, President

David Ziegler, Secretary

Staff: Amy Bakkum, Administrative Assistant

Claire Bleser, RPBCWD Administrator

Zach Dickhausen, Water Resources Technician II

Terry Jeffery, Watershed Planning Manager

B Lauer, Groundwater and Stewardship Program Coordinator

Josh Maxwell, Water Resources Coordinator

Louis Smith, Attorney, Smith Partners

Scott Sobiech, Engineer, Barr Engineering Company

Other attendees: Kim Behrens Sharon McCotter

Elizabeth Henley Marilynn Torkelson

Jen Koehler

Note: this meeting was held remotely via meeting platform Zoom in abidance with state mandates

in response to Covid-19.

#### 1. Call to Order

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President Ward called to order the Wednesday, November 4, 2020, Board of Managers Regular Monthly Meeting at 5:00 p.m. The meeting was held remotely via meeting platform Zoom.

#### 2. CAC Workshop

President Ward opened the CAC workshop. Manager Koch objected to the Board holding the workshop because it is a special meeting that was not noticed per statutory requirements. He said he will leave the workshop and will join the Board at its 7:00 p.m. monthly meeting. Ms. B Lauer said the purpose of the workshop is for the Board to discuss how it would like to move forward with gaining input and feedback from the CAC. Ms. Lauer noted that CAC President Sharon McCotter elected not to attend this workshop. There was discussion about whether the Board wanted input from CAC members during this workshop and whether CAC members were supposed to attend this workshop or not. Ms. Lauer said the CAC members are welcome to participate, but the purpose of the workshop is to provide opportunity for manager discussion.

Administrator Bleser went through the workshop agenda, explaining the workshop will include presentation of background information and context and will include polls and discussion. Administrator Bleser reminded the Board of the CAC's motion in July requesting regular work direction from the Board about specific items on which the Board would like the CAC's input. She asked the Board to consider when it is most helpful to have input from the CAC.

Ms. Kim Behrens talked about the types of tasks the CAC engages in and how the tasks are directed. She let the Board know the CAC is interested in taking on a more active role in the work of the RPBCWD as stakeholders in projects, education and outreach strategies, grants, and new initiatives. Ms. Behrens shared that the CAC is asking that its unique knowledge is used and asked for to ensure community input is heard on decisions that impact the RPBCWD. President Ward noted that previous discussions centered around process and how it could better allow for the CAC to have the opportunity to make comments and recommendations to the Board before it acts on items.

The Board weighed in about topics it would like the CAC to advise the Board on. The managers discussed topics as well as formats the Board would like to receive input from the CAC and at what point in the decision-making process the Board would like to receive input from the CAC.

Administrator Bleser suggested she send the managers a link to this information for the managers to take time to consider the information and for the District to discuss these topics again. She recommended the District hold a 5:00 p.m. workshop on December 9<sup>th</sup>, prior to the Board's 7:00 p.m. monthly meeting on December 9<sup>th</sup>. The managers indicated consent to staff setting up and noticing a workshop for 5:00 p.m. on December 9<sup>th</sup>.

The workshop concluded at 5:46 p.m.

#### 3. Approval of Agenda

 President Ward continued the Board of Managers Monthly Meeting at 7:00 p.m.

Manager Crafton moved to approve the agenda. Manager Pedersen seconded the motion.

Manager Koch objected to the agenda and the holding of this meeting. He said he thought this meeting was to be a regular meeting starting at 7:00 p.m.. He stated that the meeting should not be a continuation of a special meeting. Manager Koch explained his objection to the special meeting is because he didn't believe the District met its requirement to provide eight days written notice of a special meeting. He noted that the meeting agenda created confusion by stating the meeting starts at 7:00 p.m., but then listing that one of the agenda items is a workshop starting at 5:00 p.m.

Manager Koch requested removing all items off the Consent Agenda and moving the items to 9a, including items, 8a – Accept October Staff Report, 8b – Accept October Engineer's Report, 8c – Accept October Construction Inspection Report, 8d – Approve Pay App #10 Scenic Heights, 8e – Approve Permit 2020-054 Lake Minnetonka Care Center as Presented in the Proposed Board Action of the Permit Report, and 8f – Approve Cooperative Agreement with St. Hubert Catholic Community. Manager Koch requested reversing the order of items 10a – Managers' Report – and 10b – Administrator's Report – and adding to item 11c – Upcoming Board Topics – other – the

topics of 11ci – Budget, 11cii – 2020 Work Plan, 11ciii – Annual Review of the Administrator,
 and 11civ - IT consultant that was previously approved by the Board.

Administrator Bleser requested adding to the agenda Action Item 9e - hire an administrative assistant.

.Upon a roll call vote, the motion carried 4-0 as follows:

Manager	Action
Crafton	Aye
Koch	Aye
Pedersen	Aye
Ward	No
Ziegler	Aye

# 4. Kerber Pond Ravine Feasibility Presentation

Mr. Jeffery described the project's history and introduced Ms. Jen Koehler of Barr Engineering to present the Kerber Pond Ravine feasibility study.

Ms. Koehler reminded the Board that Lotus Lake is impaired for excess sediments, and she reported that the proposed Kerber Pond Ravine project scored 34 using the District's prioritization tool. She displayed photos of the project area and talked about the subwatershed and its water flow patterns. She presented the two concepts explored in the feasibility study, including:

Concept 1: Channel Stabilization; and,

Concept 2: Low Flow Channel, High-Flow Storm Sewer.

She displayed a table comparing the two concepts, pointing out the estimated annual total phosphorous reduction for both concepts is 2.9 pounds per year, and the Engineer's opinion of estimated annual cost per pound of phosphorous removed for Concept 1 is \$6,200 (with the +/- range of \$3,400-\$32,400) and for Concept 2 \$10,700 (with the +/- range of \$5,800-\$55,100). She noted that Concept 1 is the more cost effective solultion. She presented the Engineer's opinion of total probable cost: Concept 1 was \$395,000 (\$280,000-\$590,000) and Concept 2 was \$678,000 (\$470,000-\$1,020,000).

Ms. Koehler reported the proposed project would achieve approximately 50% of the erosion source load reduction required by the Lotus Lake TMDL, and the District will want to monitor pollutant loading through the ravine under existing conditions and after implementation to

monitor the project impacts. She explained the City of Chanhassen communicated it has a potential street reconstruction project coming up on Frontier Trail, and if the Kerber Pond Ravine project moves forward, the City would like it to coincide with the timing of the Fronter Trail street reconstruction project, which could potentially occur in 2023-2025. Ms. Koehler noted the entire project area is on private property, so coordination between the District and the City is vital to make sure all necessary access is secured.

Mr. Jeffery stated staff recommends the District return the feasibility study to the City for the City to take the lead on any project, and the District could participate through some type of cost share. He and Ms. Koehler responded to manager questions, and Mr. Jeffery discussed in more detail Wetland Conservation Act and Army Corps of Engineers implications.

Administrator Bleser said she will distribute the feasibility study to the managers.

#### 5. Matters of General Public Interest

No matters of general public interest were raised.

# 6. Reading and Approval of Minutes

# a. October 7, 2020, RPBCWD Board of Managers Budget Workshop

Manager Pedersen noted on line 168, the word "approved" should be corrected to "approve," the words "to act" should be deleted on line 176, and the word "to" should be added to line 342. Manager Ziegler moved to accept the minutes as amended. Manager Crafton seconded the motion. <u>Upon a roll call vote, the motion carried 5-0 as follows:</u>

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Manager	Action
Crafton	Aye
Koch	Aye
Pedersen	Aye
Ward	Aye
Ziegler	Aye

#### 

b. October 14, 2020, RPBCWD Board of Managers Continuation of October 7<sup>th</sup> Regular Monthly Meeting

Manager Ziegler moved to accept the minutes as presented. Manager Pedersen seconded the motion.

Manager Koch moved to amend the motion to strike the minutes and deem the meeting null and void. He explained his objection to the Board holding the meeting is due to the lack of adequate meeting notice. The motion died due to lack of a second. Attorney Smith stated it was determined that the October 14<sup>th</sup> meeting was duly noticed.

Upon a roll call vote, the motion carried 4-1 as follows:

Manager	Action
Crafton	Aye
Koch	No
Pedersen	Aye
Ward	Aye
Ziegler	Aye

#### **7. CAC**

President Ward noted the CAC did not hold a meeting in October and there are no CAC meeting minutes.

#### 8. Consent Agenda

All Consent Agenda items were moved to Agenda Item 9a.

#### 9. Action Items

#### a. Pulled Consent Agenda Items

#### i. Accept October Staff Report

Manager Koch said as far as he knows, the District doesn't have a full set of internal controls and measure. He has asked for them and hasn't received them. He said no one has shown him where they have been adopted and where they are, and so he doesn't see how the Board can review reports based on internal controls and measures if the District doesn't have them.

Manager Koch asked for more information on the discussion about Chanhassen taking over permitting authority over the District's rules. Mr. Jeffery responded that the City's plan is to adopt the District's rules by reference, so the City's rules would be equally protective. Manager Koch provided his opinion about the City's

inability to enforce rules, and he would like the Board to discuss the issue further.

Manager Koch asked for more details about AIS monitoring and the pike netting. Mr. Maxwell described the District's fish monitoring schedule and said there was no netting on Lotus Lake this year. Manager Koch asked if the District knows when the University of Minnesota will be providing the District with a report on the iron-enhanced sand filings project. Administrator Bleser said the University is still doing analysis, but there may be an update coming out in January or February. Manager Koch asked for more information about the wetland services project, and Mr. Jeffery provided details. Manger Koch commented he is wondering if the District could take a lead in a lidar project to monitor the wetlands and how they expand and shrink. Mr. Jeffery responded that staff is looking at lidar technology in relation to the District's work.

Manager Ziegler moved to approve the October staff report. Manager Pedersen seconded the motion. Manager Koch made the friendly amendment that the Board accept the staff report rather than approve it. Managers Ziegler and Pedersen agreed to the friendly amendment. <u>Upon a roll call vote</u>, the motion carried 5-0 as follows:

Manager	Action
Crafton	Aye
Koch	Aye
Pedersen	Aye
Ward	Aye
Ziegler	Aye

#### ii. Accept October Engineer's Report

Manager Koch asked about the report's reference to a meeting about ASTM standards for products, and he asked if there is a timeline for standards being adopted. Engineer Sobiech said the committee is in the initial stages of being set up and there is no timeframe set for delivering a set of standards around manufactured treatment devices. He added that the Minnesota Pollution Control Agency has a working group formed to set up some type of standardization to incorporate into the Minnesota Stormwater Manual by early to mid-2021.

Manager Koch asked for more details about staff tracking time spent on preapplication calls and communications, and Engineer Sobiech provided information.

Manager Crafton moved to accept the October Engineer's report. Manager
Ziegler seconded the motion.. <u>Upon a roll call vote, the motion carried 5-0 as</u>
follows:

Manager	Action
Crafton	Aye
Koch	Aye
Pedersen	Aye
Ward	Aye
Ziegler	Aye

## iii. Accept October Construction Inspection Report

Manager Koch moved to accept the October Construction Inspection Report.

Manager Ziegler seconded the motion. <u>Upon a roll call vote</u>, the motion carried 5-0 as follows:

Manager	Action
Crafton	Aye
Koch	Aye
Pedersen	Aye
Ward	Aye
Ziegler	Aye

# iv. Approve Pay App #10 – Scenic Heights

Manager Koch asked for an explanation about the basis for the limitation on the retainage. Engineer Sobiech explained the limitation has been the standard language since the state made a revision. Manager Koch said he would like the District to remove that limitation. Attorney Smith said the language is written in to the specs at the front of the process, and the District is free to adjust it. Manager Koch requested that next time staff provide options on the retainage for the Board to consider. Attorney Smith suggested that he and Engineer Sobiech

prepare information on the matter to provide to the Board for its review and discussion at a future Board meeting. The Board indicated consent to direct legal counsel and the engineer to prepare the information to provide to the Board.

Manager Koch moved to approve Pay App #10 Scenic Heights. Manager Ziegler seconded the motion. <u>Upon a roll call vote</u>, the motion carried 5-0 as follows:

Manager	Action
Crafton	Aye
Koch	Aye
Pedersen	Aye
Ward	Aye
Ziegler	Aye

# v. Approve Permit 2020-054 Lake Minnetonka Care Center as Presented in the Proposed Board Action of the Permit Report

Manager Koch asked if there are concerns about capturing pollutants or biohazards in underground storage and if the District has requirements to address the issue. Engineer Sobiech said that as a private developer, the developer is required to enter into a maintenance declaration and have it recorded on the property. He talked further about the required maintenance, noting groundwater monitoring is not required. Manager Koch said he thinks it is worth the District discussing whether it should require groundwater monitoring.

Manager Koch moved to approve Permit 2020-054 Lake Minnetonka Care Center with the Engineer's recommendations and conditions presented in the Engineer's memo. Manager Ziegler seconded the motion. <u>Upon a roll call vote, the motion</u> carried 5-0 as follows:

Manager	Action
Crafton	Aye
Koch	Aye
Pedersen	Aye
Ward	Aye
Ziegler	Aye

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# vi. Approve Cooperative Agreement with St. Hubert Catholic Community

Manager Koch said there were inconsistencies within the Cooperative Agreement and terms missing, and he recommended adding to the agreement construction area controls. He recommended referring the agreement back to legal counsel for review and consideration of the comments he has made. The motion died due to lack of second.

Manager Ziegler moved to approve the Cooperative Agreement with St. Hubert Catholic Community subject to the review of the District's legal counsel and engineer and with their non-substantive changes. Manager Pedersen seconded the motion. Manager Koch remarked he will vote no not because he is against the project but because he feels there is room in the Cooperative Agreement for significant improvement and feels it is an inadequate agreement under these circumstances Upon a roll call vote, the motion carried 4-1 as follows:

Manager	Action
Crafton	Aye
Koch	No
Pedersen	Aye
Ward	Aye
Ziegler	Aye

#### 

#### b. Accept September Treasurer's Report

Manager Crafton moved to accept the September Treasurer's Report. Manager Ziegler seconded the motion. Manager Koch commented he has an issue with the District cutting checks before the Board approves payment, and he asked if the procedure of issuing checks prior to their approval is documented in the District's financial policies. Administrator Bleser responded she will review the District's escrow agreements and the Districts policies and will report back at the Board's December meeting. Manager Koch asked for more details about what services the District received for the invoice from Redpath and Company, and he provided comments about items that should be included in the District's budget and how the District should be eliminating redundancies and inefficiencies and should be saving money. Manager Koch provided additional comments about the balance sheet and stated the District needs to make sure it has certification that the District's money market account funds are all covered under FDIC. Manager Koch

said it is not proper accounting to report Visa as a vendor and the charges should be reported by vendor and the amount of the Visa charge should be listed as the amount the District owes the vendor. He recommended Administrator Bleser bring this item up to the accountant and the auditor.

Upon a roll call vote, the motion carried 4-1 as follows:

Manager	Action
Crafton	Aye
Koch	No
Pedersen	Aye
Ward	Aye
Ziegler	Aye

# c. Approve Paying of the Bills

Manager Crafton moved to pay the bills. Manager Ziegler seconded the motion. Manager Koch said he has a hard time approving paying bills for items for which the District doesn't have a budget, particularly the professional services. <u>Upon a roll call vote, the motion carried 4-1.</u>

Manager	Action
Crafton	Aye
Koch	No
Pedersen	Aye
Ward	Aye
Ziegler	Aye

#### d. Elect Two MAWD Delegates and an Alternate and MAWD Participation

Administrator Bleser requested the managers let her know if they are planning to attend the MAWD annual meeting. Manager Pedersen moved to elect Manager Crafton and Manager Ziegler as the Board's delegates. Manager Koch seconded the motion.

## Upon a roll call vote, the motion carried 5-0 as follows:

Manager	Action
Crafton	Aye
Koch	Aye
Pedersen	Aye
Ward	Aye
Ziegler	Aye

Manager Koch moved to elect President Ward as the alternate delegate. Manager Crafton seconded the motion. Upon a roll call vote, the motion carried 5-0 as follows:

Manager	Action
Crafton	Aye
Koch	Aye
Pedersen	Aye
Ward	Aye
Ziegler	Aye

# e. Administrative Assistant

Administrator Bleser asked the Board to approve the District moving forward to hire an administrative assistant. Manager Crafton stated she submitted her comments on the role's job description to Administrator Bleser and reported that because the Personnel Committee meeting wasn't noticed, the Committee hasn't met to discuss the job description and responsibilities.

Manager Koch moved to lay this item over until the Board's December meeting, direct the Personnel Committee to meet to discuss and finalize the job description, and direct Administrator Bleser to update the table of anticipated positions and salaries. Manager Crafton seconded the motion. There was a lengthy discussion about the job description, the urgency for hiring an administrative assistant, methods of budgeting for employee

costs that managers have seen in other areas of their careers, and the level of detail managers should receive regarding each employee's benefits. <u>Upon a roll call vote, the motion failed 2-3 as follows:</u>

Manager	Action
Crafton	Aye
Koch	Aye
Pedersen	No
Ward	No
Ziegler	No

Manager Pedersen moved to authorize hiring an administrative assistant with the salary range provided by Administrator Bleser and the Personnel Committee finalizing the position description to provide to the Board at the December meeting. Manager Ziegler seconded the motion. Manager Koch said he thinks the process should move forward as he described. Upon a roll call vote, the motion carried 4-1.

Manager	Action
Crafton	Aye
Koch	No
Pedersen	Aye
Ward	Aye
Ziegler	Aye

#### 10. Discussion Items

#### a. Administrator Report

 Administrator Bleser noted the dates Sharon Klump is available for conducting the Administrator review. The Board agreed to hold the Administrator review on November 16, 2020, at 9:00 a.m.

Administrator Bleser talked about the air purifiers now in place in the District office. She provided an update on the wrapping up of the District's field season. Administrator Bleser reported the District is coordinating a viewing of Kiss the Ground in collaboration with the City of Minnetonka and the Nine Mile Creek Watershed District. She said the viewing will likely be scheduled for December.

#### b. Manager Reports

Manager Koch asked if the District has looked for an IT consultant. Administrator Bleser talked about the IT services the City of Eden Prairie is open to sharing with the District. Manager Koch stated the District should not be relying on the City of Eden Prairie and needs to hire an outside IT consultant with a wide range of experience and advise the District on its systems, software, and security. He raised his concerns about the District missing meeting some of its statutory requirements such as timely responses to Data Practices Act requests.

#### c. Rice Marsh Lake Update

Engineer Sobiech displayed a PowerPoint presentation and reminded the Board that earlier this year staff presented the Rice Marsh Lake feasibility study to the Board. He provided background on Rice Marsh Lake, explaining the lake is impaired for excess nutrients and talking about the reductions needed to meet the water quality standard criteria. Engineer Sobiech talked about the data collected from RPBCWD monitoring, and he explained the ways in which the watershed model was modified to improve phosphorous load estimates. He described the alternatives reviewed in the feasibility study and the metrics examined. Engineer Sobiech summarized the scoring system staff applied to the metrics and reported that the alternative that scored at the top was a proprietary device by Bio Clean Environmental called the Kraken, a stormwater chamber with filtration cartridges for the water to filter through. He talked about the investigation staff undertook to evaluate the Kraken as a BMP and described the findings.

Engineer Sobiech said staff supports the recommendation provided in the feasibility study, which is to utilize a Kraken or similar proprietary device. He added that the City of Chanhassen is supportive of the project. Engineer Sobiech stated he suggests the Board hold a public hearing in December if the Board is interested in moving forward with the project. He explained that if the Board orders the project, the District will need a cooperative agreement with the City of Chanhassen and move forward to doing the detailed design of the project for constructing the project in late 2021, ideally.

Manager Koch asked several questions, and Engineer Sobiech and Administrator Bleser responded. Manager Koch remarked the District needs to get its arms around the data and nail it down. He said he would like to know if the City of Chanhassen should dredge the pond. He commented it seems the District doesn't have all the pieces of information to be able to evaluate. Manager Koch said he is leery about proprietary products and he thinks the District should wait for all the data before ordering the project. He added he is concerned about money due to the fall out of Covid-19, and he believes the District should see the economics of 2021 before ordering the project. He asked what the next steps are in getting all the information. Engineer Sobiech clarified the project process,

explaining the next step would be design and specifications, followed by getting bids, followed by awarding or not awarding the project. Administrator Bleser said the District would hold a public hearing in December to gather public comments on the proposed project. Manager Koch said the District should be gathering the data on the effectiveness of the alum treatment and see if the data justifies the project.

Manager Pedersen commented in support of moving forward with the project process. Mr. Jeffery remarked the District needs to address the external loading to Rice Marsh Lake.

Manager Pedersen moved to approve going forward with the design portion of the Pond RML 12 sediment plan. Manager Crafton seconded the motion. Manager Koch said this item is an informational item. Attorney Smith pointed out the Board will need to order the public hearing if it plans to hold one in December. He explained the public hearing is needed before ordering the project design. Manager Pedersen made the friendly amendment to her motion to direct staff to order the public hearing to be held at the Board's December monthly meeting. Manager Crafton agreed to the friendly amendment.

Manager Koch said the District needs more data. He clarified that the motion on the table is to approve holding a public hearing in December. President Ward said yes.

#### Upon a roll call vote, the motion carried 4-0.

Manager	Action
Crafton	Aye
Koch	Abstain
Pedersen	Aye
Ward	Aye
Ziegler	Aye

# 

# d. Plan Amendments: DEI, Rules, Soil,

Administrator Bleser summarized the proposed plan amendments included in the meeting packet. Ms. B Lauer presented on the proposed Diversity, Equity, and Inclusion (DEI) amendment. Managers provided feedback, and Manager Koch said he would like to hear the CAC's input. He said he finds the information in the proposed plan amendment a little vague, and he would like an opportunity for managers to have an interactive dialog and to engage the community in an interactive dialog.

Ms. Sharon McCotter said the CAC believes there should be a discussion about what constitutes equity and identify where opportunities are available. She said the CAC is interested in being involved in these efforts.

346 President Ward asked staff what next steps are being proposed regarding the District's 347 DEI. Administrator Bleser said she sees the next steps to be furthering the conversations about DEI by engaging the CAC in the discussion, engaging the Board in discussion, and 348 possibly touching base with the cities for conversation. She said she is hearing the Board 349 350 is in consensus with staff moving forward to engage about DEI at a broader level and then bringing the topic back to the Board. 351 352 e. Other 353 President Ward laid over any further plan amendment presentations to the Board's 354 December monthly meeting. He noted the managers will be participating in the MAWD Virtual Annual Conference December 1-4. 355 356 11. Upcoming Board Topics 357 President Ward noted that the upcoming Board topics and events were listed on the meeting agenda and amended under item 3 – Approval of the Agenda. Upcoming topics 358 and events include: 359 360 Public Hearing for Ordering Rice Marsh Lake Water Quality (December), Bloomington 361 Flood Mapping and Prioritization Tool, Public Hearing on Rice Marsh Lake, Budget, Annual Review of the Administrator, and IT consultant as previously approved by the 362 363 Board. 364 12. Upcoming Events Citizen Advisory Committee Meeting, November 16, 2020, 6:00 p.m., virtual meeting 365 366 Explore Your Waterway with the U.S. EPA, Webinar, November 17, 2020, 12:00 p.m., virtual MAWD Virtual Annual Conference, December 1-4, 2020, virtual 367 368 Board of Managers Public Hearing and Regular Meeting, December 9, 2020, 7:00 p.m., virtual 369 13. Adjournment

Manager Crafton moved adjourn the meeting. Manager Pedersen seconded the motion. Upon a

roll call vote, the motion carried 5-0 as follows:

370

371

Manager	Action
Crafton	Aye
Koch	Aye
Pedersen	Aye
Ward	Aye
Ziegler	Aye

The meeting adjourned at 10:22 p.m.

Respectfully submitted,

David Ziegler, Secretary

# DRAFT Minutes: Monday, November 16, 2020 RPBCWD Citizen's Advisory Committee Monthly Meeting ZOOM Mtg.

**CAC Members** (By each name, put a P=Present, E=Excused, not present but with notification) or A=Absent with no notification)

Jim Boettcher	Р	Peter Iverson	E	Sharon McCotter	Р	
Kim Behrens	Р	Michelle Frost	Р	Jan Neville	Р	
Heidi Groven	Р	Terry Jorgenson	Р	Marilynn Torkelson	Р	
Barry Hofer	Р	Matt Lindon	Р	Vanessa Nordstrom	А	

Claire Bleser	RPBCWD Administrator	Р
B Lauer	RPBCWD staff	Р
Dorothy Pedersen	Board of Managers	Р

#### Key MOTIONS for the Board of Managers: None

1.

#### Key discussion items:

1. All Subcommittees are on inactive status until further notice. Jan made motion and Jim seconded. Motion carried. Water Stewardship Grant (WSG) committee remains active.

**Key Consensus item**: CAC December meeting date changed from Dec 21 to Dec 14.

#### I. Opening

- **A.** Call CAC meeting to Order: President Sharon McCotter called the meeting to order at 6:02 pm.
- **B. Attendance:** As noted above.
- C. Matters of general public interest: None
- **D. Approval of Agenda:** Jan moved and Barry seconded to approve the agenda as amended. Motion carried.
- **E. Approval of September 2020 CAC Meeting Minutes**: Jim moved and Sharon seconded to approve the minutes. Motion carried.
- **F.** Jan Neville volunteered to be our timekeeper.

#### II. Board Meeting Recap and Discussion

- A. **Matt October BOM mtg recap** Duck Lake Bridge project was approved, Lake Susan park pond filter with iron enhanced bench treatment approved and new vehicle for district employees approved.
- B. **BOM workshop of CACs Role** -B What input would the BOM like?, How should CAC provide input? and When should CAC provide the BOM input?

- Examples of when they've wanted input: 10 year plan, E&O, Budget, Project and Capital Improvement Projects (CIPS). Discussion to be continued next workshop Dec 9th.
- C. CAC's Subcommittees status-After minimal discussion CAC agreed that while Sharon's Stormwater Committee is permanently disbanded (she will continue work as a citizen, not a CAC member), the other subcommittees are inactive until/unless needed in the future. Water Stewardship Grant (WSG) committee remains active.

## D. Sharon November BOM mtg recap

- Hiring of the Administrative Assistant approved
- Outreach Manager role pending Personnel Committee and Board review; looking at the total organization structure and funding
- Presentation on Rice Marsh Lake by BARR Engineering (Scott S.)
  - Solution addresses external loading and protects previous investments
  - Kraken filter is the current recommendation
  - Public hearing in December 2020 with 2021 implementation

#### **RPBCWD Proposed 10 Year Plan Amendments**

- DEI (Diversity, Equity, and Inclusion) B (45 minutes) See report in Sharon's email attachment. B proposes a December DEI presentation for orientation and January further discussion/brainstorming ideas to incorporate DEI
- Rules and Soil amendment discussions laid over until the December 9th BOM meeting due to lateness of the hour

## III. Program and Project Updates; Staff Engagement with CAC; CAC Business; –

- FYI CAC officer election and December meeting date originally scheduled for December 21st has been changed to the 14th so Sharon can run the meeting as usual. Consensus to change the date to Dec. 14th
- **MAWD conference December 1-4; Virtual -** Claire- pre conference workshops on Drainage Ditches , the other on financing watershed. 3-4 CAC members are usually sent. Marilynn and Heidi are interested in attending.
- **Budget status Claire** No changes anticipated. Board certified the levy in September. In December BOMs can choose to lower the levy if needed.
- While on virtual/Zoom calls, when you are the CAC liaison, attending the managers meeting, and feel you have something crucial to the conversation at hand, utilize the Chat feature to send comments to everyone. Claire and B will likely be monitoring the Chat and have the ability to intercede on our behalf. Comments during the meeting are generally restricted to allow managers to discuss and get through the agenda. Written comments can also be submitted in advance as well.
- **Other items:** Dorothy brought up the district's Kiss the Ground showing December 10th. Barry also recommended Brave Blue World available on Netflix.

#### V. Upcoming Events and meeting close –

1. Explore Your Waterway with the U.S. EPA! Webinar, Tuesday, Nov. 17 – 12-1:30. Here is the link to the sign up page for the EPA event.

- 2. RPBCWD Board of Managers December 9, 2020; 5:00 continuation of manager workshop on working with the CAC; 7:00 PM Regular board meeting virtual Zoom meeting Jan to attend on behalf of the CAC
- 3. RPBCWD CAC Meeting December 21, 2020; 6:00 PM virtual Zoom meeting; Manager Pedersen to attend on behalf of the managers
  - 4. Meeting Adjourn Jan moved and Jim seconded to adjourn meeting at 7:52pm



18681 Lake Drive East Chanhassen, MN 55317 952-607-6512 www.rpbcwd.org

Managers,

The District Citizen Advisory Committee has ten members who have indicated interest in continuing service in 2021. Those members and the cities in which they reside are as follows:

- Sharon McCotter-Chanhassen
- Jim Boettcher- Chanhassen
- Heidi Groven- Chanhassen
- Kim Behrens- Chanhassen
- Pete Iverson- Eden Prairie
- Michelle Frost- Eden Prairie
- Terry Jorgenson- Eden Prairie
- Matt Lindon- Eden Prairie
- Jan Neville- Eden Prairie
- Marilynn Torkelson- Eden Prairie

Previously, the Board of Managers has moved to have a CAC membership of fifteen. If it is the pleasure of the Board to increase membership, an online application will be released to solicit new membership. A copy of the application is attached. If it is the pleasure of the Board, applications materials will be made public on December 15<sup>th</sup>. The application period will close on January 15<sup>th</sup>. New CAC appointments will be made in February 2020.

Sincerely,

B Lauer Groundwater and Stewardship Program Coordinator

# Citizen Advisory Committee (CAC) Application First Name \* Enter a value for this field. Last Name \* Address where you reside \* If you are employed within the watershed, please also list that address. Email Address \* **Phone Number \*** Why are you interested in becoming a Citizen Advisor for the Watershed District? \* What do you hope to accomplish while serving on the committee? \* What are the strengths and/or qualifications you can bring to help this committee fulfill its purpose and duties? \* One of the roles of CAC members is to identify education needs in the community. What is one need, related to water, that you have seen? \*

Submit

# RPBCWD November Staff Report

Administration		Staff update	Partners
Accounting and Audit	Coordinate with Accountants for the development of financial reports. Coordinate with the Auditor. Continue to work with the Treasurer to maximize on fund investments.	Staff Bakkum and Administrator Bleser compiled the monthly treasurer's report electronically, in compliance with safety protocols, with assistance from Staff Jeffery.	
Administration		Annual Communication is included in your packet.	
Annual Report	Compile, finalize and submit an annual report to agencies	Started compiling and QC'd data to begin drafting of the 2020 annual report.	
BWSR	Discuss Targeted Watershed Grant Distribution	Administrator Bleser and Staff Maxwell attended the last meeting. There was discussion in regards to prioritizing between WD and WMO and SWCD projects. A few projects were moved forward.	9-Mile WD Eden Prairie BWSR Bloomington Chanhassen Carver Co. Hennepin Co. LMRWD Minnetonka Waconia
DEI	Diversity, Equity and Inclusion	Staff Lauer presented to the CAC, the DEI report. Starting in December, the CAC will be engaged in a series of workshops related to DEI. Staff Lauer attended a meeting of Metro Area education and outreach staff regarding culturally relevant outreach materials.	

Human Resources	General Human Resources	Administrator Bleser submitted answers to a questionnaire and submitted General Assessment.	
Internal Policies	Work with Governance Manual and Personnel Committees to review bylaws and manuals as necessary	The Governance manual was adopted.	
Advisory Committees	Engage with the Technical Advisory Committee on water conservation, chloride management and emerging topics Engage with the Citizen Advisory Committee on water conservation, annual budget and emerging topics.	The CAC met for their regular meeting on November 16th. Staff Lauer presented Building a Stronger District Together to the CAC and laid out a framework for engaging the CAC in the DEI work of the District. Administrator Bleser answered questions regarding District Projects.	
Local Surface Water Management Plan		Staff Jeffery continues to have discussions with the City of Chanhassen.	
MAWD		Manager Ziegler and Crafton are delegates at the MAWD Conference.	
District-Wide			
Regulatory Program	Review regulatory program to maximize efficiency. Engage Technical Advisory Committee and Citizen Advisory Committee on possible rule changes. Implement a regulatory program.	Two permit applications have been submitted since the November meeting. One is a private commercial development and the other is a municipal storm sewer improvement project. Both will require board review and approval. One permit was administratively approved since the November meeting. Permit 2020-064 was for the construction of a home on an existing lot of record. As it was not within 500 feet of a surface water, it only triggered Rule C. Staff Jeffery attended the preconstruction meeting for 2020-045 Lake Lucy Ridge.	

		Staff Jeffery met with the property owner of the island on Lake Lucy to discuss the implications of constructing a new home on the property.  Staff Jeffery and Engineer Sobeich met with Eden Prairie to discuss the repair of an escarpment on Purgatory Creek  Staff Jeffery met with Carver County and the design team to discuss what is being referred to as the Arboretum Area Transportation Plan (AATP). The majority of the review area is outside of the RPBCWD but portions of the TH5 corridor are within RPBCWD.  Staff Jeffery and Engineer Sobeich met with Minnetonka to discuss their proposed 2022 road reconstruction project.	
Aquatic Invasive Species	Review AIS monitoring program Develop and implement Rapid Response Plan as appropriate Coordinate with LGUs and keep stakeholders aware of AIS management activities. Manage and maintain the aeration system on Rice Marsh Lake Riley Chain of Lakes Carp Management Purgatory Chain of Lakes Carp Management Review AIS inspection program. Keep abreast in technology and research in AIS. Zebra mussel adult and veliger monitoring.	The permit for the operation of the aeration unit on Rice Marsh Lake was approved and the public was noticed on the District website and in the Chanhassen Villager and Sun Current.  Staff is still receiving zebra mussel plates from volunteers.  Staff began compiling data for the water resources report.	City of Chanhassen City of Eden Prairie University of Minnesota MN DNR Carver County

Cost-Share	Schedule and coordinate site visits.  Review applications and recommend implementation.	November is the first month of the evaluation season for the Watershed Stewardship Program.  Staff Lauer updated the website to reflect that the application and site visit season is closed.  The District approved one final application for 2020 that was reviewed by the review committee at the end of October.  Staff Lauer had begun mapping and compiling data regarding the performance of the program in 2020.  Staff Lauer has continued to field inquiries into the program and provide them with the appropriate information and next steps.  Staff Lauer has begun annual evaluation of the program.	Carver County Soil and Water Conservation District
Data Collection	Continue Data Collection at permanent sites.  Identify monitoring sites to assess future project sites.	Staff worked on data QC and compilation this month in preparation for drafting the 2020 water resources report.  WOMP stations: samples were collected 3 times this month for the Metropolitan Council.  Lake level sensors were checked, downloaded, and pulled in early November. Lake level troll 500 sensors were sent in for yearly maintenance.  Staff began a preliminary shoreline assessment on Lotus Lake this month which is based on the Erosion Intensity (EI) Score Worksheet the District utilizes for shoreline permits. Staff boated around the perimeter of the lake, assessed the shoreline based on multiple variables, and recorded video of shoreline	Metropolitan Council City of Eden Prairie University of MN City of Chanhassen MNDNR City of Minnetonka

around the lake. Staff will complete the remaining variable via desktop review and create a shoreline map based on the final scores. The assessment may be expanded to other lakes in the future.

The YSI water quality sonde was sent in for yearly maintenance.

Pond data has been collected biweekly since the end of May. The EnviroDIY monitoring stations have been working better this year. Staff have been cleaning the sensors during every visit and calibrating the sensors when needed. These units were pulled early this month and the data is being compiled and QC'd.

Stream EnviroDIY stations were checked (checked biweekly) and have been working. They were pulled early this month.

Macro Invertebrates were collected on Bluff Creek this year as part of the regular stream rotation. The samples were sent into Dean Hansen for identification and enumeration.

Phytoplankton analysis was completed by Margaret Rattei from Barr Engineering this month. Staff Maxwell will soon analyze 2020 zooplankton samples.

Staff finished walking the remaining lower reaches of Purgatory Creek to update MSHA and Modified Pfankuch assessments this year. Staff has also walked the upper reach (B5) of Bluff Creek and updated those assessments.

Staff has started winterizing equipment and has brought the electrofishing motor in for regular maintenance.

District Hydrology and Hydraulics Model	Coordinate maintenance of Hydrology and Hydraulics Model. Coordinate model update with LGUs if additional information is collected. Partner and implement with the City of Bloomington on Flood Evaluation and Water Quality Feasibility.	Presentation on the work done in Bloomington will be presented at the board meeting	City of Bloomington City of Minnetonka City of Eden Prairie City of Deephaven City of Shorewood.
Education and Outreach	Implement Education & Outreach Plan, review at year end.  Manage partnership activities with other organizations.  Coordinate Public Engagement with District projects.	Chanhassen is part of the Adopt A Drain Program!  Staff Lauer collaborated with staff from Nine Mile Creek Watershed District and the City of Minnetonka to organize and advertise a screening and discussion of the documentary Kiss the Ground. The event will be held on December 10th.  Staff Lauer and Administrator Bleser met with NMCWD and City of Minnetonka to discuss potential collaborations on future virtual educational events.  Staff Lauer and Administrator Bleser hosted a webinar with the U.S. EPA regarding updates to their How's my Waterway online tool. The event was well attended and feedback was positive.  Staff Bakkum met with NMCWD staff to discuss partnership on 2021 Smart Salting trainings.	Adopt a drain: City of Eden Prairie, City of Minnetonka, City of Bloomington, Hamline University, Nine Mile Creek Watershed District, MPCA, Fortin Consulting
Groundwater Conservation	Work with other LGUs to monitor, assess, and identify gaps. Engage with the Technical Advisory Committee to identify potential projects.	Staff Lauer met with NMCWD to share our groundwater programming and potential collaboration.	Metropolitan Council City of Eden Prairie City of Shorewood City of Bloomington City of Minnetonka

	Develop a water conservation program (look at Woodbury model)	Staff Lauer has sent a draft of the Groundwater Conservation Guide to a graphic design contractor.	City of Chanhassen
Lake Vegetation Management	Work with the University of Minnesota or Aquatic Plant Biologist, Cities of Chanhassen and Eden Prairie, lake association, and residents as well as the Minnesota Department of Natural Resources on potential treatment. Implement herbicide treatment as needed.  Secure DNR permits and contracts with herbicide applicators.  Lakes the District is monitoring for treatment include: Lake Susan, Lake Riley, Lotus Lake, Mitchell Lake, Red Rock Lake and Staring Lake.  Work with Three Rivers Park District for Hyland Lake	No new updates.	City of Eden Prairie City of Chanhassen University of Minnesota MNDNR
Opportunity Projects	Assess potential projects as they are presented to the District	No new updates	ISG Staring Lake Outdoor Center The Preserve Association
Total Maximum Daily Load	Continue working with Minnesota Pollution Control Agency on the Watershed Restoration And Protection Strategies (WRAPS). Engage the Technical Advisory Committee.	No new updates	МРСА
Repair and Maintenance Grant	Develop and formalize grant program.	No new updates	

University of Minnesota	Review and monitor progress on University of Minnesota grant. Support Dr John Gulliver and Dr Ray Newman research and coordinate with local partners. Keep the manager abreast to progress in the research. Identify next management steps.		Stormwater ponds partners: Bloomington, Chanhassen, Eden Prairie, Minnetonka, Shorewood, and Limnotech. Plant Management: Chanhassen Eden Prairie
Watershed Plan	Review and identify needs for amendments.	Soil amendment and rules modification are included in your packet.	
Wetland Conservation Act (WCA)	Administer WCA within the Cities of Shorewood and Deephaven. Represent the District on Technical Evaluation Panel throughout the District	No WCA applications have been received in Deephaven.  No WCA applications have been received in Shorewood.  Staff Jeffery has provided comment on applications in Chanhassen, and Eden Prairie.	City of Shorewood City of Deephaven City of Chanhassen City of Eden Prairie MCWD BWSR DNR ACOE
Wetland Management	Assess known existing wetlands, identify previously unknown wetlands, and identify potential restoration and rehabilitate wetlands and wetland requiring additional protection.	Staff Jeffery, Staff Dickhausen and staff Nicklay have begun updating the MNRAM Access database.  Staff Jeffery, Engineer Sobeich, Joe Bischoff, and Karen Wold of Barr have a meeting scheduled to discuss the wetland classification scheme that will be used, as well as how to assess biodiversity and habitat. The intent is to address a few of the ecosystem services at a time.	City of Chanhassen City of Eden Prairie Hennepin County Carver County MNDNR BWSR
Hennepin County	Phase 1: Develop a plan to target commercial and association-based sources or chloride pollution -	HCCI met and discussed next steps. Two	

Chloride Initiative	businesses, malls, HOAs, property management companies and the private applicators that they hire. We will hire a consultant to facilitate focus groups with private applicators, as well as those that execute contracts with private applicators. These focus groups will help identify needs and barriers for our target audience. The consultant will compile information into a plan for implementation.		
Lower Minnesota Chloride Cost-Share Program Bluff Creek One Water	The Lower Minnesota River Watersheds are coming together to offer cost-share grants.	Lower Minnesota Collaborate Chloride Reduction Grants are now available! The announcement was sent out and web portal is all set-up.	LMRWD, RBWMO, NMCWD
Bluff Creek Tributary Restoration	Implement and finalize restoration. Monitor Project.	On hold till Spring.	City of Chanhassen
Wetland Restoration at 101	Remove 3 properties from flood zone, restore a minimum 7 acres and as many as 16 acres of wetlands, connect public with resources, reduction of volume, rate, pollution loads to Bluff Creek	Staff Jeffery, Engineer Sobeich and Karen Wold of Barr Engineering met to discuss current status of wetland restoration and next steps.	City of Chanhassen MN DNR Carver County
Riley Creek One Water Lake Riley Alum	Continuing to monitor the Lake.	No new updates	

1.1.6		Ni	C'I of Charles
Lake Susan	Complete final site stabilization and	No new updates	City of Chanhassen
Improvement	spring start up.		Clean Water Legacy
Phase 2	Finalize and implement E and O for the		Amendment
	project.		
	Monitor project.		
Lake Susan Spent Lime	2020 startup and monitoring.	The unit was taken offline and winterized early this month. The unit appears to be removing	City of Chanhassen
Spent Line		anywhere from 50-90% of total phosphorus	
		concentrations based on sample analysis.	
Lower Riley	Coordinate agreement and acquire	On hold till Spring.	City of Eden Prairie
Creek	easements if needed for the	On note the spring.	Lower MN River
Stabilization	restoration of Lower Riley Creek reach		Watershed District
Stabilization	D3 and E.		Watershea District
	Implement Project.		
	Continue Public Engagement for project		
	and develop signage of restoration.		
Rice Marsh Lake	Continuing to monitor the Lake.	No new updates	City of Eden Prairie
Alum	<b>0</b>		City of Chanhassen
Treatment			•
Rice Marsh Lake	Conduct feasibility.	Public Hearing is on December 9.	City of Chanhassen
Watershed	Develop cooperative agreement		
Load Project 1	with City of Chanhassen		
Upper Riley	Work with City to develop scope of	Engineering staff are working closely with the	City of Chanhassen
Creek	work (in addition to stabilizing the	City in the development of the corridor	
	creek can we mitigate for climate	enhancement plan.	
	change)		
	Conduct feasibility		
	Develop cooperative agreement with		
	the City of Chanhassen		
	Order Project		
	Start design		
Middle Riley	Work with Bearpath HOA/Golf Course		Bearpath
Creek	to develop scope of work (in addition		Neighborhood
	to stabilizing the creek can we		Association.

	mitigate for climate change and provide for an improved recreational experience) Draft feasibility report Develop cooperative agreement with Bearpath Order Project Start design		Clty of Eden Prairie Dept. of Natural Resources
St Hubert Water Quality Project		Cooperative agreement is included in your packet. SRF is working with the school and is approaching 90% design.	CCSWCD Metropolitan Council City of Chanhassen
Purgatory Creek One Water			
PCRA Berm		No new updates	City of Eden Prairie
Duck Lake Water Quality Project	Work with the City to implement neighborhood BMP. Identify neighborhood BMP to help improve water resources to Duck Lake. Implement neighborhood BMPs.	Administrator Bleser and District Engineer Sobiech have met with Eden Prairie Staff Members Mary Krause and Rod Rue to discuss the term sheet for the cooperative agreement. The agreement is now being drafted.	City of Eden Prairie
Lotus Lake – Internal Load Control	Monitor treatment and plant populations.	No new updates	
Scenic Heights	Continue implementing restoration effort. Work with the City of Minnetonka and Minnetonka School District on Public Engagement for project as well as signage.	Final pay app for the project is being processed this month.	Minnetonka Public School District City of Minnetonka Hennepin County
Silver Lake Restoration	Order project Design Project	Engineer is close to 60% design and will be sending plans to the City for review.	City of Chanhassen

	Work with the City of Chanhassen for Design, cooperative agreement and implementation		
Professional			
Development	special workshop hosted by Aaron Wolf, T Transformation. The skills cultivated via the multi-faceted dialogue- all of which supports Staff Lauer attended the American Water groundwater, community engagement and Staff Maxwell attended the beginner and National Association of Lake Management objects, functions, basic and advanced day of common statistical tools in R, and plotted	Resources Association Conference and attended d Diversity, Equity, and Inclusion. advanced trainings of the Introduction to R for At Society Conference. The workshops covered R stamanagement, basic descriptive statistics, works	Conflict Management and g workshops, and mediating sessions focussed on quatic Research at the virtual syntax, types of variables and king with R packages, an overview



#### Memorandum

To: Riley-Purgatory-Bluff Creek Watershed District Board of Managers and District Administrator

**From:** Barr Engineering Co.

Subject: Engineer's Report Summarizing November 2020 Activities for December 9, 2020, Board

Meeting

Date: December 1, 2020

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 November 2020.

#### **General Services**

- a. Participated in a virtual meeting with Watershed Planning Manager Jeffery and Counsel Welch on November 4<sup>th</sup> to discuss revisions to the maintenance provision of Rule F (Shoreline and Streambank Stabilization). The discussion focused on limiting the potential revision to the maintenance provision, clarifying what qualifies as maintenance, that the provision only applying to lakeshore, the need for maintenance activities to comply with design and submittal criteria, and the fact that the revision will not promote the naturalization of prior riprapped shorelines. Reviewed draft revisions to Rule F text and provided comments to the District.
- b. Met with Watershed Planning Manager Jeffery and the city of Chanhassen on November 5<sup>th</sup> to discuss the 60% design for the restoration of the eroded conveyance at the south end of Silver Lake. The city provided recommended revisions to the design drawings and suggested that the project be expanded to include the portion of the conveyance channel on private property to promote public safety. The city agreed to contact the private property owner to gauge interest and willingness of the owner.
- c. Participate in November 23<sup>rd</sup> virtual meetings with Administrator Bleser and staff Jeffery to discuss the upcoming public hearing on the Rice Marsh Lake subwatershed RML12 best management practice (format, content, presenter)
- d. Participated in an October 30<sup>th</sup> virtual meeting with Administrator Bleser, Counsel Smith and President Ward to review the November 4<sup>th</sup> meeting agenda
- e. Participated in the November 4<sup>th</sup> regular Board of Managers meeting.
- f. Prepared Engineer's Report for engineering services performed during November 2020.
- g. Miscellaneous discussions and coordination with Administrator Bleser about the project staffing, soil health plan amendment, Duck Lake draft cooperative agreement, stormwater reuse systems, shoreline considerations and upcoming Board meeting agenda.

To: Riley-Purgatory-Bluff Creek Watershed District Board of Managers and District Administrator

From: Barr Engineering Co.

Subject: Engineer's Report Summarizing November 2020 Activities for December 9, 2020, Board Meeting

Date: December 1, 2020

Page: 2

#### **Permitting Program**

a. Permit 2020-054: Lake Minnetonka Care Center – This project consists of constructing a new building, parking lot, drive, sidewalks, and related utilities at 16913 State Hwy 7 in Minnetonka. A subsurface stormwater management system will provide stormwater rate, volume and water quality control. The project triggers the erosion prevention, wetland buffers, and sediment control rule and the stormwater management rule. Informed applicant of the Board's conditional approval. Coordinated with applicant on revisions to the draft maintenance declaration prior to recordation.

- b. Permit 2020-057: Bluff 25 Culvert Rehabilitation This project consists of rehabilitating the culvert crossing where Purgatory Creek passes below the Minnesota River Bluffs LRT Regional Trail just downstream of Valleyview Road. The project triggers RPBCWD's Rule B (Floodplain Management and Drainage Alterations), Rule C (Erosion Prevention and Sediment Control), Rule D (Wetland and Creek Buffers), and Rule G (Waterbody Crossings and Structures). The permit application was considered complete with the revised October 28<sup>th</sup> submittal. Reviewed revised submittal and drafted a permit review report for the Board's consideration at the December 9<sup>th</sup> meeting.
- c. Permit 2020-061: Purgatory Creek 2<sup>nd</sup> Addition: This proposed project involves construction of a cul-de-sac with 7 lots with the site grading, sanitary sewer, water main, storm sewer, and street construction adjacent to Sunnybrook Road in Eden Prairie. Coordinated with Watershed Planning Manger Jeffery is issue a 60-day permit review timeline extension until February 6, 2021 because the applicant has not provided a revised submittal in response to review comments.
- d. Permit 2020-065: Terry Pine Coffee Shop— This project consists of constructing a new building, parking lot, drive, sidewalks, and related utilities at proposed construction of a coffee shop and associated parking/drive lanes at 16315 Terry Pine Drive in Eden Prairie. A subsurface stormwater management system will provide stormwater rate, volume and water quality control. The project triggers the erosion prevention and sediment control rule and the stormwater management rule. Reviewed revised submittal. A permit report was drafted for the Board's consideration at the December 9<sup>th</sup> meeting.
- e. *Permit 2020-066: Chase Bank* This project consists of redevelopment of a 0.62-acre site into a Chase Bank building and associated parking at 928 Prairie Center Drive, Eden Prairie, MN. A subsurface stormwater management system will provide stormwater rate, volume and water quality control. The project triggers the erosion prevention and sediment control rule and the stormwater management rule. Reviewed November 6<sup>th</sup> submittal and informed the applicant on November 13<sup>th</sup> the application was incomplete because it was missing a geotechnical investigation, snowmelt modeling, and water quality analysis. Reviewed the November 23<sup>rd</sup> revised submittal and participated in a December 1<sup>st</sup> call with the applicant's engineer and city of Eden Prairie to answer question about restricted sites determination and abstraction to the maximum extent practicable.
- f. Participated in a November 9<sup>th</sup> preapplication meeting with city of Minnetonka and Alliant Inc to discuss the city's upcoming project to provide a high level outlet from the landlocked basin between Clear Springs Elementary and Mahoney Avenue. Provided Alliant RPBCWD's

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Purgatory Creek hydrologic and hydraulic model to assist in assessing potential downstream impacts of proposed outlet. Received permit application on November 23<sup>rd</sup>.

- g. Participated in a November 23<sup>rd</sup> preapplication meeting with Watershed Planning Manager Jeffery, city of Eden Prairie, and Wenck to discuss the city's streambank stabilization along Purgatory Creek adjacent to 11761 Welter's Way. The project will likely trigger the floodplain management, erosion prevention & sediment control rule, wetland & creek buffers, and shoreline & streambank stabilization rules. City anticipates a formal submittal in early December. Provided the estimated 2, 10, and 100-year flow rates in Purgatory Creek form RPBCWD's hydrologic and hydraulic models to Wenck to support their design effort.
- h. Participated in a November 30<sup>th</sup> preapplication meeting with Watershed Planning Manager Jeffery, city of Minnetonka, and Bolton and Menk to discuss the city's upcoming street reconstruction in the Westonka neighborhood. The project involves the reconstruction of roughly 5.6 miles of roadway to an urban street section with curb and gutter. The project will likely trigger the floodplain management, erosion prevention & sediment control, wetland buffers, waterbody crossings & structures, and the stormwater management rules. City anticipates a formal submittal in fall 2021.
- i. Conducted erosion prevention and sediment control inspection on November 18<sup>th</sup> for permits in Hennepin County only because district staff inspected all permits in Carver County this month. Provided a summary of sites with open corrective actions to Watershed Planning Manager Jeffery on November 19<sup>th</sup>. Watershed Planning Manager Jeffery plans to incorporate the information into a District prepared, standalone construction site inspection report. Watershed Planning Manager Jeffery informed Barr that District staff will be conducting all permit inspections starting in December 2020.
- j. Reviewed a preapplication erosion intensity worksheet for a potential shoreline stabilization project on Lake Susan at 8600 Apple Tree Lane and provided comments on scoring to the property owner's landscaper. The applicant approached the district for a permit for riprap but the erosion intensity score sheet does not support a high energy site.
- k. Miscellaneous conversation with Watershed Planning Manager Jeffery about rules, shoreline fast-track maintenance permits, permit database status, financial assurances, and inspections.

#### Data Management/Sampling/Equipment Assistance

- a. Prepared, loaded, and verified 14 RMB laboratory (RMB) reports.
- b. Prepared, loaded, and verified field data collected with the Survey123 mobile application for the Ponds monitoring programs.

#### Task Order 6: WOMP Station Monitoring

#### Purgatory Creek Monitoring Station at Pioneer Trail

a. Download and review data.

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

a. Download and review data.

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b. Storm event sampling.

c. Review and approve MCES Laboratory invoice.

#### Task Order 14b: Lower Riley Creek Final Design

a. No activity in November.

#### Task Order 21B: Bluff Creek Stabilization Project

a. Reviewed request for payment #6 and conducted a site review to verify installation of requested items for payment. Informed the contractor that the application for payment would not be processed until they complete the mulching of the trees and shrubs as required by the contract as well as correct the installation about 20 shrubs and 3 trees which were either planted too low (buried stems will rot) or planted too high (roots are exposed). While the total shrub and tree quantities were installed, none of them have been mulched per the spec and there are issues with the quality and consistency of some of the plants installed. Attached are some example photos of the installations.

#### Task Order 23: Scenic Heights School Forest Restoration

- a. The final site management visits of the restoration contract have been completed. Crews from Landbridge Ecological sprayed buckthorn re-sprouts with foliar herbicide and followed up with a final cutting. It is anticipated that the final pay application will be processed and the project will be finalized in the next couple months.
- b. Over the last three years the progress on restoring this highly visited site has been extremely successful. The nearly seven acres have been converted from a heavily infested buckthorn understory to a diverse pocket ecosystem including oak savanna, prairie, and oak/aspen/black cherry woodland. Prior to restoration the buckthorn severely limited site access thus hampering the educational value of the site while allowing soils to erode into Purgatory Park. The native seed mixes installed in 2018 and 2019 are maturing quickly while the plants installed by children and other volunteers with the District have complimented the overall ecological diversity of the site. Project partners including the City of Minnetonka, ISD 276, and Three Rivers Park District have all agreed that the site has been greatly improved for both educational opportunities as well as expanding the ecological corridor of the northern reach of Purgatory Creek.
- c. A new Scenic Heights teacher has taken over the management of the site moving forward. Her efforts will follow-up on the management successes the project have established. Garlic mustard management as well as buckthorn re-sprout removal will be a task that can be accomplished by volunteer groups if performed regularly.

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Photo 1: Red oak tree regeneration is no longer hampered by dense buckthorn understory as native grasses and perennials secure the soil at the Scenic Heights Elementary School Outdoor Classroom. The site now includes several acres of oak savanna and woodland edge ecotypes which were once the dominant land cover of this region.

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

- a. Development and review of 60% design and plan set of proposed system design, including review of City standard plates and details, site grading, and development of IESF ditch check design details.
- b. Development technical specifications
- c. Development of 60% engineer's opinion of cost
- d. Follow-up on USACE permitting/jurisdiction
- e. Complete MnRAM assessments of wetlands in project area
- f. Prepare for and attend the 60% design review meeting with district and city staff.

## Task Order 26: Stormwater Model Update and Flood-Risk Area Prioritization Identification for the Bloomington Portion of Purgatory Creek

- a. Received input from City staff that the City does not have further comments on the prioritization framework.
- b. The preliminary prioritization framework and prioritized flood-prone areas will be presented at the December Board of Managers meeting.

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c. Barr staff will begin preparing documentation summarizing the process for developing the prioritization framework, source information, and initial prioritized list of flood-prone areas. Barr anticipates providing the draft report for District staff review in December.

#### Task Order 28B: Rice Marsh Lake (RM 12a) Water Quality Improvement Project

a. Prepare for the public hearing on this potential capital improvement project at the December 9<sup>th</sup> regular board of managers meeting.

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

- b. On November 16<sup>th</sup>, Barr staff reached out to Bearpath to schedule a meeting to review the new course layouts generated by the Nicklaus group.
- c. On November 23<sup>rd</sup> Bearpath provided updated sketches with proposed new cart path layouts alongside the proposed new Hole 13 tee area layout with the delineated wetland boundaries and buffers.
- d. RPBCWD, Barr, and Bearpath representatives met (virtually) on November 24<sup>th</sup> to discuss the new proposed layout and the next steps for design, permitting,etc. The group is working toward assembling a design for RPBCWD board approval in March 2021, with a bid package in April. Construction is tentatively slated for September 2021, with a goal of finishing the tee areas by October 1<sup>st</sup>, with stream work construction wrapping up sometime after that date, ideally by November/December 2021.

#### Task Order 31A: Kerber Pond Ravine Stabilization Feasibility

- a. Finalize feasibility report based on comments as provided by City and District Staff
- b. Preparation presentation for and present feasibility study to RPBCWD Managers at November 2020 meeting

#### Task Order 032A: Upper Riley Creek Ecological Enhancement Plan

- Assisted Administrator Bleser with obtaining contact information of owners or facility managers for adjacent private properties to coordinate a future stakeholder meeting with the appropriate parties.
- b. Continued work on the Ecological Enhancement Plan.

#### Task Order 033: Wetland Assessment - Phase 1

- a. Compiled and summarized available ecosystem service and wetland function models for review.
- b. Developed invite language for Peer Advisory group.
- c. Began preparing for first meeting to address wildlife habitat and biodiversity/floristic quality.
- d. Summarized classification methods.

		DATE			DATE TO			
2201507.114.45		DATE			DATE TO	50110141115	CONADULANT	NOTE:
PROJECT NAME	PERMIT #	INSPECTED	COMPLIANT	CORAC	COMPLY	FOLLOW UP	COMPLIANT	NOTES
Mission Hills Senior Living	2015-002							
Saville West Subdivision	2015-036	10/20/2020	YES	NA	NA			No Activity as they have not fullfilled permit obligations.
Arbor Glen	2015-050							
SWLRT	2016-017	10/20/2020		NA	NA			
County Rd 61	2016-032	10/21/2020		NA	NA			
Kopesky 2nd Addition	2017-001	10/19/2020		NA	NA			
Prairie Bluffs Sr Living	2017-024	10/19/2020						
Tweet Pediatric Dental	2017-029	10/20/2020	YES	NA	NA			Ready for closeout
Fawn Hills	2017-047	10/21/2020	YES	NA	NA			
O'Reilly	2017-072	10/20/2020	NO	YES	ASAP	11/2/2020		
Hampton Inn	2018-005	10/20/2020	YES	NA	NA			
ECE I, LLC	2018-012		YES	NA	NA			SITE IS READY FOR CLOSEOUT
Avienda	2018-016	10/19/2020	YES	NA	NA			NO WORK YET
MAMAC Systems	2018-027	CLOSED						
Eden Prairie Senior Living	2018-038	10/19/2020	YES	NA	NA			Site finished. A few clean up items then close out
Smith Village	2018-044	10/20/2020	YES	NA	NA			
CSAH 61 - Peterson Borrow	2018-047	10/19/2020		NA	NA			
HCRRA Culvert Replacement	2018-052	CLOSED						
Bluff Creek Tributary	2018-056	10/19/2020	YES	NA	NA			
Walker Home	2018-058	CLOSED						
McCoy Lake Sediment Removal	2018-061	EXPIRED						
Lower Riley Creek Stabilization	2018-062	10/21/2020	YES	NA	NA			Inspections can cease until spring
Castle Ridge	2018-066	10/26/2020		YES	11/2/2020			
Hennepin Cnty Library - EP	2018-067	10/20/2020		NA	NA			Ready for closeout
Dristeem	2018-068	CLOSED						
CR 101 Pipeline Repair	2018-069	CLOSED						
4917 Vine Hill Rd	2018-070	10/20/2020	YES	NA	NA			
Minnetonka HS LAX fields	2018-071	CLOSED						
Hyland Park Parking Lots	2018-072	10/20/2020	YES	NA	NA			
Preserve Blvd Recon		10/19/2020			NA			
Ground Storage Reservoir	2018-074	10/20/2020			NA			
The Park	2019-001	10/19/2020		NA	NA			
Shelangoski Home	2019-002	CLOSED	123					
Stable Path	2019-003	10/20/2020	VFS	NA	NA			Contacted RPBCWD about educational signage
Duck Lake Rd	2019-004	PENDING	123	147 (	1471			Contracted in Bewa about educational signage
Singletree Lane Streetscape	2019-005	CLOSED						
2019 Mill and Overlay	2019-005	CLOSED				+		
Beverly Hills	2019-000	10/20/2020	VFS	NA	NA			
Staring Lake Pavilion	2019-007	10/20/2020	123	14/-1	INC.			
5995 Ridge Rd Remodal	2019-008	10/20/2020	VES	NA	NA			
Chan HS Conession San Service	2019-009	CLOSED	ILJ	INA	INA	+ -		PERMIT EXPIRED
Westwind Plaza: Chase Bank	2019-010	10/19/2020	VEC	NA	NA	+		FLINITI LAFINED
Lake Drive East M&O	2019-011	CLOSED	TLS	INA	INA			
	<b>.</b>							
MNTKA Blvd Natural Gas Pipe	2019-016	CLOSED	VEC					
6650 Pawnee Dr	2019-017	10/19/2020						
6657 Deerwood Dr	2019-018	10/19/2020	YES					

				1		1		
		DATE			DATE TO			
PROJECT NAME	PERMIT #		COMPLIANT		COMPLY	FOLLOW UP	COMPLIANT	NOTES
Sheldon Place Townhomes	2019-019	10/20/2020		NA	NA			
3993 Hillcrest	2019-020	10/21/2020	YES	NA	NA			Ready for closeout
2019 Misc Drainage Improvements	2019-021	CLOSED						
Woodcrest	2019-022		NO ACTIVITY					
Minnetonka Library Improvemen	2019-023	10/21/2020		NA	NA			
Conifer Heights	2019-024	10/20/2020	YES	NA	NA			
Homestead Cr Sump Collection	2019-025	CLOSED						
Ridgewood Church	2019-026	9/16/2020	YES	NA	NA			
EP M&O	2019-027	CLOSED						
LifeTime Parking Expansion	2019-028	CLOSED						
Sheldon Ave Storm Sewer	2019-029	NO ACTIVITY						
Applebees Parking Lot	2019-032	10/19/2020	YES	NA	NA			Have requested closeout. Still have vegetation to establish and silt fence to remove.
Spring Rd Ped Improvements	2019-033	8/14/2020	YES	NA	NA			
Lion's Tap	2019-034	10/21/2020	YES	NA	NA			
Lot 2, Block 1, Shadowood 3rd	2019-035							
Miller Pool	2019-036	CLOSED						SITE IS READY FOR CLOSEOUT
Maple Leaf Drive SPSC	2019-037							SITE IS READY FOR CLOSEOUT
Costco Fuel Facility Expansion	2019-038	WITHDRAWN						
Maple Leaf Drive Draintile	2019-039	CLOSED						
Homes By Legacy	2019-040	10/20/2020	YES	NA	NA	1		
Englestad Pool	2019-041	8/13/2020	YES	NA	NA	1		
TH 101	2019-042	NO ACTIVITY						
Cedarcrest Stables	2019-043	10/20/2020	YES	NA	NA	1		Some street tracking. Dan Blake to address
Magnolia	2019-046							SITE IS READY FOR CLOSEOUT
Vogelsburg Demolition	2019-047	CLOSED						
EPPS-CMS Addition	2019-048	10/20/2020	NO	YES	11/2/2020			Exposed slopes with not protection
Powers Turn Lanes	2019-049	10/19/2020		NA	NA			
SP 8825-629	2019-050	CLOSED				1		
Berrospid Addition		NO ACTIVITY				1		
5545 Kipling Ave	1	10/20/2020	YES	NA	NA	1		
The Overlook		WITHDRAWN				†		
Lennar Drive Removal		CLOSED				†		
Moments of Chanhassen	2020-003	PENDING				†		
Doan Home (Dove Ct)	2020-004	LINDING						SITE IS READY FOR CLOSEOUT
Silver Home	2020-005	10/20/2020	VFS	NA	NA			STE IS NEAD IT ON CESSESS I
TH 5 Regional Trail	2020-007	NO ACTIVITY	1.23	. */ .		+ -		
Eden Ridge, LLC	2020-007	10/20/2020	YFS	NA	NA	+ -		
ECKANKAR	2020-009	CLOSED	1.23	. */ .		+ -		
Ginder Home	2020-003	10/20/2020	VFS	NA	NA	+ -		
Mntka HS 2020 Parking Lot EXP	2020-010	10/20/2020	123	111/	INA	+ -		SITE IS READY FOR CLOSEOUT
PMP Street Maintenance		NO ACTIVITY				+		SITE IS READ FOR CEOSEOUT
Hillcrest Drive	2020-012	INO ACTIVITY				+		SITE IS READY FOR CLOSEOUT
Johnson Shoreline	2020-013	CLOSED		<del> </del>		+		STIL IS NEAD I TON CLOSEOUT
Vassallo Shoreline		CLOSED		<del> </del>		+		
2020 HSIP Project		NO ACTIVITY		<del> </del>		+		
Deephaven 2020 Street Maintenance		CLOSED		<del>                                     </del>		+ -		
Deephaven 2020 Street Maintenance	2020-017	CLUSED		<u> </u>				

	I			Ī	l	1		Т
		DATE			DATE TO			
			COMPLIANT			FOLLOW UP	COMPLIANT	
Deerfield Trail	2020-018	9/16/2020	YES	NA	NA			Ready for closeout
CR 101 Paving		NO ACTIVITY						
Lakeview Rd Pool	2020-020							
Purgatory Park Pipe Replacement	2020-021	CLOSED						
Elim Shores Trail	2020-022							SITE IS READY FOR CLOSEOUT
2020 SPCS - Kimberly & Chennault	2020-023	CLOSED						
2020 SPCS - Kristie Ln	2020-024							SITE IS READY FOR CLOSEOUT
Homestead Cr Sump Collection	2020-025	CLOSED						
Target ADA Ped Improvements	2020-026							SITE IS READY FOR CLOSEOUT
Pleasantview Rd Drainage Imp	2020-027	CLOSED						
UHG Tech Drive Pipe Replacement	2020-028							
CORTRUST Bank	2020-029	PENDING						
Vinehill and Purgatory Park	2020-030	CLOSED						
Prairie Heights	2020-031	10/20/2020	YES	NA	NA			
Henderson Pool	2020-032							SITE IS READY FOR CLOSEOUT
Chan 2020 Pavement Rehab	2020-033	WITHDRAWN						
Lake Lucy Rd Rehab	2020-034	WITHDRAWN						
Honeysuckle	2020-035	10/20/2020	YES	NA	NA			
EP 2020 PMP	2020-036	CLOSED						
Oster Sand Blanket	2020-037	CLOSED						
Jones Shoreline	2020-038	PENDING						
Berkshire Townhomes Ret Wall	2020-039	CLOSED						
Dooling shoreline	2020-040	10/19/2020	YES	NA	NA			
Eliasen rip rap	2020-041							
Brady Home - Cedarcrest	2020-042	10/20/2020	YES	NA	NA			
GBM Realty Parking Lot	2020-043	10/19/2020	YES	NA	NA			
Barry Home	2020-044	10/19/2020	YES	NA	NA			
Galpin Project	2020-045							
Tenner Pool	2020-046	10/26/2020		NA	NA			
Abdul Landscaping Project	2020-047	10/20/2020	YES	NA	NA			
Pogge Project	2020-048							SITE IS READY FOR CLOSEOUT
Metes and Bounds 901 Carver Beach Rd	2020-049	WITHDRAWN						
Parkhurst Addition	2020-050	NO ACTIVITY						
Biolyph Parking Lot Addn	2020-051	PENDING						
White Pool	2020-052	10/19/2020	YES	NA	NA			
CR 3 Culvert Replacement	2020-053	WITHDRAWN						
Minnetonka Care Center	2020-054	PENDING						
Warmuth Project	2020-055	WITHDRAWN						
Minnetonka High School 2021 Arts Center Parking Lo	2020-056	PENDING						
Bluff 25 Culvert Rehab Project	2020-057	10/20/2020	YES	NA	NA			
Eagle Ridge Dr Drain Tile	2020-058		NO ACTIVITY	,				LOC returned
Billings Pool	2020-059	PENDING	NO ACTIVITY	,				
Christian Brothers Automotive	2020-060	PENDING						
Purgatory Creek Estates 2nd Addition	2020-061	PENDING	NO ACTIVITY	,				
481 Bighorn	2020-062	10/20/2020	YES	NA	NA			
	<u> </u>							

## **Spotlight projects**

2020 projects included a pilot groundwater conservation program, water quality improvements, and exciting new research.

## GROUNDWATER CONSERVATION PROGRAM



In 2020, The District launched a new Groundwater Conservation Program. Groundwater is the primary source for drinking water within RPBCWD, so it is very important that we ensure it is plentiful for generations to come. The program offers support to our city partners to distribute water efficient technologies throughout communities. The District is coordinating education efforts to make sure residents and businesses alike, know how easy it can be to save money and water!

# STORMWATER PONDS STUDY



Over the last few years, the District has been spearheading research efforts to understand how stormwater ponds are functioning. Stormwater ponds are everywhere in our landscape and were designed to settle pollutants before the water is released into our creeks, lakes and wetlands. In 2020, with the Cities of Chanhassen and Minnetonka, we applied iron filings to two stormwater ponds to determine if they can trap phosphorus (photo above). Stay tuned for results!

#### MN GREENCORPS

Beginning in September 2019, the District acted as a host site for a MN GreenCorps member. An off-shoot of AmeriCorps, GreenCorps members focus on buildiing community resliency through environmental action. The District's member, Amy Bakkum, focused on Green Infrastructure Improvements as they related to stormwater. As part of her workplan, she focused mainly on chloride reduction within the private sector and developing ways for residents to reduce stormwater runoff on their properties. She designed and built a gravel bed tree nursery at the District office which housed 125 trees in 2020 which were given to District residents to showcase the benefits of trees and improve water quality.



# **Board of managers**

#### **GOING STRONG AT THE DISTRICT**

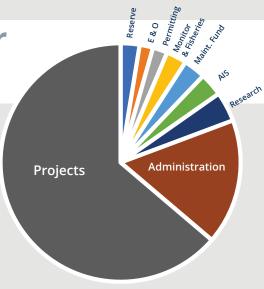
RPBCWD is fortunate to have five passionate citizens sitting on its board of managers. In 2020, all five managers continued in their terms and worked to support the District's work through monthly board meetings, subcommittee meetings, and special meetings. Want to sit in on a meeting? Open to the public, the board of managers meet the first Wednesday of every month to discuss projects, vote on actions, and review permits. Check out the District's website to view the calendar, read past meeting mintues, and more.



# Your tax dollars at work for clean water

The watershed district is funded through property tax levies. That means, if you live within RPBCWD you are helping make the work of protecting clean water possible.

The 2020 levy is \$ 3,575,000. The budget for 2020, which includes funds from previous levies, is \$7,045,000. Where will those dollars go? To projects like those highlighted above, administration, research & planning, monitoring & fisheries, a maintenance fund, aquatic invasive species, permitting, education & outreach (E&O), and a reserve fund in case of an emergency.



### 2020 ANNUAL COMMUNICATION



#### Greetings,

2020 is a year to be remembered. Not only for the great projects and programs that were implemented but also for how the District adapted to the pandemic. The District started the new year as it normally would focusing on summarizing 2019 activities, analyzing 2019 water quality data, preparing for the new field season and developing education programming for 2020. As we approached March, it was clear the typical plan needed to be modified. Prior to the governor's order, Staff had already prepared to be working remotely. Our regular team meetings became virtual and our sidebars became chats on the computer.

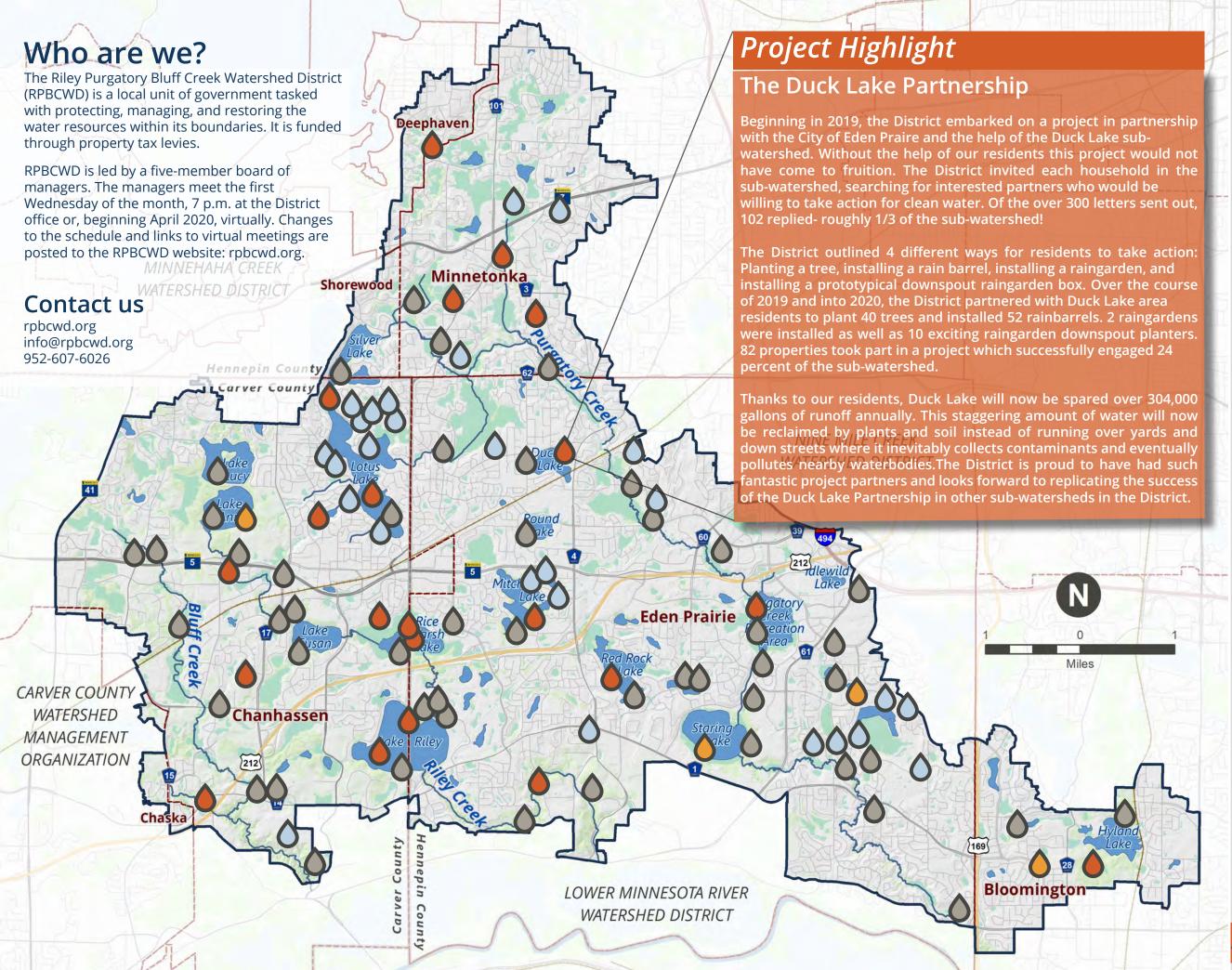
The transition from in- person to virtual is not an easy one but I am so impressed with the flexibility and adaptability of my co-workers, board members, partners, and residents. As we approached our typical field season, the District developed outdoor and indoor protocols to maximize the safety not only of our staff but also of the residents, workers, and partners that we work with. The District moved its board meeting online and project continued to be implemented.

Some of the projects that were implemented include two creek stabilizations, Lake Riley Alum Treatment, Scenic Height School of Forest Restoration, Aquatic Invasive Species Management (plants and carp), 400 wetlands surveyed, Duck Lake Community Partnership (more details following), building a gravel tree nursery bed at our office (trees were used for projects and in the Silver Lake and Duck Lake Watershed) and the development of the Smart Salting for Property Manager Manual with the Hennepin County Chloride Initiative.

This was another busy year, but the biggest accomplishment was the resiliency of District staff and the flexibility of our residents and partners under these challenging times. We look forward to 2021 when the District will continue to build on the programs and projects identified in our 2018 10 Year management Plan.

Sincerely, Claire Bleser District Administrator





# Where have we been?

In each of its three watersheds, RPBCWD uses a One-Water management strategy. Rather than focus on a single water body at a time, the strategy looks at the watershed as a whole. It begins with collecting data on the health of the waters, followed by identifying solutions, and finally prioritizing & implementing projects, working together in partnerships whenever possible. We host and collaborate on educational events to engage the public, and award cost share grants to support water quality projects in the community. RPBCWD's permit program also plays an important role by reviewing projects from other entities to make sure they do not degrade our waters.

With three creeks, over a dozen lakes, and seven cities, there are many things to do and places to be in the watershed. Explore the map to discover where we've been this year.



**Projects** 



**Cost Share** 



**Water Quality Monitoring** 



Workshops, Events, Outreach

2020 Annual Communication



18681 Lake Drive East Chanhassen, MN 55317 952-607-6512 www.rpbcwd.org

#### Riley Purgatory Bluff Creek Watershed District Permit Application Review

Permit No: 2020-057

Considered at Board of Managers Meeting: December 9, 2020

Received complete: October 28, 2020

Applicant: Hennepin County Regional Railroad Authority

Consultant: Bolton and Menk, Eric Leagjeld

**Project:** Bluff 25 Culvert Rehabilitation—The proposed project includes repairing and relining the

existing cast-in-place culvert along Purgatory Creek under the MN River Bluffs LRT Regional

Trail just south of Valley View Road.

Location: 15195 Valley View Road, Eden Prairie, MN

Reviewer: Scott Sobiech, PE, Barr Engineering

Proposed Board Action
Manager seconded adoption of the following resolutions based on the permit report that follows and the presentation of the matter at the December 9, 2020 meeting of the managers. Resolved that the application for Permit 2020-057 is approved, subject to the conditions and stipulations set forth in the Recommendations section of the attached report;
Resolved that on determination by the RPBCWD administrator that the conditions of approval have been affirmatively resolved, the RPBCWD president or administrator is authorized and directed to sign and deliver Permit 2020-057 to the applicant on behalf of RPBCWD.
Upon vote, the resolutions were adopted, [VOTE TALLY].

#### **Rule Conformance Summary**

Rule	Issue	Conforms to RBPCWD Rules?	Comments
В	Floodplain Management and Drainage Alterations	Yes	
С	<b>Erosion Control Plan</b>	See Comment	See Rule Specific Permit Condition C1.
D	Wetland and Creek Buffer	See Comment	See Rule Specific Permit Condition D1.
G	Waterbody Crossing and Structures	See Comment	See Rule Specific Permit Condition G1-G2.
L	Permit Fee	NA	Governmental Entity
M	Financial Assurance	NA	Governmental Entity

#### **Project Background**

The existing culvert is a cast in place concrete arch, spanning 14 feet, with a rise of about 7 feet. It is 105 feet long and has concrete headwalls and wingwalls at each end. The channel bottom in the culvert consists of natural stone and cobbles. There are full length cracks with delamination of adjacent concrete along the north side and at the top of the structure. Transverse cracks are more densely populated at the west half of the structure. The transverse cracks allow backfill infiltrations with corresponding void penetration of up to 3 feet behind the wall of the culvert. The southwest wingwall has failed. The southeast wingwall has detached from the structure, displaced, and failed.

The project proposes to repair and slip line the failing culvert, which conveys Purgatory Creek flows under the MN River Bluffs LRT Regional Trail just south of Valley View Road. To off-set the loss of flow area from the slip lining a secondary reinforced concrete pipe is proposed to be hydraulically jacked under the trail parallel to the existing crossing. This secondary crossing is proposed to be set at an elevation to maintain the hydraulic capacity of the crossing. The project proposes no new impervious surface, so compliance with the RPBCWD stormwater-management criteria does not require.

The applicant was notified on September 9, 2020 that the submittal was incomplete because no information was provided to demonstrate compliance with the applicable criteria of RPBCWD's Rule B Floodplain Management and Rule D, Wetland and Creek Buffers.

The project site information is summarized below:

Description	Area (acres)
Total Site Area	0.92
Existing Site Impervious	0.03
Post Construction Site Impervious	0.03
New (Increase) in Site Impervious Area	0
Disturbed impervious surface	0
Total Disturbed Area	0.7

#### Exhibits:

- 1. Permit Application received August 25, 2020
- 2. HCRRA Culvert BLUFF 25 Inspection Report & Feasibility Alternatives dated October 25, 2019
- 3. Hydraulics Memo dated August 24, 2020
- 4. Design Plans Sheets dated August 25, 2020 (revision dated October 14, 2020)

- 5. Existing and proposed conditions SWMM Models for 2, 10, 100-year events received August 31, 2020
- 6. Cut/Fill analysis dated October 14, 2020
- 7. Response letter dated October 28, 2020 to RPBCWD's September 9, 2020 incomplete notice and comments

#### **Rule Specific Permit Conditions**

#### **Rule B: Floodplain Management and Drainage Alterations**

Because the project disturbs land below the 100-year flood elevation of Purgatory Creek to repair the culvert under MN River Bluffs LRT Regional Trail, the project must conform to the requirements in the RPBCWD Floodplain Management and Drainage Alteration rule (Rule B, Subsection 2.1).

The proposed culvert rehabilitation project conforms to Rule B, Subsections 3.1 because no buildings are proposed to be constructed or reconstructed as part of the project. Because the proposed project does not create any new or disturb existing impervious surface and the crossing is regulated under Rule G, the project is not subject to the restriction on creekside imperviousness in Rule B, Subsection 3.4. Placement of fill below the 100-year flood elevation is prohibited unless fully compensatory storage at the same elevation (+/- 1 foot) and within the floodplain of the same waterbody is provided (Rule B, Subsection 3.2). The supporting materials demonstrate, and the RPBCWD Engineer concurs, that 2.5 cubic yards of fill will be placed, and 142.8 cubic yards of compensatory storage will be created below the 100-year floodplain, thus providing a net increase in the floodplain storage. The earthwork tables provided on the drawings confirm the compensatory storage is provided at the same elevation (+/-1 foot) below the 100-year floodplain, thus the project conforms to Rule B, Subsection 3.2. The RPBCWD engineer concurs with the hydraulic analysis conducted by the applicant's engineer which demonstrates that the project will not materially alter surface flows. The analysis also demonstrates that the flow velocities for the 2-, 10-, and 100-year events will be slightly lower than existing conditions confirming that the proposed rehabilitation project is not reasonable likely to have adverse impact (Rule B, Subsection 3.3). A note on the plans requires activities be conducted to minimize the potential transfer of aquatic invasive species conforming to Rule B, Subsection 3.6.

The proposed project conforms to the floodplain management and drainage alteration requirements of Rule B.

#### **Rule C: Erosion and Sediment Control**

Because the project will disturb more than 50 cubic yards of material the project must conform to the requirements in the RPBCWD Erosion and Sediment Control rule (Rule C, Subsection 2.1).

The erosion control/turf restoration plan prepared by the Bolton and Menk includes installation of silt fence, inlet protection for storm sewer catch basins, rock berm construction entrances, daily inspection, placement of a minimum of 6 inches of topsoil, decompaction of areas compacted during construction,

and retention of native topsoil onsite. To conform to the RPBCWD Rule C requirements the following revisions are needed:

C1. The Applicant must provide the name and contact information of the individual responsible for erosion control at the site. RPBCWD must be notified if the responsible individual changes during the permit term.

#### **Rule D: Wetland and Creek Buffers**

Because the proposed work triggers a permit under RPBCWD Rule B and G for the crossing rehabilitation work and Purgatory Creek is a public waters watercourse, Rule D, Subsections 2.1a and 3.1c requires buffer adjacent to this watercourse. (There are no regulated wetlands on the project site.)

Purgatory Creek flows through the project site and requires an average buffer width of 50 feet from the creek centerline, minimum 30 feet in accordance with Rule D, Subsection 3.2.b.v for a public waters watercourse. The erosion control/turf restoration plan shows the buffer zone and marker locations as well as demonstrating that the proposed buffer area extends the required average widths and to the property limits (Rule D, Subsection 3.4). The buffer widths are summarized in the table below.

Regulated Feature	Required	Required	Provided	Provided
	Minimum	Average	Minimum	Average
	Width (ft)	Width (ft)	Width (ft)	Width (ft)
Purgatory Creek	30	50	50	50

A note on the erosion control/turf restoration plan indicates the Applicant is proposing revegetating disturbed areas within the proposed buffer with native vegetation in conformance with Rule D, Subsection 3.3. A note is included on the plan sheet indicating the project will be constructed so as to minimize the potential transfer of aquatic invasive species (e.g., zebra mussels, Eurasian watermilfoil, etc.) to the maximum extent possible conforming to Rule D, Subsection 3.5.

To conform to the RPBCWD Rule D the following revisions are needed:

D1. Buffer areas and maintenance requirements must be documented in an agreement approved by RPBCWD. As a public entity, HCRRA may comply with this requirement by entering into a maintenance agreement with the RPBCWD.

#### **Rule G: Waterbody Crossings and Structures**

Because the project will rehabilitate the existing culvert and install a secondary reinforced concrete pipe under the trail parallel to the existing culvert (collectively known and analyzed as the rehabilitated creek crossing) along Purgatory Creek, a public watercourse, the project requires conformance with RPBCWD's Waterbody Crossings and Structures Rule (Rule G). The criteria in subsections 3.1, 3.2 and 3.7 apply to the project. The proposed work falls within the scope of Minnesota Department of Natural Resources

General Permit #2015-1192. (Rule F: Stormwater and Streambank Stabilization is not triggered because the riprap being installed in bank of the creek is to prevent erosion more so than stabilize the bank.)

This work represents a public benefit by replacing a deteriorating culvert such as will maintain public-use trail connectivity (Rule G, Subsection 3.1a)

The proposed crossing was modeled in SWMM by the applicant. The analysis shows that the proposed 100-year frequency flood elevation upstream of the crossing (844.0) will match the existing elevation 844.0 M.S.L. and the downstream flood elevation will also match the existing flood elevation of 843.6 M.S.L., thus confirming the project will not increase the flood stage of the existing water body conforming to Rule G, Subsection 3.2a.

This portion of Purgatory Creek is not used for navigation, thus the requirement of Rule G, Subsection 3.2b does not apply to this project. The applicant provided modeling demonstrating the project will not adversely affect water quality or cause increased scour, erosion or sedimentation because the project maintains similar flow velocities through the culvert and downstream creek section. In addition, stabilization materials are sized and designed appropriately to withstand the shear stress along this section of Purgatory Creek and provide a stable creek system consistent with the criteria in Rule G, Subsection 3.2c. Because this is a rehabilitation of the existing crossing in place, wildlife will continue to be able to use Purgatory Creek as it is used under existing conditions, thus preserving wildlife passage. The proposed layer of sediment/riprap in the bottom of the rehabilitated culvert will be provided for aquatic organism passage, thus consistent with Rule G, Subsection 3.2d.

A no-build option would result in flows through the existing deteriorating arch culvert continuing to cause erosion along the culvert. The feasibility efforts conducted by the applicant considered slip lining to rehabilitate the culvert in place or a full culvert replacement by open cutting the crossing. The open cut option was dismissed because of the extensive site disturbance. Because the rehabilitation option minimizes site disturbance along the creek and provides a secondary culvert to maintain existing flow characteristic, this option has the minimal impact to the area and the creek system which is consistent with Rule G, Subsection 3.2e.

The erosion control/turf restoration plan includes a note directing the contractor that no work affecting the creek bed shall occur between April 1 and June 30 which does not align with watercourse requirement in Rule G, Subsection 3.7a. Banks will be immediately stabilized after completion of permitted work and revegetated as soon as growing conditions allow (Rule G, Subsection 3.7b). A note is included on the plan sheet indicating the project will be constructed so as to minimize the potential transfer of aquatic invasive species (e.g., zebra mussels, Eurasian watermilfoil, etc.) to the maximum extent possible (Rule G, Subsection 3.7c).

Rule G, Subsection 3.7d requires compliance with the applicable criteria in subsections 3.3 of Rule F. Construction drawings submitted confirm that riprap is sized appropriately in relation to the erosion

potential. The project proposes the use field stone riprap having an average size of 6 inches in diameter (MNDOT Class II Riprap). Because the proposed riprap can withstand shear stress of 2.4 lb/ft², which is slightly great than the anticipated shear stress (1.9 lbs/ sq ft), the riprap design is consistent with the erosion intensity for the flow in Purgatory Creek at this location, thus conforming to Rule F, Subsection 3.3b (i). Drawings confirm the proposed crossing will follow the existing alignment of the watercourse (Rule F, Subsection 3.3b (ii) and 3.3b (iv)). The standard riprap detail included with the drawings indicate that a granular transitional layer and a geotextile fabric will be placed, thus conforming to Rule F, Subsection 3.3b (iii). The drawing illustrate that the proposed riprap will extend to the top of bank, which is lower than the 100-year flood elevation, thus conforming to Ruel F Subsection 3.3b (v). The riprap design reflects energy dissipation and stabilization necessary to minimize erosion at the watercourse and is not placed for cosmetic purposes per Rule F, Subsection 3.3b (vi).

To conform to the RPBCWD Rule G the following revisions are needed:

- G1. General note #1 on the erosion control/turf restoration plan must be revised to require no activity between March 15 and June 15.
- G2. Permit applicant must provide a draft maintenance agreement for the waterbody crossing for RPBCWD approval, in accordance with Rule G, Section 5. As a public entity, HCRRA may comply with this requirement by entering into a maintenance agreement with the RPBCWD.

#### **Applicable General Requirements:**

- 1. The RPBCWD Administrator and Engineer shall be notified at least three days prior to commencement of work.
- 2. Construction must be consistent with the plans, specifications, and models that were submitted by the applicant that were the basis of permit approval. The date(s) of the approved plans, specifications, and modeling are listed above and on the permit. The granting of the permit does not in any way relieve the permittee, its engineer, or other professional consultants of responsibility for the permitted work.
- 3. The grant of the permit does not relieve the permittee of any responsibility to obtain approval of any other regulatory body with authority.
- 4. The issuance of this permit does not convey any rights to either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.
- 5. In all cases where the doing by the permittee of anything authorized by this permit involves the taking, using or damaging of any property, rights or interests of any other person or persons, or of any publicly owned lands or improvements or interests, the permittee, before proceeding therewith, must acquire all necessary property rights and interest.
- 6. RPBCWD's determination to issue this permit was made in reliance on the information provided by the applicant. Any substantive change in the work affecting the nature and extent of applicability of RPBCWD regulatory requirements or substantive changes in the methods or

- means of compliance with RPBCWD regulatory requirements must be the subject of an application for a permit modification to the RPBCWD.
- 7. If the conditions herein are met and the permit is issued by RPBCWD, the applicant, by accepting the permit, grants access to the site of the work at all reasonable times during and after construction to authorized representatives of the RPBCWD for inspection of the work.

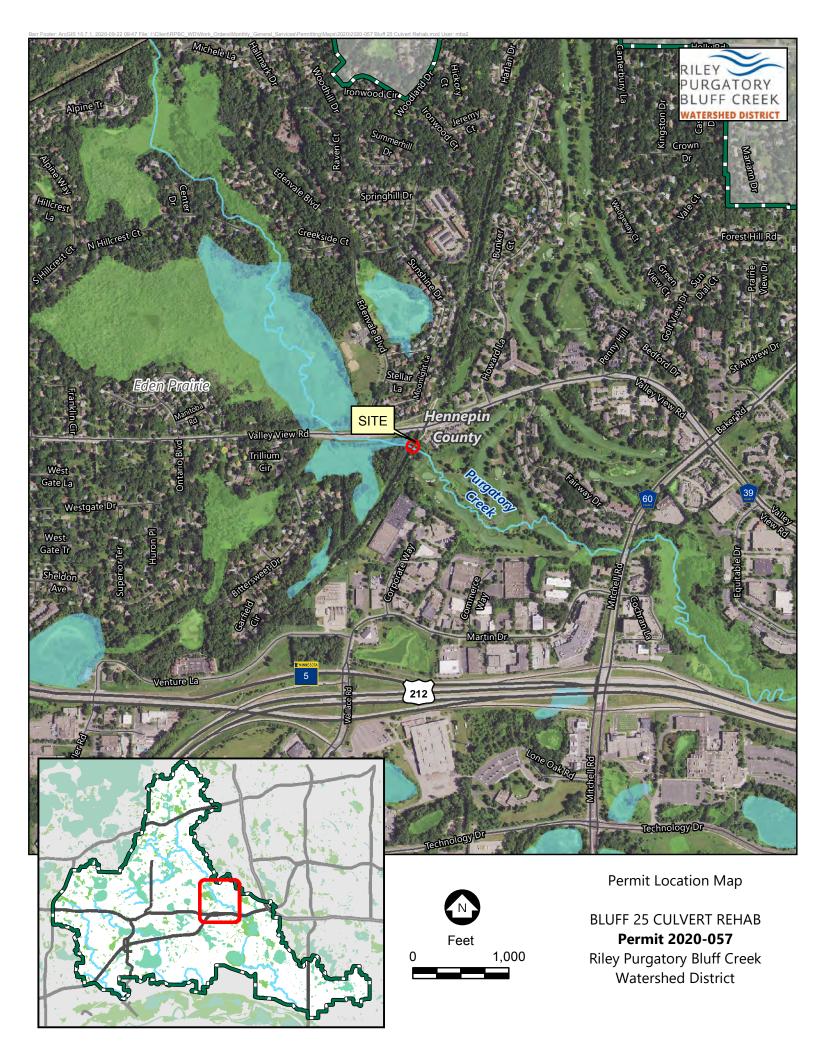
#### **Findings**

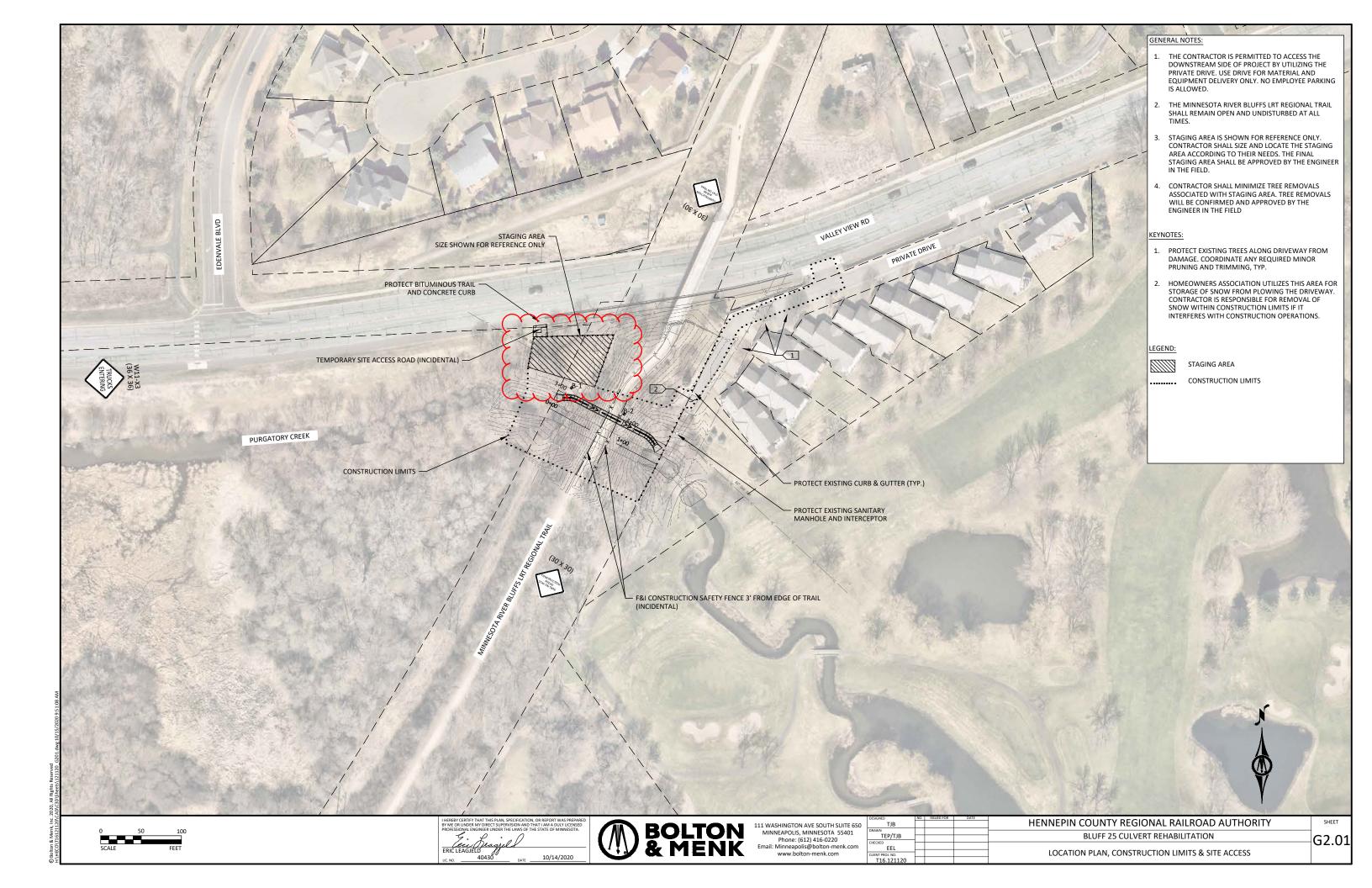
- 1. The proposed project includes the information necessary, plan sheets and erosion control plan for review.
- 2. The proposed project conforms to Rule B.
- 3. The proposed project will conform to Rules C, D, and G if the conditions listed above are met.
- 4. Under Minnesota Department of Natural Resources General Permit 2015-1192 (attached to this report), approval of work under RPBCWD rule(s) G constitutes approval under applicable DNR work in waters rules. Compliance with conditions on approval and payment of applicable fees, if any, are necessary to benefit from general permit approval and the responsibility of the applicants.

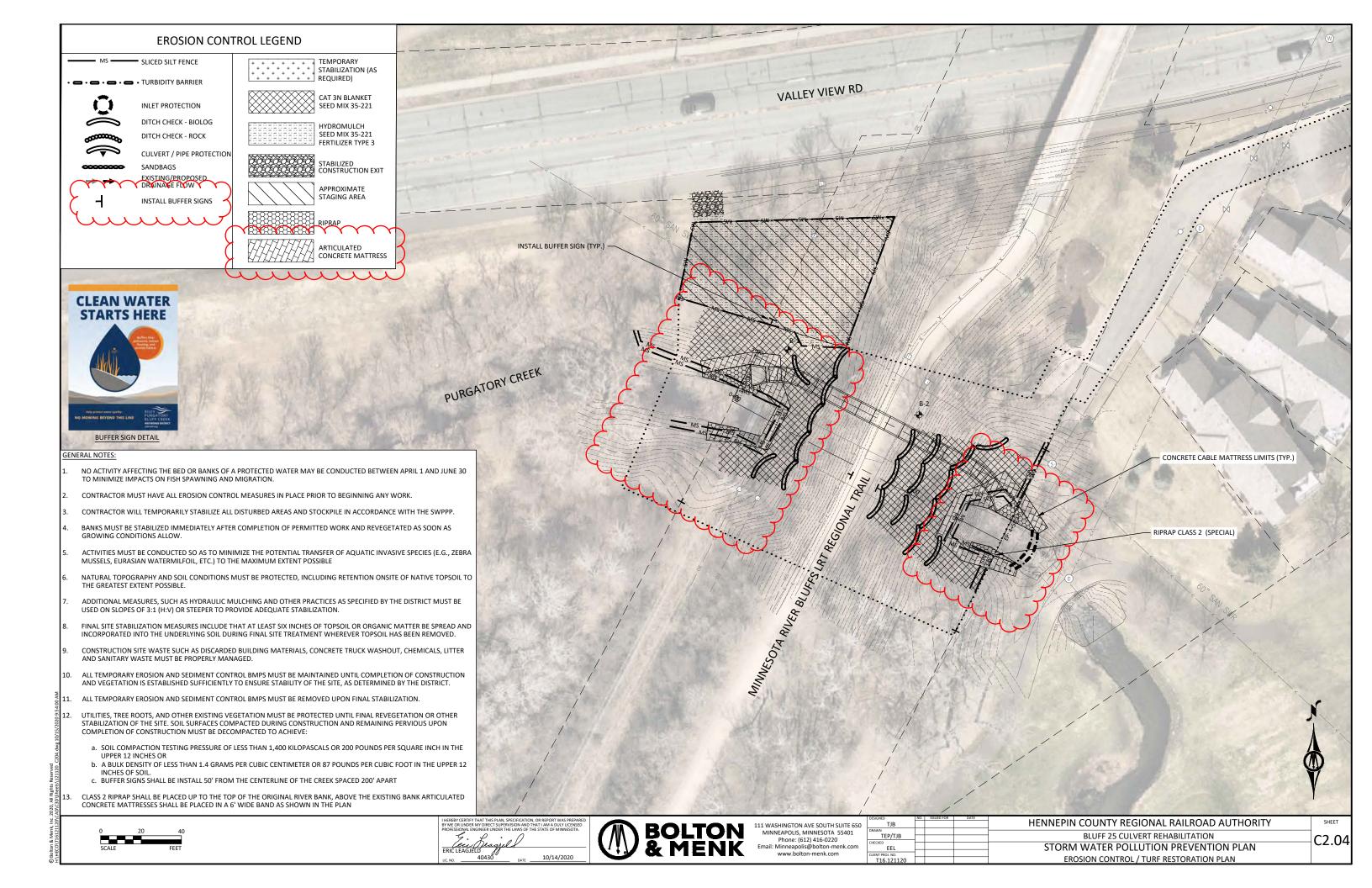
#### **Recommendation:**

Approval of the permit contingent upon:

- 1. Continued compliance with General Requirements.
- 2. The Applicant must provide the name and contact information of the individual responsible for erosion control at the site. RPBCWD must be notified if the responsible individual changes during the permit term.
- 3. Receipt of an updated erosion control/turf restoration plan revising the general note #1 on the to require no activity between March 15 and June 15.
- 4. Permit applicant must provide a draft maintenance agreement and inspection plan for the waterbody crossings and buffer areas. Once approved by RPBCWD, the HCRRA must enter an agreement with RPBCWD to maintain the project facilities in accordance with the plan..









18681 Lake Drive East Chanhassen, MN 55317 952-607-6512 www.rpbcwd.org

#### Riley Purgatory Bluff Creek Watershed District Permit Application Review

Permit No: 2020-065

Considered at Board of Managers Meeting: December 9, 2020

Received complete: November 11, 2020

**Applicant:** Java Companies, LLC – Jon Fransway

Representative: Civil Site Group – Ben Jore

**Project:** The Terry Pines Coffee Development proposes the redevelopment of a commercial property,

with construction of a new building, parking lot, drive, sidewalks, related utilities and an underground stormwater detention/infiltration system to provide volume control, water

quality, and rate control.

**Location:** 16315 Terry Pine Drive, Eden Prairie, MN 55416

**Reviewer:** Scott Sobiech, P.E., Barr Engineering; Katie Turpin-Nagel, Barr Engineering

Reviewer.	Scott Sobiech, F.E., Dan Engineering,	Ratie Turpin-Nagel, Dari Engineering
<b>Proposed Board</b>	<u>Action</u>	
following resolu		seconded adoption of the natter :
	e application for Permit 2020-065 forth in the Recommendations sect	is approved, subject to the conditions and tion of the attached report;
the permit have	been affirmatively resolved, the RI	dministrator that the conditions of approval of PBCWD president or administrator is applicant, Permit 2020-065 on behalf of
Upon vote, the r	esolutions were adopted,	[VOTE TALLY].

#### **Applicable Rule Conformance Summary**

Rule	İs	ssue	Conforms to Rule?	Comments
С	Erosion Control Plan		See comment.	See rule-specific permit condition C1.
J	Stormwater	Rate	Yes	
	Management	Volume	See comment.	See rule-specific permit condition J1. See rule-stipulation 4
		Water Quality	Yes	
		Low Floor Elev.	Yes	
		Maintenance	See comment.	See rule-specific permit condition J2.
		Chloride Management	See comment.	See rule-stipulations 5
	Wetland Protection		N/A	
L	Permit Fee		Yes.	\$3,000 received October 23, 2020.
М	Financial Assura	ince	See comment.	The financial assurance is calculated at \$62,538

#### **Background**

There is a State Farm Insurance building, parking lot, and associated appurtenances on the existing site. The applicant proposes demolition and removal of the existing building and parking lot for construction of a new building, parking lot, drive, sidewalks, related utilities and an underground stormwater detention/infiltration system to provide volume control, water quality, and rate control.

The project site information is summarized in Table 1

**Table 1. Project site information** 

Project Site Information	Area (acres)
Total Site Area	0.56
Existing Site Impervious	0.222
Post Construction Site Impervious	0.328

Project Site Information	Area (acres)
New (Increase) in Site Impervious Area	0.086 (40% increase)
Sidewalk and Trail Exempt Impervious Area (acres)	0.0
Disturbed impervious surface (acres)	0.222 (100% disturbance)
Total Disturbed Area	0.56

#### Exhibits:

- 1. Permit application dated October 23, 2020 (Notified applicant on October 30, 2020 that submittal was incomplete)
- 2. Project Plan set dated October 22, 2020 (revised November 11, 2020, revised November 23, 2020)
- 3. Stormwater Report dated October 20, 2020 (revised November 11, 2020, revised November 23, 2020)
- 4. Subsurface Soil Boring Logs by American Engineering Testing, Inc. dated October 8, 2020
- Existing and Proposed HydroCAD Models received October 23, 2020 (revised November 11, 2020, revised November 23, 2020)
- Existing and Proposed Conditions MIDs Models received October 23, 2020 (revised November 23, 2020)
- 7. Review Responses dated November, 2020 (i.e., the applicant's responses to the October 30<sup>th</sup> incomplete notice/review comments)
- 8. Review Responses dated November 24, 2020 (i.e., the applicant's responses to the November 11<sup>th</sup> complete notice/review comments)
- 9. Review Responses dated October 30, 2020
- 10. Review Responses dated November 11, 2020
- 11. Engineers Opinion of construction cost received November 11, 2020 (revised November 24, 2020)

#### **Rule Specific Permit Conditions**

#### **Rule C: Erosion and Sediment Control**

Because the project will alter 0.56 acres of land-surface area the project must conform to the requirements in the RPBCWD Erosion and Sediment Control rule (Rule C, Subsection 2.1).

The erosion control plan prepared by Civil Site Group includes installation of silt fence, sediment bioroll/compost filter log, inlet protection for storm sewer catch basins, stabilized construction entrances, daily inspection, placement of a minimum of 6 inches of topsoil, decompaction of areas compacted during construction, and retention of native topsoil onsite. To conform to RPBCWD Rule C requirements the following revisions are needed:

C1. The Applicant must provide the name and contact information of the general contractor responsible for the site. RPBCWD must be notified if the responsible party changes during the permit term. This information is required prior to issuance of the permit.

#### **Rule J: Stormwater Management**

Because the project will involve 0.56 acres of land-disturbing activity, the project must meet the criteria of RPBCWD's Stormwater Management rule (Rule J, Subsection 2.1). The criteria listed in Subsection 3.1 will apply to the entire site because the project will disturb more than 50% of the existing impervious surface on the parcel (Rule J, Subsection 2.3).

The project includes construction of an underground detention/infiltration system to provide runoff volume abstraction, water-quality treatment, and rate control. Pretreatment of runoff prior to entering the underground detention/infiltration system is provided by a sump manhole. There is also an isolator row in the subsurface treatment system dedicated to pretreatment (i.e., a sediment row).

#### **Rate Control**

In order to meet the rate control criteria listed in Subsection 3.1.a, the 2-, 10-, and 100-year post development peak runoff rates must be equal to or less than the existing discharge rates at all locations where stormwater leaves the site. The applicant used a HydroCAD hydrologic model to simulate runoff rates for pre- and post-development conditions for the 2-, 10-, and 100-year frequency storm events using a nested rainfall distribution, and a 100-year frequency, 10-day snowmelt event. The existing and proposed 2-, 10-, and 100-year frequency discharges from the site are summarized in Table 2. The proposed project is in conformance with RPBCWD Rule J, Subsection 3.1.a.

Table 2. Rate control summary

Discharge Location	2-Year Discharge (cfs)		10-Year Discharge (cfs)		100-Year Discharge (cfs)		10-Day Snowmelt (cfs)	
	Ex	Prop	Ex	Prop	Ex	Prop	Ex	Prop
South	<0.1	<0.1	0.1	0.1	0.3	0.2	<0.1	<0.1
North	1.0	0.1	1.8	0.7	3.6	2.6	0.1	<0.1
West	<0.1	<0.1	<0.1	<0.1	0.1	0.1	<0.1	<0.1

#### **Volume Abstraction**

Subsection 3.1.b of Rule J requires the abstraction onsite of 1.1 inches of runoff from the impervious surface of the parcel. An abstraction volume of 0.030 acre-feet (1,311 cubic feet) is required from the 0.328 acres of impervious area. The project includes an underground detention/infiltration system with pretreatment to provide runoff volume abstraction, water quality treatment, and rate control. Pretreatment of runoff prior to entering the underground detention/infiltration system is provided by a sump manhole and a dedicated sediment row to conform to Rule J, Subsection 3.1b.ii.2.

Soil borings performed by American Engineering Testing, Inc. show that soils below the proposed underground detention/infiltration system consist of silty sand. The MN Stormwater Manual indicates an infiltration rate of 0.45 inches per hour for silty sand. Soil borings at other locations show predominately Hydrologic Soil Group (HSG) Type A and B soils onsite (i.e., silty sand (fine to medium grained), sand (fine to medium grained)). While the stormwater report lists a suggested infiltration rate of 0.45 inches per hour based on soil classification, infiltration or hydraulic conductivity testing has not yet been completed at the bottom of the infiltration facilities, as required by Rule J, Subsection 3.1.b.ii.c. The applicant must submit documentation verifying the infiltration capacity of the soils and that the volume control capacity is calculated using the measured infiltration rate prior to project close-out. If infiltration capacity is less than the design rate needed to conform with the volume abstraction requirement in subsection 3.1b, design modifications to achieve compliance with RPBCWD requirements will need to be submitted (in the form of an application for a permit modification or new permit).

Groundwater was not encountered in the soil borings. Because groundwater was not observed at the termination depth of the borings (elevations 861-870 feet), the groundwater level is not expected to be higher than elevation 870 feet. The bottom of the proposed subsurface infiltration system is at an elevation of 873.80 feet. This indicates that groundwater is at least 3 feet below the bottom of the proposed stormwater management systems (Rule J, Subsection 3.1.b.ii.2). An abstraction volume of 1,622 cubic feet is provided by the underground detention/infiltration system, which is large enough to provide more than the required abstraction volume for the site.

The proposed stormwater facilities provide adequate surface area to drawdown the abstraction volumes within the required 48-hour period, thus conforming with Rule J, Subsection 3.1.b.ii.3, assuming the infiltration rates are consistent with design assumptions.

The abstraction achieved by the project is summarized in Table 3.

Table 3. Volume abstraction summary

Stormwater Management System	Required Abstraction Depth (inches)	Required Abstraction Volume (cubic feet)	Provided Abstraction Depth (inches)	Provided Abstraction Volume (cubic feet)
Underground detention/infiltration system	1.1	1,311	1.230	1,622

The engineer concurs with the submitted hydrologic and hydraulic modeling and finds that the proposed project conforms with Rule J, Subsection 3.1.b. However, the following revision is needed to align the proposed construction drawings with the modeling:

J1. Permit applicant must provide updated construction drawings or shop drawings that show that the subsurface storage (Stormtech DC-780) matches the HydroCAD design inputs.

#### Water Quality Management

Subsection 3.1.c of Rule J requires the Applicant provide volume abstraction in accordance with 3.1b or least 60 percent annual removal efficiency for total phosphorus (TP), and at least 90 percent annual removal efficiency for total suspended solids (TSS) from site runoff, and no net increase in TSS or TP loading leaving the site from existing conditions. Because the BMPs proposed by the applicant provide more volume abstraction than is require by 3.1b and the engineer concurs with the modeling, the engineer finds that the proposed project is in conformance with Rule J, Subsection 3.1.c.

#### **Low floor Elevation**

No structure may be constructed or reconstructed such that its lowest floor elevation is less than 2 feet above the 100-year event flood elevation according to Rule J, Subsection 3.6. Table 4 shows the low floor elevation of the proposed structure (881.45 ft) is greater than the required 2 feet above 100-year event flood elevation of underground detention/infiltration system (877.28). The RPBCWD Engineer concurs that the proposed project is in conformance with Rule J, Subsection 3.6.

**Table 4. Summary Low Floor Analysis** 

Stormwater Facility	Low Floor Elevation of Building (feet)	100-year Event Flood Elevation Stormwater Facility (feet)	Groundwater Elevation at Proposed Low Floor (feet) <sup>1</sup>	Freeboard (feet)
Underground detention/infiltration System	881.45	877.28	<870	4.17

#### **Maintenance**

Subsection 3.7 of Rule J requires the submission of a maintenance plan. All stormwater management structures and facilities must be designed for maintenance access and properly maintained in perpetuity to assure that they continue to function as designed. The applicant has not yet provided a draft maintenance declaration for review. To conform to the RPBCWD Rule J the following revisions are needed:

J2. Permit applicant must provide a maintenance and inspection declaration for review. A draft of the declaration must be provided for District approval prior to recording.

#### **Chloride Management**

Subsection 3.8 of Rule J requires the submission of chloride management plan that designates the individual authorized to implement the chloride management plan and the MPCA-certified salt applicator engaged in implementing the plan. To close out the permit and release the \$5,000 in financial assurance held for the purpose of chloride management, the permit applicant must provide a chloride management plan that designates the individual authorized to implement the chloride management plan and the MPCA-certified salt applicator engaged in implementing the plan at the site.

#### **Rule L: Permit Fee:**

The RPBCWD permit fee schedule adopted in February 2020 requires permit applicants to submit a permit-fee deposit of \$3,000 to be held in escrow and applied to reimburse RPBCWD for the permit-application processing fee and permit review and inspection-related costs. When the permit application is approved, the deposit must be replenished to the applicable deposit amount by the applicant before the permit will be issued to cover actual costs incurred to monitor compliance with permit conditions and the RPBCWD Rules. A permit fee deposit of \$3,000 was received on October 23, 2020.

#### Rule M: Financial Assurance:

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Perimeter Control: 820 L.F. x \$2.50/L.F. =	\$2,050
Restoration: 0.23 acres x \$2,500/acre =	\$575
Inlet Protection: 6 x \$100/each =	\$600
Construction Entrance: 1 x \$250/each =	\$250
Rule J:	
Stormwater facilities: 125% of Engineer's Opinion of Cost (1.25*\$38,702) =	\$48,378
Chloride Management Plan =	\$5,000
Contingency (10%)	\$5,68 <u>5</u>
Total Financial Assurance	\$62,538

#### **Applicable General Requirements:**

- 1. The RPBCWD Administrator and Engineer shall be notified at least three days prior to commencement of work.
- 2. Construction shall be consistent with the plans and specifications approved by the District as a part of the permitting process. The date of the approved plans and specifications is listed on the permit.
- 3. Construction must be consistent with the plans, specifications, and models that were submitted by the applicant that were the basis of permit approval. The date(s) of the approved plans, specifications, and modeling are listed on the permit. The grant of the permit does not in any way relieve the permittee, its engineer, or other professional consultants of responsibility for the permitted work.
- 4. The grant of the permit does not relieve the permittee of any responsibility to obtain approval of any other regulatory body with authority.
- 5. The issuance of this permit does not convey any rights to either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.
- 6. In all cases where the doing by the permittee of anything authorized by this permit involves the taking, using or damaging of any property, rights or interests of any other person or persons, or of any publicly owned lands or improvements or interests, the permittee, before proceeding therewith, must acquire all necessary property rights and interest.
- 7. RPBCWD's determination to issue this permit was made in reliance on the information provided by the applicant. Any substantive change in the work affecting the nature and extent of applicability of RPBCWD regulatory requirements or substantive changes in the methods or means of compliance with RPBCWD regulatory requirements must be the subject of an application for a permit modification to the RPBCWD.
- 8. If the conditions herein are met and the permit is issued by RPBCWD, the applicant, by accepting the permit, grants access to the site of the work at all reasonable times during and after construction to authorized representatives of the RPBCWD for inspection of the work.

#### **Findings**

- 1. The proposed project includes the information necessary, plan sheets and erosion control plan for review.
- 2. The proposed project will conform to Rules C and J if the Rule Specific Permit Conditions listed above are met.

#### **Recommendation:**

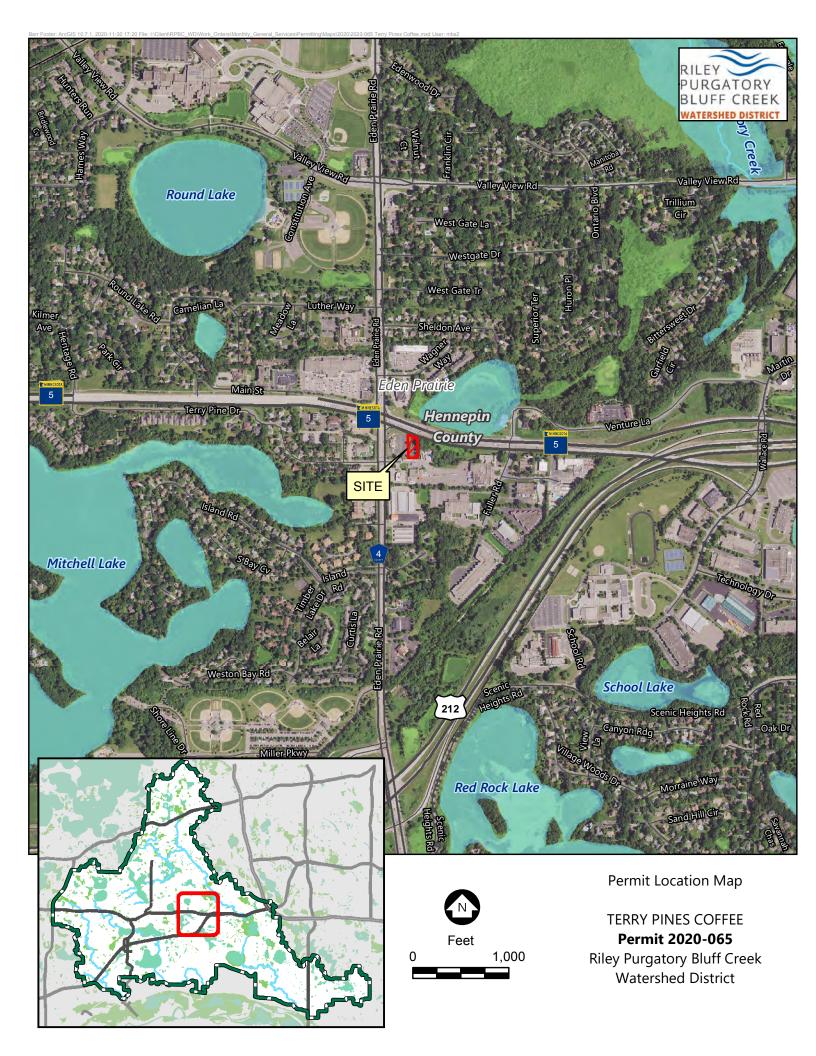
Approval of the permit contingent upon:

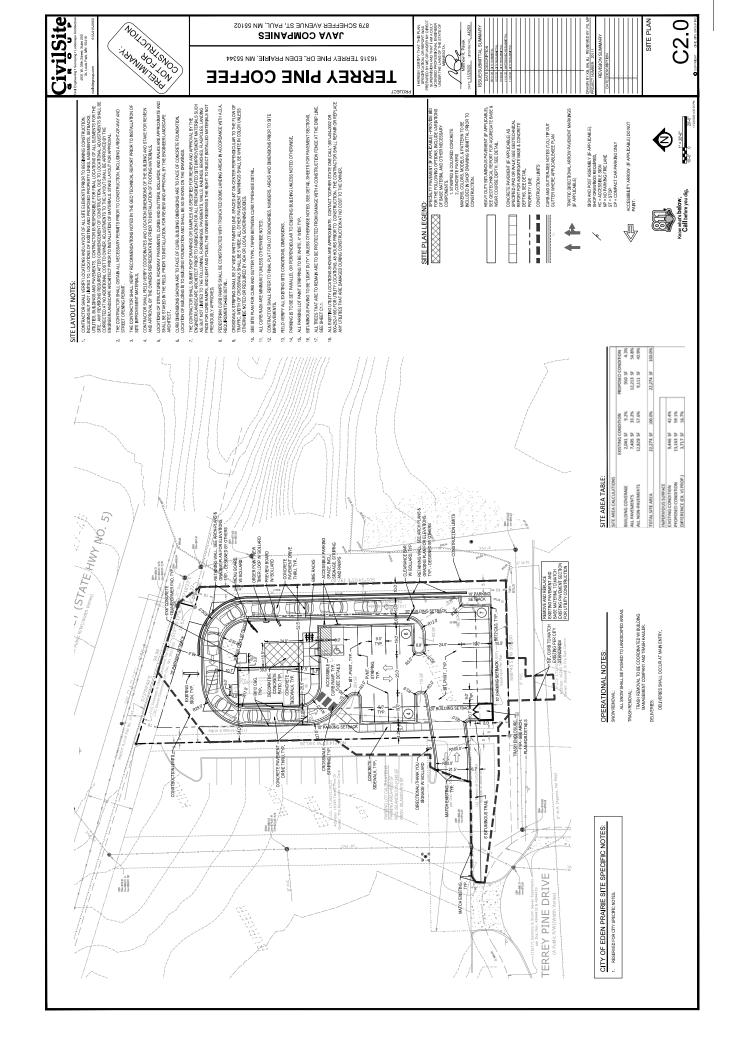
- 1. Continued compliance with General Requirements.
- 2. Financial Assurance in the amount of \$62,538.
- 3. The applicant providing the name and contact information of the general contractor responsible for the site.
- 4. The applicant must provide updated construction drawings or shop drawings that show that the subsurface storage (Stormtech DC-780) matches the HydroCAD design inputs.
- 5. Receipt in recordation of a maintenance declaration for the operation and maintenance of the stormwater management facilities. A draft must be approved by the District prior to recordation.

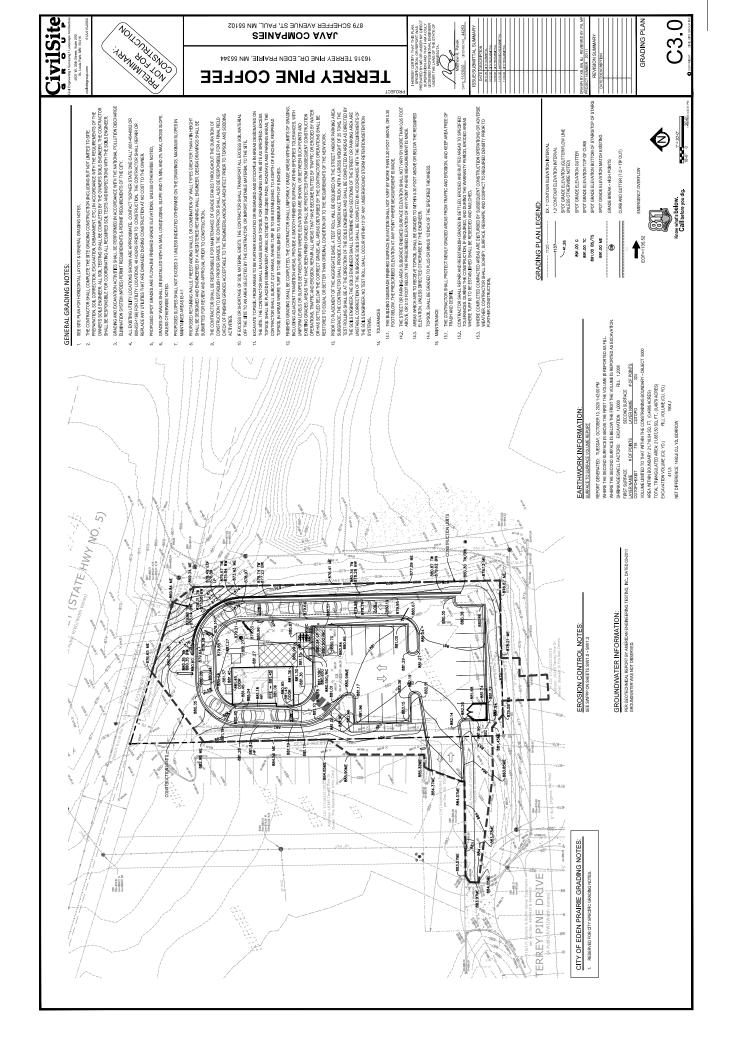
By accepting the permit, when issued, the applicant agrees to the following stipulations:

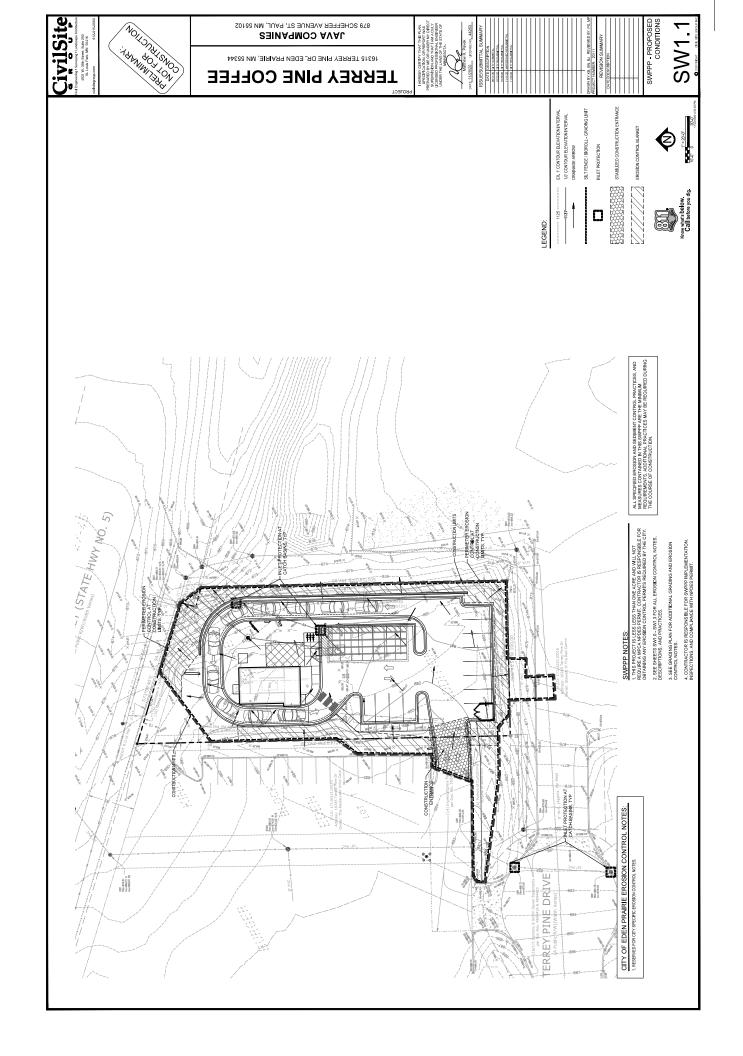
- 1. Per Rule J Subsection 4.5, upon completion of the site work, the permittee must submit as-built drawings demonstrating that at the time of final stabilization, the pretreatment manholes and subsurface stormwater facility conform to design specifications and function as intended and approved by the District. As-built/record drawings must be signed by a professional engineer licensed in Minnesota and include, but not limited to:
  - a) the surveyed bottom elevations, water levels, and general topography of all facilities;
  - b) the size, type, and surveyed invert elevations of all stormwater facility inlets and outlets;
  - c) the surveyed elevations of all emergency overflows including stormwater facility, street, and other;
- 2. Providing the following additional close-out materials:
  - a) Documentation that constructed infiltration and reuse facilities perform as designed. This may include infiltration testing, flood testing, or other with prior approval from RPBCWD
  - b) Documentation that disturbed pervious areas remaining pervious have been decompacted per Rule C.2c criteria
- 3. The work on the Terry Pines Coffee development under the terms of permit 2020-065, if issued, must have an impervious surface area and configuration materially consistent with the approved plans. Design that differs materially from the approved plans (e.g., in terms of total impervious area) will need to be the subject of a request for a permit modification or new permit, which will be subject to review for compliance with all applicable regulatory requirements.
- 4. Per Rule J, Subsection 3.1.b.ii measured infiltration capacity of the soils at the bottom of the infiltration systems must be provided. The applicant must submit documentation verifying the infiltration capacity of the soils and that the volume control capacity is calculated using the measured infiltration rate. If infiltration capacity is less than needed to conform with the volume abstraction requirement in subsection 3.1b, design modifications to achieve compliance with RPBCWD requirements will need to be submitted (in the form of an application for a permit modification or new permit).
- 5. To close out the permit and release the \$5,000 in financial assurance held for the purpose of the chloride management, the permit applicant must provide a chloride management plan that designates the individual authorized to implement the chloride management plan and the MPCA-certified salt applicator engaged in implementing the plan at the site.

Replenish the permit fee deposit to the original amount or such lesser amount as the RPBCWD administrator deems sufficient within 45 days of receiving notice that such deposit is due in order to cover continued actual costs incurred to monitor compliance with permit conditions and the RPBCWD Rules.











December 2, 2020

Claire Bleser District Administrator Riley Purgatory Bluff Creek Watershed District 18681 Lake Drive E. Chanhassen, Minnesota 55317

Dear Claire:

Enclosed please find the checks and Treasurer's Report for Riley Purgatory Bluff Creek Watershed District for the one month and ten months ending October 31, 2020.

Please examine these statements and if you have any questions or need additional copies, please call me.

Sincerely,

REDPATH AND COMPANY, LTD.

Mark C. Gibbs, CPA

Enclosure



To The Board of Managers Riley Purgatory Bluff Creek Watershed District Chanhassen, Minnesota

#### **Accountant's Opinion**

The Riley Purgatory Bluff Creek Watershed District is responsible for the accompanying October 31, 2020 Treasurer's Report in the prescribed form. We have performed a compilation engagement in accordance with the Statements on Standards for Accounting and Review promulgated by the Accounting and Review Services Committee of AICPA. We did not audit or review the Treasurer's Report nor were we required to perform any procedures to verify the accuracy or completeness of the information provided by the Riley Purgatory Bluff Creek Watershed District. Accordingly, we do not express an opinion, a conclusion, nor provide any form of assurance on the Treasurer's Report.

#### **Reporting Process**

The Treasurer's Report is presented in a prescribed form mandated by the Board of Managers and is not intended to be a presentation in accordance with accounting principles generally accepted in the United States of America. The reason the Board of Managers mandates a prescribed form instead of GAAP (Generally Accepted Accounting Principles) is this format gives the Board of Managers the financial information they need to make informed decisions as to the finances of the watershed.

GAAP basis reports would require certain reporting formats, adjustments to accrual basis and supplementary schedules to give the Board of Managers information they need, making GAAP reporting on a monthly basis extremely cost prohibitive. An independent auditing firm is retained each year to perform a full audit and issue an audited GAAP basis report. This annual report is submitted to the Minnesota State Auditor, as required by Statute, and to the Board of Water and Soil Resources.

The Treasurer's Report is presented on a modified accrual basis of accounting. Expenditures are accounted for when incurred. For example, payments listed on the Cash Disbursements report are included as expenses in the Treasurer's Report even though the actual payment is made subsequently. Revenues are accounted for on a cash basis and only reflected in the month received.

legeth and Conpain, Ltd. REDPATH AND COMPANY, LTD.

St. Paul, Minnesota December 2, 2020

### RILEY PURGATORY BLUFF CREEK WATERSHED DISTRICT

## **Treasurers Report**

## **October 31, 2020**

#### REPORT INDEX

Page #	Report Name	
1	Cash Disbursements	
2	Fund Performance Analysis – Table 1	
3	Multi-Year Project Performance Analysis – Table 2	
4	Balance Sheet	
5	VISA Activity	

#### RILEY PURGATORY BLUFF CREEK WATERSHED DISTRICT Cash Disbursements October 31, 2020

Amount

#### **Accounts Payable:**

Check #

Payee

	CHeck#	rayee	Amount
	5272V	Character & Dalaman Andrews	(\$2.700.26)
	5372V	Stewart & Deborah Anderson	(\$3,790.26)
	5386V 5405	Masha Hoy Barr Engineering	(2,664.75) 50,793.20
	5406	B9 Polar Waters, LLC	7,593.28
	5407	CenterPoint Energy	124.02
	5408	CenturyLink	171.92
	5409	City of Chanhassen	34.38
	5410	City of Eden Prairie	5,000.00
	5411	Coverall of the Twin Cities	316.76
	5412	Dingman Custom Homes	1,725.00
	5413	ECM Publishers, Inc.	333.20
	5414V	VOID	-
	5415	Grey Fox Pottery	512.20
	5416	HDR Engineering, Inc.	711.92
	5417	HealthPartners	3,060.02
	5418	Amy Herbert, LLC	900.00
	5419	Mariya Hoy	2,664.75
	5420	Iron Mountain	162.57
	5421	Daniel & Molly Kerr	3,930.00
	5422	Larry Koch	230.87
	5423	League of Minnesota Cities Insurance WC	767.00
	5424	Lecy Bros. Homes	1,825.00
	5425	Limnotech	1,865.65
	5426	Metro Sales, Inc.	27.78
	5427	Metro Watershed Partner	1,750.00
	5428	Nine Mile Creek Watershed District	166.67
	5429	Lisanne Oster	43.50
	5430	The Preserve Association	18,130.75
	5431	Principal Life Insurance Company	404.01
	5432	ProTech	236.57
	5433	Redpath & Company	2,766.17
	5434	RMB Environmental Laboratories, Inc.	1,582.00
	5435	Kim & Robert Silverman	3,017.50
	5436	Smith Partners	13,015.63
	5437	Southwest News Media	809.00
	5438	Southwest Metro Chamber of Commerce	376.00
	5439	SRF Consulting Group, Inc.	1,752.46
	5440	Wenck, Inc.	4,875.00
	5441	What Works, Inc.	1,365.00
	5442	Xcel Energy	17.53
	5443	Elim Shores	2,440.35
		Total Accounts Payable:	\$129,042.65
Payroll Disbur	sements:		
		Payroll Processing Fee	199.65
		Employee Salaries	38,007.18
		Employer Payroll Taxes	2,866.76
		Employer Benefits (H.S.A. Match)	466.66
		Employee Benefit Deductions	(494.40)
		Staff Expense Reimbursements	91.11
		PERA Match	2,921.50
		Total Payroll Disbursements:	\$44,058.46
		VISA - 10/13/20	5,642.84
		VISA - 10/22/20	7,330.50
		Refund - Teledyne Isco	(1,052.00)
		Ck. #5414-Elim Shores - Permit Fee Refund	(2,440.35)
		Ck. #5429-Lisanne Oster-Permit Fee Refund	(43.50)
		Ck.#5412-Dingman Custom Homes-Surety Refund	(1,725.00)
		Ck.#5424-Lecy Bros.Homes-Surety Refund	(1,825.00)
		Ck.#5435-Kim & Robert Silverman-Surety Refund	(3,017.50)
TOTAL DISBURSEMENTS:			\$175,971.10

**Memos**The 2020 mileage rate is .575 per mile. The 2019 rate was .58 Old National VISA will be paid on-line

#### RILEY PURGATORY BLUFF CREEK WATERSHED DISTRICT Fund Performance Analysis - Table 1 October 31, 2020

			Revised	Command Manually	Vanuta Data	Year-to Date
REVENUES	2020 Budget	Fund Transfers	2020 Budget	Current Month	Year-to-Date	Percent of Budget
Plan Implementation Levy	\$3,703,000.00	_	\$3,703,000.00	-	\$1,916,340.82	51.75%
Market Value Credit	\$0.00	-	\$0.00	34.51	\$34.51	
Permit	25,000.00	-	25,000.00	5,616.15	59,240.15	236.96%
Grant Income	346,719.00	-	346,719.00	-	75,950.00	21.91%
Investment Income	75,000.00	-	75,000.00	-	51,264.76	68.35%
Past Levies	3,699,097.00	-	3,699,097.00	-	-	0.00%
Miscellaneous Income	-	-	-	-	3,788.84	
Reimbursements	-	-	-	-	119,204.05	
Partner Funds TOTAL REVENUE	612,698.00	-	612,698.00	- 45.650.66		0.00% <b>26.31%</b>
TOTAL REVENUE	\$8,461,514.00	÷	\$8,461,514.00	\$5,650.66	\$2,225,823.13	20.51%
EXPENDITURES						
Administration						
Accounting and Audit	\$42,000.00	-	\$42,000.00	\$2,965.82	\$45,668.80	108.74%
Advisory Committees	5,000.00	-	5,000.00	-	337.48	6.75%
Insurance and bonds	20,000.00	-	20,000.00	767.00	18,287.00	91.44%
Engineering Services	109,000.00	-	109,000.00	7,962.50	80,090.69	73.48%
Legal Services	84,000.00	-	84,000.00	9,833.33	87,527.09	104.20%
Manager Per Diem/Expense	20,000.00	-	20,000.00	687.24	12,057.00	60.29%
Dues and Publications	14,000.00	-	14,000.00	-	12,276.00	87.69%
Office Cost	150,000.00	-	150,000.00	15,344.65	140,156.38	93.44%
Permit Review and Inspection	135,000.00	-	135,000.00	9,543.16	149,419.58	110.68%
Permit and Grant Database	39,900.00	-	39,900.00	-	23,500.00	58.90%
Professional Services	-	-	-	1,365.00	11,992.00	
Recording Services	17,000.00	-	17,000.00	900.00	10,104.48	59.44%
Staff Cost	600,000.00	=	600,000.00	39,456.71	420,557.51	70.09%
Subtotal	\$1,235,900.00	-	\$1,235,900.00	\$88,825.41	\$1,011,974.01	81.88%
Programs and Projects District Wide						
10-year Management Plan	\$5,000.00	_	\$5,000.00	\$23.90	\$12,844.66	256.89%
AIS Inspection and early response	85,000.00		85,000.00	22.94	2,806.46	3.30%
Cost-share	398,723.00	_	398,723.00	20,481.84	120,949.74	30.33%
Data Collection and Monitoring	192,000.00	_	192,000.00	13,614.93	172,025.08	89.60%
Community Resiliency	63,130.00	_	63,130.00	9,366.57	23,374.57	37.03%
Education and Outreach	123,000.00	_	123,000.00	11,809.33	92,682.63	75.35%
Plant Restoration - U of M	58,762.00	_	58,762.00	,	25,903.87	44.08%
Repair and Maintenance Fund *	267,730.00	-	267,730.00	50.00	55,189.58	20.61%
Wetland Management*	165,685.00	-	165,685.00	8,533.96	26,840.58	16.20%
Groundwater Conservation*	179,750.00	-	179,750.00	, <u>-</u>	120.00	0.07%
Lake Vegetation Implementation	125,937.00	-	125,937.00	2,133.00	37,244.98	29.57%
Opportunity Project*	287,501.00	-	287,501.00	-	13,666.29	4.75%
Stormwater Ponds - U of M	79,985.00	-	79,985.00	-	32,820.96	41.03%
Hennepin County Chloride Initiative	114,830.00	-	114,830.00	-	21,859.46	19.04%
Lower Minnesota Chloride Cost-Share	217,209.00	-	217,209.00	-	-	0.00%
Subtotal	\$2,364,242.00	-	\$2,364,242.00	\$66,036.47	\$638,328.86	27.00%
Bluff Creek						
Bluff Creek Tributary*	\$65,037.00	-	\$65,037.00	\$144.00	\$55,418.41	85.21%
Wetland Restoration at Pioneer	308,674.00	-	308,674.00	897.58	88,295.44	28.60%
Subtotal	\$373,711.00	-	373,711.00	\$1,041.58	\$143,713.85	38.46%
Riley Creek	¢205 000 00		¢305 000 00		¢255 04 4 74	02.040/
Lake Riley - Alum Treatment* Rice Marsh Lake in-lake phosphorus load	\$305,000.00	-	\$305,000.00	-	\$255,914.74	83.91% 23.62%
	60,568.00 300,000.00		60,568.00	110.00	14,307.26	
Rice Marsh Lake Water Quality Improvement Phase 1 Riley Creek Restoration (Reach E and D3)	1,773,623.00	-	300,000.00 1,773,623.00	110.00	15,852.50 1,937,328.37	5.28% 109.23%
Lake Riley & Rice Marsh Lake Subwatershed Assessment	29,961.00	-	29,961.00	-	33,851.77	112.99%
Upper Riley Creek Stabilization	1,100,000.00	(250,000.00)	850,000.00	2,079.50	40,211.52	4.73%
Middle Rice Creek		268,900.00	268,900.00	2,630.00	74,636.65	27.76%
Lake Ann Wetland Restoration	150,000.00	(100,000.00)	50,000.00	-	,550.65	0.00%
St. Hubert Water Quality Project		100,000.00	100,000.00	2,127.46	29,306.45	29.31%
Subtotal	\$3,719,152.00	\$18,900.00	3,738,052.00	\$6,946.96	\$2,401,409.26	64.24%
Purgatory Creek						
Purgatory Creek Rec Area- Berm/retention area - feasibility/design	\$50,000.00	-	\$50,000.00	2,742.00	\$15,101.28	30.20%
Lotus Lake in-lake phosphorus load control	104,106.00	-	104,106.00	-	24,880.41	23.90%
Silver Lake Restoration - Feasibility Phase 1	255,931.00	-	255,931.00	8,566.18	39,545.36	15.45%
Scenic Heights	55,459.00	-	55,459.00	157.50	2,715.00	4.90%
Hyland Lake in-lake phosphorus load control	1,388.00	-	1,388.00	=	-	0.00%
Duck Lake watershed load	125,422.00	-	125,422.00	1,025.00	91,487.49	72.94%
Michell Lake Subwatershed Assessment	46,203.00	-	46,203.00	-	52,071.47	112.70%
Lotus Lake Kerber Pond	30,000.00	-	30,000.00	630.00	14,967.50	49.89%
Subtotal	\$668,509.00	\$0.00	\$668,509.00	\$13,120.68	\$240,768.51	36.02%
Reserve TOTAL EXPENDITURE	\$100,000.00	(\$18,900.00)	81,100.00	-		0.00%
TOTAL EXPENDITURE  EXCESS REVENUES OVER (UNDER) EXPENDITURES	\$8,461,514.00	\$0.00	\$8,461,514.00	\$175,971.10	\$4,436,194.49	52.43%
ENGESS REVENUES OVER (UNDER) EXPENDITURES	\$0.00	\$0.00	\$0.00	(\$170,320.44)	(\$2,210,371.36)	

<sup>\*</sup>Denotes Multi-Year Project - See Table 2 for details

## RILEY PURGATORY BLUFF CREEK WATERSHED DISTRICT Muti-Year Project Performance Analysis - Table 2 October 31, 2020

		FUNDING SOURCE		Month Ended	Year	Lifetime		
	Total Project	District funds Partner Fund Grants		10/31/20	To-Date	Costs	Remaining	
Programs and Projects								
District Wide								
Community Resiliency	\$98,000.00	\$98,000.00	-	-	\$9,366.57	\$23,374.57	\$58,244.07	\$39,755.93
Repair and Maintenance Fund	277,005.00	277,005.00	-	-	50.00	55,189.58	89,465.08	187,539.92
Wetland Management	200,000.00	200,000.00	-	-	8,533.96	26,840.58	86,155.64	113,844.36
Groundwater Conservation	180,000.00	180,000.00	-	-	-	120.00	370.00	179,630.00
Opportunity Project*	300,000.00	300,000.00	-	-	-	13,666.29	26,165.29	273,834.71
Stormwater Ponds - U of M	106,092.00	64,092.00	42,000.00	-	-	32,820.96	58,927.97	47,164.03
Hennepin County Chloride Initiative	120,800.00	19,000.00	-	101,800.00	-	21,859.46	27,829.77	92,970.23
Lower Minnesota Chloride Cost-Share	217,209.00	20,000.00		197,209.00				217,209.00
Subtotal	\$1,499,106.00	\$1,158,097.00	\$42,000.00	\$299,009.00	\$17,950.53	\$173,871.44	\$347,157.82	1,151,948.18
Bluff Creek								
Bluff Creek Tributary*	\$436,750.68	\$386,750.68	\$50,000.00	\$0.00	\$144.00	\$55,418.41	\$377,131.19	\$59,619.49
Wetland Restoration at Pioneer	857,820.00	450,000.00		407,820.00	897.58	88,295.44	637,443.46	220,376.54
Subtotal	\$1,294,570.68	\$836,750.68	\$50,000.00	\$407,820.00	\$1,041.58	\$143,713.85	\$1,014,574.65	\$279,996.03
Riley Creek								_
Lake Riley - Alum Treatment 1st dose *	\$560,000.00	\$560,000.00	-	-	-	\$255,914.74	\$510,914.57	\$49,085.43
Rice Marsh Lake in-lake phosphorus load	150,000.00	150,000.00	-	-	-	14,307.26	103,740.07	46,259.93
Rice Marsh WQ 1	300,000.00	300,000.00	-	-	110.00	15,852.50	15,852.50	284,147.50
Riley Creek Restoration (Reach E and D3) *	2,168,148.00	1,615,000.00	553,148.00	-	-	1,937,328.37	2,205,460.64	(37,312.64)
Lake Riley & Rice Marsh Lake Subwatershed Assessment	72,500.00	12,500.00	5,000.00	55,000.00	-	33,851.77	76,390.74	(3,890.74)
Upper Riley Creek Stabilization	450,000.00	1,100,000.00	0.00		2,079.50	40,211.52	40,211.52	409,788.48
Subtotal	\$3,700,648.00	\$3,737,500.00	\$558,148.00	\$55,000.00	\$2,189.50	\$2,297,466.16	\$2,952,570.04	\$748,077.96
Purgatory Creek								
Purgatory Creek Rec Area- Berm/retention area - feasibility/design	\$50,000.00	\$50,000.00	-	-	\$2,742.00	\$15,101.28	\$15,101.28	\$34,898.72
Lotus Lake in-lake phosphorus load control	345,000.00	345,000.00	-	-	-	24,880.41	265,773.75	79,226.25
Silver Lake Restoration Project WQ1	268,013.00	268,013.00	-	-	8,566.18	39,545.36	51,627.19	216,385.81
Scenic Heights	260,000.00	165,000.00	45,000.00	50,000.00	157.50	2,715.00	207,256.25	52,743.75
Hyland Lake Internal Load	150,000.00	130,000.00	20,000.00	-	-	-	128,612.41	21,387.59
Duck Lake watershed load	220,000.00	220,000.00	-	-	1,025.00	91,487.49	186,064.51	33,935.49
Mitchell Lake Subwatershed Assessment	87,500.00	12,500.00	5,000.00	70,000.00		52,071.47	93,368.11	(5,868.11)
Subtotal	\$1,380,513.00	\$1,190,513.00	\$70,000.00	\$120,000.00	\$12,490.68	\$225,801.01	\$947,803.50	\$432,709.50
Total Multi-Year Project Costs	\$7,874,837.68	\$6,922,860.68	\$720,148.00	\$881,829.00	\$33,672.29	\$2,840,852.46	\$5,262,106.01	\$2,612,731.67

#### Riley Purgatory Bluff Creek Watershed District Balance Sheet As of October 31, 2020

#### **ASSETS**

#### **Current Assets**

General Checking-Old National	\$1,105,799.74
Checking-Old National/BMW	23,256.03
Investments-Standing Cash/Wells Fargo	4,033,445.33
Accrued Investment Interest	21,874.72
Due From Other Governments	51,116.73
Taxes Receivable-Delinquent	36,003.36
Pre-Paid Expense	24,742.32
Security Deposits	7,244.00

Total Current Assets: \$5,303,482.23

#### LIABILITIES AND CAPITAL

#### **Current Liabilities**

Accounts Payable	\$325,833.89
Retainage Payable	12,521.39
Salaries Payable	19,499.83
Permits & Sureties Payable	586,927.00
Deferred Revenue	36,003.36
Unearned Revenue	199,470.00

Total Current Liabilities: \$1,180,255.47

#### Capital

Fund Balance-General	\$6,333,598.12
Net Income	(2,210,371.36)

Total Capital \$4,123,226.76

Total Liabilities & Capital \$5,303,482.23

## RILEY PURGTORY BLUFF CREEK WATERSHED DISTRICT OLD NATIONAL BANK VISA ACTIVITY October 31, 2020

DATE	PURCHASED FROM	AMOUNT	DESCRIPTION	ACCOUNT #	RECEIPT
10/15/20	A marie and Water Barre	207.00	Water Daniel and Conf.	10.00.4221	77
10/15/20	American Water Resources		Water Resources Conference	10-00-4321	Y
10/15/20	American Water Resources		Water Resources Conference	10-00-4321	Y
01/16/20	Office Furniture Warehouse		Office Furniture	10-00-4200	Y
10/16/20	NALMS		NALMS Registration	10-00-4321	Y
10/19/20	USPS		Postage	10-00-4280	У
10/19/20	General Delivery Service Verizon Wireless		Courier Service	10-00-4280	Y Y
10/21/20			Telephone Expense	10-00-4240	Y
10/26/20 10/26/20	Randy's Sanitation		Recycling/Trash	10-00-4220	Y Y
10/26/20	Target		Office Supply - Cleaning Software Subscription	10-00-4200	Y
10/20/20	1Password Toronto, On. The UPS Store		Postage	10-00-4203 10-00-4280	Y
11/02/20	General Delivery Service		Courier Service	10-00-4280	Y
11/02/20	Pizzaioli Chanhassen		Team Meeting Supplies	10-00-4260	Y
11/03/20	NALMS		NALMS Registration	10-00-4200	Y
11/10/20	McAfee			10-00-4203	Y
11/10/20	Best Buy		Software Subscription Office Supply - Headset	10-00-4203	Y Y
11/16/20	MN Watershed		MAWD Registration	10-00-4200	Y
11/16/20	General Delivery Service		Courier Service	10-00-4010	Y
11/10/20	Verizon Wireless		Telephone Expense	10-00-4240	Y
11/21/20	verizon wheress	430.96	Telephone Expense	10-00-4240	1
		\$6,185.28	General Administration Total		
10/14/20	Insituing com	642.00	Eigld Equipment	20.05.4625	v
10/14/20	Insituinc.com		Field Equipment	20-05-4635	Y
10/14/20	Kwik Trip	49.13		20-05-4322	Y Y
10/16/20 10/20/20	Hologram HTTPS Menards Eden Prairie		Field Equipment Subscription Field Supply - Hardware	20-05-4635	Y
10/20/20			Field Supply - Hardware Field Supply - Hardware	20-05-4201	Y
10/20/20	Northern Tool & Equipment ESRI		Software Subscription	20-05-4201 20-13-4203	Y
10/21/20	Menards Eden Prairie		Field Supply - Hardware	20-13-4203	Y
10/22/20	Hach Company		Field Supply - Hardware Field Supply - Chemicals	20-05-4201	Y
10/28/20	Speedway	66.97		20-05-4322	Y
10/29/20	NALMS		NALMS Registration	20-05-4265	Y
11/03/20	Speedway	14.74		20-13-4322	Y
11/05/20	The UPS Store		Postage	20-05-4280	Y
11/11/20	Chanhassen Goodyear		Vehicle Maintenance	20-05-4322	Y
11/11/20	PayPal		Field Supplies	20-05-4201	Y
11/11/20	Amazon		Field Equipment - Rubber Stopper	20-05-4635	Y
11/11/20	Amazon		Field Supply - Chemicals	20-05-4201	Y
11/11/20	GIH*Global Industrial		Office Supply - Hand Towels	20-05-4635	Y
11/11/20	Chanhassen Goodyear		Vehicle Maintenance	20-05-4322	Y
11/12/20	Amazon		Field Supply - Chemicals	20-05-4201	Y
11/13/20	Cabela's		Field Equipment - Life Vests	20-05-4635	Y
11/14/20	Amazon		Field Supply - Lab Bottles	20-05-4201	Y
11/17/20	Speedway	44.14	* * *	20-05-4322	Y
11/19/20	Speedway		Vehicle Maintenance	20-05-4322	Y
11/19/20	Amazon		Textbook	20-08-4265	Y
		\$5,745.66	District-Wide Total		
		\$11.930.94	GRAND TOTAL		
		- /	_	1	

#### TASK ORDER No. 34

# Lotus Lake Vegetation Management Plan Pursuant to Agreement for Engineering Services Riley Purgatory Bluff Creek Watershed District and Barr Engineering Company. December 1, 2020

This Task Order is issued pursuant to Section 1 of the above-cited engineering services agreement between the Riley Purgatory Bluff Creek Watershed District (District) and Barr Engineering Company (Engineer) and incorporated as a part thereof.

#### 1. Background:

It is our understanding that the District would like to develop an aquatic vegetation management plan for Lotus Lake. The primary objectives of the plan are to summarize current conditions and trends in the vegetation community, summarize current management activities, evaluate the established goals for the vegetation community, and develop recommended actions for achieving the desired goals. The purpose of the plan is to develop an approach for achieving long-term vegetation management goals and improve strategies aimed at protecting the lakes' ecological values. Barr will also develop information to complete a Minnesota DNR Local Vegetation Management Plan that may be necessary for aquatic plant management. Barr proposes an ecosystem service approach to developing goals and objectives for the lake vegetation communities. This approach will help define specific goals for managing the lake vegetation community as well as quantifiable goals.

#### 2. Description of Services:

To achieve the District's goals, Barr will work with the District and their partners to develop the aquatic plant management goals. The Ecosystem Services approach is currently used worldwide to establish the scientific basis for actions to enhance the contribution of ecosystems to human well-being without undermining their long-term productivity." (Millenium Ecosystem Assessment 2003; <a href="https://www.millenniumassessment.org/en/index.html">https://www.millenniumassessment.org/en/index.html</a>). Barr will incorporate this approach to communicate the value of aquatic plants to lake ecosystems and their users.

There are four primary steps to develop the Aquatic Plant Management Plan for Lotus Lake. These steps include:

- 1. Compile aquatic vegetation data and current management for Lotus Lake and identify any data gaps
- 2. Describe current conditions and trends in the vegetation community
- 3. Develop goals and ecosystem service assessments for the vegetation community and
- 4. Development and adaptive management framework for managing aquatic vegetation in Lotus Lake

#### 3. Scope of Services:

The tasks to complete these objectives are described as follows:

#### Task 1. Summarize Aquatic Vegetation Data, Conditions, Management Activities, and Trends

The first task is to review all relevant data, reports and plans to identify available data, management actions and analyses to support the development of the review. We will also acquire readily available data at this stage including GIS files, Biobase files, relevant data, DNR permits and relevant reports. Barr staff will also review data for primary stressors including fisheries, water quality, and water elevations. Following the data review, Barr staff will summarize the list of current issues and any potential data gaps for assessing the vegetation management activities.

The next step is to summarize the current vegetation conditions and trends in the lakes using metrics such as species richness, floristic quality, and indicator species. Trends in diversity and floristic quality will be evaluated as well as the extent ant and biovolume of the community. The goal of this task is to evaluate recent management actions effectiveness in making progress toward to established vegetation goals. This take will also include a discussion of the current perception of the plant communities with residents, lake associations, and lake users.

#### **Deliverables**

- Data summary for vegetation community, management actions, and potential stressors
- Summarized management activities conducted since the development of the management plans
- List of identified data gaps
- Summary of current lake vegetation community condition and trends
- Summary of local perceptions of the lake vegetation community

#### Task 2. Review and Update Aquatic Vegetation Management Goals

Significant advances in our understanding of healthy aquatic vegetation communities were developed in recent years. Statewide reference databases are now available from the MNDNR as well as recent studies highlighting reasonable expectations for healthy, diverse aquatic plant communities. Barr staff will use these databases to develop reference lakes to develop a better understanding of potential outcomes for lake management. Barr will also use recent studies to develop an understanding of the lakes' provision of ecosystem services. This task also includes some "visioning" for the aquatic plant community to visualize the goals and help residents understand the goals of the plan.

#### **Deliverables**

- Updated targets for the aquatic vegetation communities
- Visualizations of the current and potential aquatic vegetation communities

#### **Task 3. Define Aquatic Vegetation Stressors**

Included in the recent advances in our understanding of aquatic plant communities is a more developed understanding of the factors controlling plant diversity and health. Barr staff will highlight the factors that may be limiting aquatic plant diversity in these lakes to help guide management actions. While not all of these factors are well understood, they provide reasonable guidance for managing the aquatic vegetation community.

#### **Deliverables**

Summary of stressors that may be affecting the aquatic vegetation plant community

#### Task 4. Develop Adaptive Management Framework to Achieve Aquatic Vegetation Community Targets

Barr will review the current management approach and develop a list of potential long-term aquatic vegetation management options for pursuing the goals as outlined in the management plan. Methods deemed feasible after review with the District will then be developed as management options. Response variables necessary to gauge performance of each management method will also be identified. Once the potential lake response and management options are identified, Barr will develop a decision matrix to provide a framework for guiding adaptive management based on monitoring data and the feasible management options.

#### **Deliverables**

Adaptive management matrix to guide aquatic plant management in Mitchell and Red Rock Lake

#### Task 5. Reporting

Barr will develop a draft and final report summarizing the results of the study including aquatic plant community visualization, management actions and goals, data gaps and future recommended analyses.

#### **Deliverables**

Draft and final project reports

#### Task 6. Meetings

Barr staff will prepare for and attend meetings to facilitate the completion of the aquatic vegetation management review. Barr staff budgeted for the following meetings:

- A single meeting with local residents, lake associations and lake users to gain input on current lake vegetation community condition as well as perceptions.
- Up to two meetings with District staff and local partner as directed by District staff.
- One Board meeting to present the results of the management plan.

#### Deliverables

Meeting preparation and attendance

#### Task 7. Project Management

Project Management will be required in all phases to ensure the work meets the expectations of District staff and other stakeholders, and that the work is completed in a satisfactory manner, within the project timeline and within the agreed-upon budget.

#### **Assumptions**

Several assumptions were made in preparing the scope of work for this agreement. Assumptions relating to individual work tasks are listed in the task descriptions above. Additional assumptions that do not correspond with a single work task are as follows:

- This effort focuses on aquatic vegetation management and will not assess the riparian areas
- District staff will provide all available aquatic vegetation data
- District staff will provide all monitoring cost estimates and level of effort
- All meetings will be held virtually or at RPBCWD's office and last no more than 2 hours.
- Meeting scheduling and coordination will be performed by District staff
- Barr will provide supporting data to RPBCWD; however, it will not be comprehensively included in the summary memorandum.
- The proposed budget includes costs for mileage reimbursement for site visits and site observation.
- The District will provide all available and applicable GIS and CAD files to Barr in electronic format.
- Barr has allotted time for a single round of review comment on the draft report by the District

#### 4. Budget:

Barr's services for this work plan will be compensated for in accordance with the engineering services agreement and will not exceed \$29,700, without written authorization by the Administrator. The following table provides a breakdown of the anticipated cost for major tasks associated with scope of services describe above.

Task	Task Description	Anticipated Budget	Anticipated Completion Date
1	Summarize vegetation data, condition, trends and management activities	\$6,500	March 2021
2	Develop aquatic vegetation management goals	\$2,200	March 2021
3	Define aquatic vegetation stressors	\$2,600	March 2021
4	Develop adaptive aquatic vegetation management framework	\$4,600	May, 2021
5	Report	\$7,100	June 2021
6	Meetings	\$5,500	Ongoing
7	Project Management	\$1,200	Ongoing
Task Orde	er 34 Services Total	\$29,700	

#### 5. Schedule and Assumptions Upon Which Schedule is Based

The schedule outlined above assumes project initiation will occur in December 2021. The schedule may be modified depending on actual initiation of project work, weather impacts on field work and other unforeseen conditions.

**IN WITNESS WHEREOF**, intending to be legally bound, the parties hereto execute and deliver this Agreement.

CONSULTANT	RILEY PURGATORY BLUFF CREEK WATERSHED DISTRICT
Ву	Ву
Its <u>Vice President</u>	Its <u>President</u>
Date:	Date:
	APPROVED AS TO FORM & EXECUTION

Attendees: Jill, Dorothy, Claire, Amy, Terry

- 1. The Personnel Handbook is still with Smith Partners: potential discussion at the Personnel Committee's next meeting in December if finalized for review.
- 2. Review of Permit and Soil Technician

Currently, sites are inspected once a month by Barr, and only in one of our counties (Hennepin). The Barr inspection looks at erosion control only, and the cost runs \$7000-8000 a month. We've been looking at the sites in Carver ourselves, but not with the thoroughness we should, as per Terry. If we were to hire a Permit/Soil Tech, who should be certified for construction practices, we could probably be at sites once a week, at about a cost of \$3600-4000 a month. We could look at having this person go to vulnerable sites after a rain event of  $\frac{1}{2}$ " or larger; they could also close out inspections, and look more closely at infiltration on the site. In other words, at a savings of a minimum of \$36,000, we'll be getting better, more thorough inspections. The committee recommends the hire of a Permit/soil tech immediately; Terry will submit a job description for the position, and it will be submitted to the Personnel Committee for written review, and then to Board for approval at the December meeting.

3. Claire provided the committee with job descriptions in Education for review to the Committee members. Due to COVID, the Personnel Committee is recommending the replacement hire of Maya Swopes' position: Education and Outreach Coordinator. The committee reviewed the job description, and reconfirmed grade level and salary. We should have this person is place ASAP as we are falling behind with other staff attempting to help fill duties. The committee believes after the economy and community health has recovered, we should review and recommend hire of an Outreach Manager. Claire will submit the revised org chart, along with the job description for this position to the Board for approval at the December meeting.

Next Personnel Committee meeting should be mid-December via Zoom, date to be decided after the handbook is completed by Smith Partners.

Items on the Agenda: review of Personnel Handbook

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#### 9.17 Soil Health

The Natural Resources Conservation Service (NRCS) defines "soil health, also referred to as soil quality, as the continued capacity of soil to function as a vital living ecosystem that sustains plants, animals, and humans. This definition speaks to the importance of managing soils so they are sustainable for future generations." Because the water resources are directly impacted by what happens on the land within the resource's watershed, understanding and promoting soil health is an important avenue to achieving the many RPBWCD's goals identified the 10-year plan, Planning for the Next Ten Years 2018-2027. Table 9-7 summarizes various RPBCWD goals and strategies that have some connection to healthy soils.

Table 9-7 Soil Health Connection to RPBCWD Goals and Strategies

Goal	Description	Applicable Strategies
EO 1	Design, maintain, and implement Education and Outreach programs to educate the community and engage them in the work of protecting, managing, and restoring water resources.	EO S4, EO S7 EO S9
Plan 2	Include sustainability and the impacts of climate change in District projects, programs, and planning.	Plan S2 Plan S3 Plan S7
WQual 1	Protect, manage, and restore water quality of District lakes and creeks to maintain designated uses.	WQual S1 WQual S3 WQual S6
WQual 2	Preserve and enhance the quantity, as well as the functions and values of District wetlands.	WQual S8 WQual S11
WQual 3	Preserve and enhance habitat important to fish, waterfowl, and other wildlife.	WQual S13 WQual S14 WQual S18
Ground 1	Promote the sustainable management of groundwater resources.	Ground S1 Ground S2
WQuan 1	Protect and enhance the ecological function of District floodplains to minimize adverse impacts.	WQuan S1 WQuan S2 WQuan S3 WQuan S6
WQuan 2	Limit the impact of stormwater runoff on receiving waterbodies.	WQuan S7 WQuan S8 WQuan S9 WQuan S10

Therefore, in addition to any of the aforementioned BMPs, tilling to loosen soils and amending with compost within the construction extents of the BMPs would result in additional runoff retention and reduce TP loading to the water resources throughout the district. Typically, a soil with good structure (defined below) has 25% of the pore space

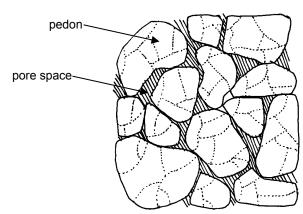
available to retain water. That means that eight inches of healthy amended/tilled soil can retain two inches of water during a storm event. This assumes that the soil is vegetated so that the water flow is slowed to allow for infiltration rather than run across the surface.

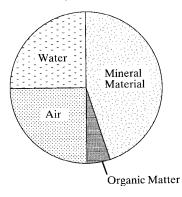
#### 9.17.1 Soil Structure

Soil structure refers to how the sand, silt, and clay in soils are grouped together into aggregates called pedons. With the formation of pedons, pore space is provided in soils – the combination of pedons and pore spaces promotes the development of good soil structure.

### Soil pedons are formed by:

- humus (highly decomposed compost and organic matter),
- organic glues created by fungi and bacteria in the decomposing organic matter, and
- polymers and sugars excreted from plant roots.





Soils with ideal soil structure contain 50% mineral material and 50% pore space. Water readily infiltrates into the soil and is held in this pore space. Plants grown on soils with good soil structure are healthy and resilient to stresses of flood, drought, insects, and disease.

Soil scooped from a badger mound in a prairie that has never been tilled, compacted, or otherwise disturbed. All soil processes are functioning. Pedons are visible that make up soil structure.

Much of the watershed has low infiltrating, clayey soil, and so infiltration of runoff on landscaped areas is a challenge. Clay soils have a very dense



(poor) soil structure because this soil is characterized by very small clay particles that tightly bond together to form a very dense soil. In addition, while the clay soil has a lot of tiny pore spaces, the water is held very tightly within these pore spaces. These properties make it difficult for plant roots to grow deep into the soil, for water to infiltrate, and for plants to use the water stored in the soil. Plant growth should be encouraged by tilling organic matter amendments into the soil to provide additional larger pore space and to facilitate structure enhancement by the soil food web (described below) to increase aeration and infiltration.



<u>Soil being tilled to incorporate organic matter in a compacted urban landscape. This method helps to provide nutrients and promote development of soil structure for plants to thrive.</u>

Soil compaction through mass grading, soil stripping and construction (including lawns) destroys soil structure and significantly reduces the ability of water to soak into ground.

Amending lawns and landscapes with organic matter increases infiltration and facilitates



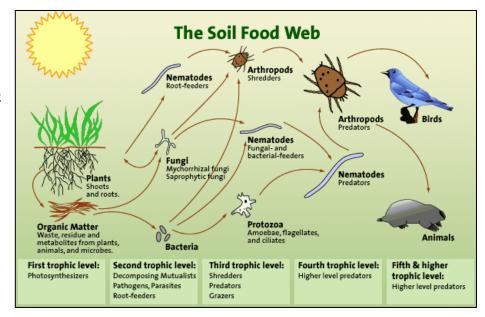
Compost produced from yard waste by metro cities.

pollutant removal by binding
contaminants to soil particles or
breakdown by microbes. In most cases,
amending any soil type with organic
matter is beneficial; amending sandy soil
improves nutrient and water holding
capacity, while amending clay soil
improves drainage and aeration. Organic
matter is any decomposed plant or animal

material (compost, mulch, rotted manure, etc.) which improves soil structure and porosity.

There are many advantages to building soil structure by amending soils with organic matter. Good soil structure means that the porous soil will:

- Readily accept stormwater, allowing for quick infiltration of large volumes of water.
- Hold large
   volumes of water
   in the soil for
   future availability
   to plants. This
   makes for
   healthier, more
   resilient plantings.



- Reduce the amount of phosphorus reaching water bodies because first, large volumes of water are intercepted by soils, and second because soils readily and strongly adhere phosphorous to soil particles. Phosphorus is an essential plant nutrient. Its best held in the soil where landscape and native plants can use it rather than letting it run to lakes where it feeds algae.
- Hold oxygen in the soil. This is essential for root respiration and diversity of microbes in the soil.
- Provide nutrients to plants as compost further breaks down soil microbes.
- Provide food and habitat for microbes living in the soil which break down
  organic matter and supply nutrients to plants. In exchange, they consume sugars
  and proteins release from plant roots, therefore feeding the soil food web.
  Larger organisms, like nematodes and arthropods, burrow through the soil,
  mixing it, providing the mechanism for soil aeration, increased infiltration, and
  physically developing soil pedons.



Soil under a dry lawn that is devoid of organic matter. Organic matter (black topsoil) was added as an amendment to promote plant growth and water infiltration.

Organic matter is naturally found in the upper soil layers (topsoil). The color of the topsoil can provide some clues as to how much organic matter is in the soil.

Typically, darker color soil has more organic matter caused by the carbon in the organic matter. Conversely, a lighter color soil would have less organic matter (because there is less carbon).

Organic matter acts like glue to bind soil particles into pedons, which improves the soil structure and water holding capacity.

Organic matter can also reduce soil erosion by promoting infiltration (rather than runoff) and improving the stabilization of soil pedons (so pedons stay in place).

#### Soil structure is destroyed by:

- Compaction through construction activities, driving vehicles, or excessive foot traffic. Compaction reduces pore space, limits oxygen circulation and plant growth, and decreases water infiltration.
- Stripping of topsoil and mass grading which eliminates or mixes topsoil deep into the soil profile and out of reach for plants.
- <u>Pesticides and other contaminants which kill soil organisms that are the backbone of developing and maintaining soil structure.</u>
- Fertilizers which throw off the nutrient balance for microbes, and impact the soil food web by altering the function of bacteria.
- Excessive tilling which destroys soil structure and vital fungal systems. This is mainly a problem in agricultural settings. Initial tilling of compost into a depleted or compacted soil is an essential first step in restoring soil.

While most native soils are 2 to 10 percent organic matter, urban soils typically contain a minimal amount of organic matter due to the action of mass grading and mixing soil

deep in the ground. Therefore, the addition of organic matter to feed the soil food web is a key component for soil restoration. Tilling 6 to 8 inches of compost into the top 8 inches of soil will help restore the soil food web by providing pathways for oxygen and sources of nutrition to sustain microbes, which maintain the looseness of the soil. Tilling can initially promote a flush of beneficial microbial activity in the soil, increasing the rate of decomposition. As the food webs of microbes and invertebrates (fed by the nutrients released from the decomposing organic material) in the amended soil develop and become more active, they help to improve porosity and infiltration capacity of the soil.

#### 9.17.2 Soil Amendments

Amendments such as compost, manure, biochar, or any other form of decomposed organic material can be used to amend the soil. Biochar is a charcoal-like material that is made by burning biomass (wood, grasses, etc.) in the absence of oxygen, and stores carbon, the key component of organic matter. Biochar is a stable solid that remains intact in soils for a long time. It is used as a soil amendment because it increases the water holding capacity of the soil. If soil pH is an issue, amendments to balance it include lime (raises pH and lowers acidity) and gypsum (modifies calcium) which, if used correctly, will change pH and modify the soil structure allowing better infiltration. A soil test should be conducted before adding these amendments. As landscapes and lawns are established, incorporating soil amendments helps turf, trees, and shrubs survive drought periods (because the water-holding capacity of the soil is increase) and prevents sogginess during wet periods (because water infiltrates deeper into the soil profile).

#### 9.17.3 Potential District Soil Health Activities

Some of the potential soil health activities under data collection, education and outreach, regulatory program, and groundwater conservation in **Error! Reference source not found.** include, but are not limited to, the following:

District capital improvement projects. For capital projects, the district will
consider incorporating eight inches of compost into the top eight inches of
existing soil within the construction extents of the chosen BMP. For the surface
BMP options, the amended soil would serve as an infiltration bench surrounding
the basin, providing additional abstraction of runoff from basin overflow during
large storm events.

- **District Assessment.** RPBCWD will work with various stakeholders and partners to undertake a study to better understand the health (structure) of soils throughout the watershed. The study could document the potential for healthy, well-structured soils to improve water quality, to reduced flood potential, and to enhance community resiliency. This study could include:
  - Assessment of sentinel sites. Collecting soil samples at various land use
    locations throughout the District to document the background health of soils.
    These sentinel soil sites could include both undisturbed and disturbed soils
    including: the "Big Woods", bluff area, wetlands west of Lake Ann, sample
    residential properties, parks, and commercial/industrial areas. Soil samples
    would be collected and analyzed for compaction, percent organic matter and
    microbial function.
  - Literature review. Extensive research exists on soil health and its effects on improved water quality. A literature review could be conducted to compile research findings and to identify best practices for soil improvement and soil quidance/policies for water quality improvement in the District.
  - **Develop recommendations**. From the soils analysis of sentinel sites and the literature review, summarize findings to include:
    - o the comparison of soils in sentinel sites.
    - o <u>a summary of literature findings of soil health to water quality.</u>
    - o <u>a summary of potential guidance and policies for soil improvement.</u>
  - How to guide. Develop a primer on soil health and protocols for soil improvement could be developed for citizens of the District and contractors developing projects within the District.

#### Outcomes of the district soil health efforts will:

- provide data and logic behind the funding (cost-share efforts) of soil amendment projects,
- provide permit applicants a mechanism to better understand the benefits of incorporating soil amendments as a BMP for meeting volume abstraction requirements, and
- <u>support RPBCWD groundwater and wetland function by providing means to improve surficial groundwater recharge and baseflows.</u>



#### **MEMORANDUM**

TO: Board of Managers

FROM: Terry Jeffery, Watershed Planning Manager

DATE: November 4, 2020

RE: Rule F: Shoreline and Streambank Stabilization

Section 3.4 Proposed Modifications

#### STATEMENT OF ISSUE

Under the current iteration of Rule F, it is often not possible to meet the Rule F, Subsection 3.4 criteria for a project to be considered as maintenance. As a result, applicants have been required to comply with all the of Rule F provisions, including the sequencing to align the shoreline stabilization measure with the erosive energy at the site. In many instances this has required the applicant to revise their proposed design to include bioengineering or bioengineering with vegetated rip-rap. Currently, on some lakes as many as 52% of the riparian lots have at least some portion of the shoreline stabilized with rip-rap. Of those that have been brought to the RPBCWD for review, many of these were found to be installed in a manner inconsistent with the recognized best practices for rip-rap installation. These areas are likely to be introducing sediment into the respective lake.

Staff finds it is incongruent with the desire to maintain and improve water quality while allowing for suboptimal practices to contribute sediment to the water body in question. In order to properly install rip-rap, the underlying ground must be disturbed for any of a variety of reasons: properly embedding the toe boulders, properly installing the underlying filter fabric, providing compensatory storage for the fill being placed in the form of rip-rap, and maintaining a 3 foot horizontal run for every 1 foot of vertical rise without extending further than six (6) feet waterward of the OHW.

Further, the current rule states that it is "fast-track" but, in fact, it is generally no quicker than other stabilization applications. While permit applications reviewed under §3.4 of Rule F does require fewer materials be submitted, it still must go through the same review process and be presented to the Board of Managers for approval. Staff is not recommending administratively approval at this time. Instead, staff recommends removing the term "fast-track" from the rules.

#### POTENTIAL RESOLUTIONS

#### **OPTION 1.** Leave as is

Although the maintenance provision was added during the last iteration with a high bar to encourage applicants to install practices more conducive to healthy shorelines, this option does not address the issues stated above. The unintended consequences may, in and of themselves, have a deleterious impact on water quality and habitat. For this reason, staff is not recommending this option.

**OPTION 2.** Allow for reconstruction of shoreline stabilization practice, including rip-rap if a buffer or vegetated rip-rap is provided

While this option would provide for greater protection of the resource, staff is not recommending this option. In 2014, as RPBCWD was developing the rules, lacustrine buffers were proposed. This proposal met with significant resistance from the public and the Board of Managers opted not to pursue requisite buffering of lacustrine lots. Additionally, it is not clear that maintenance activities can be required to provide additional mitigative measures.

**OPTION 3.** Allow for reconstruction of existing shoreline stabilization practice, including rip-rap provided there is no increase in length of shoreline being treated

Under this option, an applicant would need to demonstrate that an area is currently stabilized with rip-rap, the practice is in disrepair, and they will not expand the length of shoreline which is to be rip-rapped. They may disturb the underlying soils to assure that the rip-rap is installed consistent with the criteria in Rule F. Under this option, the application would still need to go before the Board of Managers for approval, but they would not need to go through the sequencing to demonstrate the need for rip-rap.

#### PREFERED OPTION

As stated in the preceding section, staff is recommending Option 3. To implement this change, staff is recommending the following changes to Rule F.

3.4 <u>Maintenance</u>. Where an applicant can establish that a shoreline stabilization practice was constructed before February 1, 2015, or after that date in compliance with a duly issued District permit, the District will issue a permit for maintenance of the practice as long as the applicant submits plans <u>compliant with the criteria in subsection 3.3</u> documenting that maintenance work will not increase the length of the practice, <u>beyond existing conditions</u>, as measured in lineal feet of shoreline.

Deleted: Fast-track maintenance

**Deleted:** Notwithstanding the requirements and criteria in subsections 3.1 to 3.3, where

Deleted: , width or depth

**Deleted:** and will not disturb underlying soils

Applicants could maintain existing rip-rap or other stabilization practices, installed according to RPBCWD rules or prior to implementation of RPBCWD rules, provided the installation of the practice is consistent with our rules and there is no increase in the length of shoreline stabilized as measured in lineal feet. All shoreline improvements would still require compliance with other applicable RPBCWD rules and require board approval prior to implementation.

#### TIMELINE

This would constitute a minor plan amendment and require a 30-day review. Staff proposes the following schedule of adoption:

December 2, 2020 – Authorize distribution of proposed amendment for review.

January 6, 2020 – Hold public hearing on proposed revisions. If no significant comments received, adopt changes at this meeting.

February 3, 2020 – If significant comments were received at the January meeting, adoption would occur at this meeting provided comments were adequately addressed.