Riley-Purgatory-Bluff Creek Watershed District
Board of Managers
Special Meeting

Monday, August 17, 2020

https://us02web.zoom.us/j/86930118356

9:00am

The Riley Purgatory Bluff Creek Watershed District Board of Managers will take part in a Special Meeting with the following items on **Monday, August 17, 2020**. For more information, contact Claire Bleser, District Administrator, at (952) 607-6512.

1. Call to Order **Action**
2. Budget Workshop Action
3. MAWD Resolutions
    a. Pesticides
    b. Wakeboat
    c. Groundwater irrigation in urban areas
    d. Soil health **Action**
4. Fairway Woods Condominium Meadowland Creation **Action**
5. Adjourn

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

7/24/2020

	2020 Budget	Fund Transfers	Revised 2020 Budget	May Month	Year-to-Date	Year-to Date Percent of Budget
REVENUES						
Plan Implementation Levy	$3,703,000.00	-	$3,703,000.00	-	-	0.00%
Permit	25,000.00	-	25,000.00	9,400.00	23,274.00	93.10%
Grant Income	346,719.00	-	346,719.00	-	-	0.00%
Investment Income	75,000.00	-	75,000.00	12,069.54	46,884.13	62.51%
Past Levies (Carry Overs)	3,699,097.00	-	3,699,097.00	-	-	0.00%
Miscellaneous Income	-	-	-	-	14,419.80	---
Partner Funds	612,698.00	-	612,698.00	-	-	0.00%
TOTAL REVENUE	**$8,461,514.00**	**$0.00**	**$8,461,514.00**	**$21,469.54**	**$84,577.93**	**1.00%**
EXPENDITURES						
Administration						
Accounting and Audit	42,000.00	-	42,000.00	2,155.10	29,698.41	70.71%
Advisory Committees	5,000.00	-	5,000.00	-	137.48	2.75%
Insurance and bonds	20,000.00	-	20,000.00	-	-	0.00%
Engineering Services	109,000.00	-	109,000.00	7,662.50	41,761.19	38.31%
Legal Services	84,000.00	-	84,000.00	6,521.82	51,257.04	61.02%
Manager Per Diem/Expense	20,000.00		20,000.00	625.00	5,595.75	27.98%
Dues and Publications	14,000.00		14,000.00	-	9,000.00	64.29%
Office Cost	150,000.00	-	150,000.00	18,257.35	75,952.99	50.64%
Permit Review and Inspection	135,000.00		135,000.00	15,867.71	79,169.15	58.64%
Permit and Grant Database	39,900.00		39,900.00	-	-	0.00%
Professional Services	-		-	0.00	2,242.00	---
Recording Services	17,000.00	-	17,000.00	1,200.00	5,289.48	31.11%
Staff Cost	600,000.00	-	600,000.00	40,886.22	208,785.10	34.80%
Subtotal	**$1,235,900.00**	**$0.00**	**$1,235,900.00**	**$93,175.70**	**$508,888.59**	**41.18%**
Programs and Projects						
District Wide						
10-year Management Plan	5,000.00		5,000.00	311.78	7,143.21	142.86%
AIS Inspection and early response	85,000.00	-	85,000.00	-	1,182.56	1.39%
Cost-share	398,723.00	-	398,723.00	16,341.35	30,510.66	7.65%
Data Collection and Monitoring	192,000.00		192,000.00	10,816.96	48,189.95	25.10%
Community Resiliency	63,130.00		63,130.00	85.00	1,754.00	2.78%
Education and Outreach	123,000.00	-	123,000.00	27,857.58	54,822.57	44.57%
Plant Restoration - U of M	58,762.00	-	58,762.00	-	-	0.00%
Repair and Maintenance Fund *	267,730.00	-	267,730.00	3,184.10	46,117.58	17.23%
Wetland Management*	165,685.00	-	165,685.00	2,766.63	11,744.55	7.09%
Groundwater Conservation* (150 K Grant and Pilot Project timing)	179,750.00	-	179,750.00	-	-	0.00%
Lake Vegetation Implementation	125,937.00	-	125,937.00	443.50	26,802.78	21.28%
Opportunity Project*	287,501.00	-	287,501.00	-	7,170.29	2.49%
Stormwater Ponds - U of M	79,985.00	-	79,985.00	12,059.00	31,829.96	39.79%
Hennepin County Chloride Initiative	114,830.00	-	114,830.00	-	6,859.46	5.97%
Lower Minnesota Chloride Cost-Share	217,209.00	-	217,209.00	-	-	0.00%
Subtotal	**$2,364,242.00**	**$0.00**	**$2,364,242.00**	**$73,865.90**	**$274,127.57**	**11.59%**
Bluff Creek						
Bluff Creek Tributary*	65,037.00	-	65,037.00	517.50	12,892.15	19.82%
Wetland Restoration at Pioneer	308,674.00	-	308,674.00	23.90	28,419.12	9.21%
Bluff Creek B5 by Galpin						
Subtotal	**$373,711.00**	**$0.00**	**$373,711.00**	**$541.40**	**$41,311.27**	**11.05%**
Riley Creek						
Lake Riley - Alum Treatment*	305,000.00	-	305,000.00	233,468.29	253,584.30	83.14%
Rice Marsh Lake in-lake phosphorus load	60,568.00	-	60,568.00	-	12,287.18	20.29%
Rice Marsh Lake Water Quality Improvement Phase 1	300,000.00	-	300,000.00	6,350.00	13,074.50	4.36%
Riley Creek Restoration (Reach E and D3)	1,773,623.00	-	1,773,623.00	2,192.38	1,748,076.41	98.56%
Lake Riley & Rice Marsh Lake Subwatershed Assessment	29,961.00	-	29,961.00	2,554.50	23,497.97	78.43%
Upper Riley Creek Stabilization	1,100,000.00	(250,000.00)	850,000.00	8,154.21	12,830.01	1.51%
Middle Riley Creek	0.00	268,900.00	268,900.00	4,600.50	26,744.52	9.95%
Lake Ann Wetland Restoration	150,000.00	(100,000.00)	50,000.00	-	-	0.00%
St Hubert Water Quality Project	0.00	100,000.00	100,000.00	8,490.42	8,490.42	8.49%
Subtotal	**$3,719,152.00**	**18,900.00**	**$3,738,052.00**	**265,810.30**	**2,098,585.31**	**56.14%**
Purgatory Creek						
Purgatory Creek Rec Area- Berm/retention area - feasibility/design	50,000.00	-	50,000.00	3,946.00	10,116.28	20.23%
Lotus Lake in-lake phosphorus load control	104,106.00	-	104,106.00	-	20,831.26	20.01%
Silver Lake Restoration - Feasibility Phase 1	255,931.00	-	255,931.00	5,176.06	16,267.68	6.36%
Scenic Heights	55,459.00	-	55,459.00	-	924.00	1.67%
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	227.50	6,072.00	4.84%
Mitchell Lake Subwatershed Assessment	46,203.00	-	46,203.00	2,898.50	39,641.47	85.80%
Lotus Lake Kerber Pond	*30,000.00*		*30,000.00*	-	*85.00*	*0.28%*
Duck Lake Partnership						
Subtotal	**$668,509.00**	**$0.00**	**$668,509.00**	**$12,248.06**	**$93,937.69**	**14.05%**
Reserve	**$100,000.00**	**($18,900.00)**	**81,100.00**	-	-	0.00%
TOTAL EXPENDITURE	**$8,461,514.00**	**$0.00**	**$8,461,514.00**	**$445,641.36**	**$3,016,850.43**	**35.65%**
EXCESS REVENUES OVER (UNDER) EXPENDITURES	**$0.00**	**$0.00**	**$0.00**	**($424,171.82)**	**($2,932,272.50)**	

***Denotes Multi-Year Project - See Table 2 for details**

	Total Project Funding	FUNDING SOURCE District funds	Partner Fund	Grants	Month Ended 5/31/2020	Year To-Date	Lifetime Costs	Remaining
Programs and Projects								
District Wide								
Community Resiliency	98,000.00	98,000.00	-	-	85	1,754.00	36,623.50	61,376.50
Repair and Maintenance Fund	277,005.00	277,005.00	-	-	3,184.10	46,117.58	80,393.08	196,611.92
Wetland Management	200,000.00	200,000.00	-	-	2,766.63	11,744.55	71,059.61	128,940.39
Groundwater Conservation	180,000.00	180,000.00	-	-	-	-	250	179,750.00
Opportunity Project*	300,000.00	300,000.00	-	-	-	7,170.29	19,669.29	280,330.71
Stormwater Ponds - U of M	106,092.00	64,092.00	42,000.00	-	12,059.00	31,829.96	57,936.97	48,155.03
Hennepin County Chloride Initiative	120,800.00	19,000.00	-	101,800.00	-	6,859.46	12,829.77	107,970.23
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*	*$18,094.73*	*$105,475.84*	*$278,762.22*	*$1,220,343.78*
Bluff Creek								
Bluff Creek Tributary*	436,750.68	386,750.68	50,000.00	-	517.5	12,892.15	334,604.93	102,145.75
Wetland Restoration at Pioneer	857,820.00	450,000.00	-	407,820.00	23.9	28,419.12	577,567.14	280,252.86
Subtotal	$1,294,570.68	$836,750.68	$50,000.00	$407,820.00	$541.40	$41,311.27	$912,172.07	$382,398.61
Riley Creek								
Lake Riley - Alum Treatment 1st dose	560,000.00	560,000.00	-	-	233,468.29	253,584.30	508,584.13	51,415.87
Rice Marsh Lake in-lake phosphorus lo	150,000.00	150,000.00	-	-	-	12,287.18	101,719.99	48,280.01
Rice Marsh WQ 1	300,000.00	300,000.00	-	-	6,350.00	13,074.50	13,074.50	286,925.50
Riley Creek Restoration (Reach E and I	2,168,148.00	1,615,000.00	553,148.00	-	2,192.38	1,748,076.41	2,016,208.68	151,939.32
Lake Riley & Rice Marsh Lake Subwate	72,500.00	12,500.00	5,000.00	55,000.00	2,554.50	23,497.97	66,036.94	6,463.06
Upper Riley Creek Stabilization	850,000.00	850,000.00	0	-	8,154.21	12,830.01	12,830.01	437,169.99
Subtotal	*$4,100,648.00*	*$3,487,500.00*	*$558,148.00*	*$55,000.00*	*$252,719.38*	*$2,063,350.37*	*$2,718,454.25*	*$982,193.75*
Purgatory Creek								
Purgatory Creek Rec Area- Berm/reter	50,000.00	50,000.00	-	-	3,946.00	10,116.28	10,116.28	39,883.72
Lotus Lake in-lake phosphorus load co	345,000.00	345,000.00	-	-	-	20,831.26	261,724.60	83,275.40
Silver Lake Restoration Project WQ1	268,013.00	268,013.00	-	-	5,176.06	16,267.68	28,349.51	239,663.49
Scenic Heights	260,000.00	165,000.00	45,000.00	50,000.00	-	924	205,465.25	54,534.75
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	0	0	227.5	6,072.00	100,649.02	119,350.98
Mitchell Lake Subwatershed Assessme	87,500.00	12,500.00	5,000.00	70,000.00	2,898.50	39,641.47	80,938.11	6,561.89
Subtotal	*$1,380,513.00*	*$1,190,513.00*	*$70,000.00*	*$120,000.00*	*$12,248.06*	*$93,852.69*	*$815,855.18*	*$564,657.82*
Total Multi-Year Project Costs	**$8,274,837.68**	**$6,672,860.68**	**$720,148.00**	**$881,829.00**	**$283,603.57**	**$2,303,990.17**	**$4,725,243.72**	**$3,149,593.96**

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

7/24/20

	2020 Budget	Fund Transfers	Revised 2020 Budget	May Month	Year-to-Date	Year-to Date Percent of Budget
REVENUES						
Plan Implementation Levy	$3,703,000.00	-	$3,703,000.00	-	-	0.00%
Permit	25,000.00	-	25,000.00	9,400.00	23,274.00	93.10%
Grant Income	346,719.00	-	346,719.00	-	-	0.00%
Investment Income	75,000.00	-	75,000.00	12,069.54	46,884.13	62.51%
Past Levies (Carry Overs)	3,699,097.00	-	3,699,097.00	-	-	0.00%
Miscellaneous Income	-	-	-	-	14,419.80	---
Partner Funds	612,698.00	-	612,698.00	-	-	0.00%
TOTAL REVENUE	**$8,461,514.00**	**$0.00**	**$8,461,514.00**	**$21,469.54**	**$84,577.93**	**1.00%**
EXPENDITURES						
Administration						
Accounting and Audit	42,000.00	-	42,000.00	2,155.10	29,698.41	70.71%
Advisory Committees	5,000.00	-	5,000.00	-	137.48	2.75%
Insurance and bonds	20,000.00	-	20,000.00	-	-	0.00%
Engineering Services	109,000.00	-	109,000.00	7,662.50	41,761.19	38.31%
Legal Services	84,000.00	-	84,000.00	6,521.82	51,257.04	61.02%
Manager Per Diem/Expense	20,000.00		20,000.00	625.00	5,595.75	27.98%
Dues and Publications	14,000.00		14,000.00	-	9,000.00	64.29%
Office Cost	150,000.00	-	150,000.00	18,257.35	75,952.99	50.64%
Permit Review and Inspection	135,000.00		135,000.00	15,867.71	79,169.15	58.64%
Permit and Grant Database	39,900.00		39,900.00	-	-	0.00%
Professional Services	-		-	0.00	2,242.00	---
Recording Services	17,000.00	-	17,000.00	1,200.00	5,289.48	31.11%
Staff Cost	600,000.00	-	600,000.00	40,886.22	208,785.10	34.80%
Subtotal	**$1,235,900.00**	**$0.00**	**$1,235,900.00**	**$93,175.70**	**$508,888.59**	**41.18%**
Programs and Projects						
District Wide						
10-year Management Plan	5,000.00		5,000.00	311.78	7,143.21	142.86%
AIS Inspection and early response	85,000.00	-	85,000.00	-	1,182.56	1.39%
Cost-share	398,723.00	-	398,723.00	16,341.35	30,510.66	7.65%
Data Collection and Monitoring	192,000.00		192,000.00	10,816.96	48,189.95	25.10%
Community Resiliency	63,130.00		63,130.00	85.00	1,754.00	2.78%
Education and Outreach	123,000.00	-	123,000.00	27,857.58	54,822.57	44.57%
Plant Restoration - U of M	58,762.00	-	58,762.00	-	-	0.00%
Repair and Maintenance Fund *	267,730.00	-	267,730.00	3,184.10	46,117.58	17.23%
Wetland Management*	165,685.00	-	165,685.00	2,766.63	11,744.55	7.09%
Groundwater Conservation* (150 K Grant and Pilot Project timing)	179,750.00	-	179,750.00	-	-	0.00%
Lake Vegetation Implementation	125,937.00	-	125,937.00	443.50	26,802.78	21.28%
Opportunity Project*	287,501.00	-	287,501.00	-	7,170.29	2.49%
Stormwater Ponds - U of M	79,985.00	-	79,985.00	12,059.00	31,829.96	39.79%
Hennepin County Chloride Initiative	114,830.00	-	114,830.00	-	6,859.46	5.97%
Lower Minnesota Chloride Cost-Share	217,209.00	-	217,209.00	-	-	0.00%
Subtotal	**$2,364,242.00**	**$0.00**	**$2,364,242.00**	**$73,865.90**	**$274,127.57**	**11.59%**
Bluff Creek						
Bluff Creek Tributary*	65,037.00	-	65,037.00	517.50	12,892.15	19.82%
Wetland Restoration at Pioneer	308,674.00	-	308,674.00	23.90	28,419.12	9.21%
Bluff Creek B5 by Galpin						
Subtotal	**$373,711.00**	**$0.00**	**$373,711.00**	**$541.40**	**$41,311.27**	**11.05%**
Riley Creek						
Lake Riley - Alum Treatment*	305,000.00	-	305,000.00	233,468.29	253,584.30	83.14%
Rice Marsh Lake in-lake phosphorus load	60,568.00	-	60,568.00	-	12,287.18	20.29%
Rice Marsh Lake Water Quality Improvement Phase 1	300,000.00	-	300,000.00	6,350.00	13,074.50	4.36%
Riley Creek Restoration (Reach E and D3)	1,773,623.00	-	1,773,623.00	2,192.38	1,748,076.41	98.56%
Lake Riley & Rice Marsh Lake Subwatershed Assessment	29,961.00	-	29,961.00	2,554.50	23,497.97	78.43%
Upper Riley Creek Stabilization	1,100,000.00	(250,000.00)	850,000.00	8,154.21	12,830.01	1.51%
Middle Riley Creek	0.00	268,900.00	268,900.00	4,600.50	26,744.52	9.95%
Lake Ann Wetland Restoration	150,000.00	(100,000.00)	50,000.00	-	-	0.00%
St Hubert Water Quality Project	0.00	100,000.00	100,000.00	8,490.42	8,490.42	8.49%
Subtotal	**$3,719,152.00**	**18,900.00**	**$3,738,052.00**	**265,810.30**	**2,098,585.31**	**56.14%**
Purgatory Creek						
Purgatory Creek Rec Area- Berm/retention area - feasibility/design	50,000.00	-	50,000.00	3,946.00	10,116.28	20.23%
Lotus Lake in-lake phosphorus load control	104,106.00	-	104,106.00	-	20,831.26	20.01%
Silver Lake Restoration - Feasibility Phase 1	255,931.00	-	255,931.00	5,176.06	16,267.68	6.36%
Scenic Heights	55,459.00	-	55,459.00	-	924.00	1.67%
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	227.50	6,072.00	4.84%
Mitchell Lake Subwatershed Assessment	46,203.00	-	46,203.00	2,898.50	39,641.47	85.80%
Lotus Lake Kerber Pond	*30,000.00*		*30,000.00*	-	*85.00*	*0.28%*
Duck Lake Partnership						
Subtotal	**$668,509.00**	**$0.00**	**$668,509.00**	**$12,248.06**	**$93,937.69**	**14.05%**
Reserve	**$100,000.00**	**($18,900.00)**	**81,100.00**	-	-	0.00%
TOTAL EXPENDITURE	**$8,461,514.00**	**$0.00**	**$8,461,514.00**	**$445,641.36**	**$3,016,850.43**	**35.65%**
EXCESS REVENUES OVER (UNDER) EXPENDITURES	**$0.00**	**$0.00**	**$0.00**	**($424,171.82)**	**($2,932,272.50)**	

***Denotes Multi-Year Project - See Table 2 for details**

		Total Project Funding	FUNDI District funds
3	**Programs and Projects**		
4	District Wide		
5	Community Resiliency	98,000.00	98,000.00
6	Repair and Maintenance Fund	277,005.00	277,005.00
7	Wetland Management	200,000.00	200,000.00
8	Groundwater Conservation	180,000.00	180,000.00
9	Opportunity Project*	300,000.00	300,000.00
10	Stormwater Ponds - U of M	106,092.00	64,092.00
11	Hennepin County Chloride Initiative	120,800.00	19,000.00
12	Lower Minnesota Chloride Cost-Share	217,209.00	20,000.00
13	*Subtotal*	*$1,499,106.00*	*$1,158,097.00*
14	**Bluff Creek**		
15	Bluff Creek Tributary*	436,750.68	386,750.68
16	Wetland Restoration at Pioneer	857,820.00	450,000.00
17	Subtotal	$1,294,570.68	$836,750.68
18	**Riley Creek**		
19	Lake Riley - Alum Treatment 1st dose	560,000.00	560,000.00
20	Rice Marsh Lake in-lake phosphorus lo	150,000.00	150,000.00
21	Rice Marsh WQ 1	300,000.00	300,000.00
22	Riley Creek Restoration (Reach E and I	2,168,148.00	1,615,000.00
23	Lake Riley & Rice Marsh Lake Subwate	72,500.00	12,500.00
24	Upper Riley Creek Stabilization	850,000.00	850,000.00
25	*Subtotal*	*$4,100,648.00*	*$3,487,500.00*
26	**Purgatory Creek**		
27	Purgatory Creek Rec Area- Berm/reter	50,000.00	50,000.00
28	Lotus Lake in-lake phosphorus load co	345,000.00	345,000.00
29	Silver Lake Restoration Project WQ1	268,013.00	268,013.00
30	Scenic Heights	260,000.00	165,000.00
31	Hyland Lake Internal Load	150,000.00	130,000.00
32	Duck Lake watershed load	220,000.00	220,000.00
33	Mitchell Lake Subwatershed Assessme	87,500.00	12,500.00
34	*Subtotal*	*$1,380,513.00*	*$1,190,513.00*
35			
36	**Total Multi-Year Project Costs**	**$8,274,837.68**	**$6,672,860.68**

ING SOURCE		Month Ended	Year	Lifetime
Partner Fund	Grants	5/31/20	To-Date	Costs
-	-	85	1,754.00	36,623.50
-	-	3,184.10	46,117.58	80,393.08
-	-	2,766.63	11,744.55	71,059.61
-	-	-	-	250
-	-	-	7,170.29	19,669.29
42,000.00	-	12,059.00	31,829.96	57,936.97
-	101,800.00	-	6,859.46	12,829.77
-	197,209.00	-	-	-
$42,000.00	*$299,009.00*	*$18,094.73*	*$105,475.84*	*$278,762.22*
50,000.00	-	517.5	12,892.15	334,604.93
-	407,820.00	23.9	28,419.12	577,567.14
$50,000.00	$407,820.00	$541.40	$41,311.27	$912,172.07
-	-	233,468.29	253,584.30	508,584.13
-	-	-	12,287.18	101,719.99
-	-	6,350.00	13,074.50	13,074.50
553,148.00	-	2,192.38	1,748,076.41	2,016,208.68
5,000.00	55,000.00	2,554.50	23,497.97	66,036.94
0	-	8,154.21	12,830.01	12,830.01
$558,148.00	*$55,000.00*	*$252,719.38*	*$2,063,350.37*	*$2,718,454.25*
-	-	3,946.00	10,116.28	10,116.28
-	-	-	20,831.26	261,724.60
-	-	5,176.06	16,267.68	28,349.51
45,000.00	50,000.00	-	924	205,465.25
20,000.00	-	-	-	128,612.41
0	0	227.5	6,072.00	100,649.02
5,000.00	70,000.00	2,898.50	39,641.47	80,938.11
$70,000.00	*$120,000.00*	*$12,248.06*	*$93,852.69*	*$815,855.18*
$720,148.00	**$881,829.00**	**$283,603.57**	**$2,303,990.17**	**$4,725,243.72**

Remaining
61,376.50
196,611.92
128,940.39
179,750.00
280,330.71
48,155.03
107,970.23
217,209.00
$1,220,343.78
102,145.75
280,252.86
$382,398.61
51,415.87
48,280.01
286,925.50
151,939.32
6,463.06
437,169.99
$982,193.75
39,883.72
83,275.40
239,663.49
54,534.75
21,387.59
119,350.98
6,561.89
$564,657.82
$3,149,593.96

Background Information 2019 MAWD Resolution

Proposing District: Riley Purgatory Bluff Creek Watershed District

Contact Name: Claire Bleser, Administrator

Phone Number: 952-607-6512

Email Address: cbleser@rpbcwd.org

Resolution Title: RESOLUTION to ban the use of pesticides and herbicides that are known carcinogens on residential and commercial lawns

Background that led to the submission of this resolution:

Riley Purgatory Bluff Creek Watershed District seeks to address groundwater health challenges through the strategies included in its 2018 10-Year Watershed Management Plan to promote the sustainable management of groundwater resources. The District recognizes that groundwater can be contaminated by fertilizer and pesticide applications, and that surface water and groundwater resources are interdependent. (10-Year Plan, 2.3.6.2, 2-21). While these relationships are challenging to quantify, contaminated water from one source can impact the water quality of the other. The District is focused on prevention of groundwater contamination through best management practices, recognizing that groundwater clean-up, when feasible, is both expensive and complex.

Pesticides and herbicides used on both commercial and residential lawns have been linked to human health problems, and some studies have connected pesticides and herbicides with carcinogenic properties, including promotion of tumors.[1] A variety of pesticide and herbicide products pose health concerns, and some pesticides include known endocrine-disrupting compounds that affect how natural hormones function in the body and interfere with the body's regulation of the endocrine system.[2]

There are two primary pathways to pesticide and herbcide exposure, both directly and via drinking water through groundwater contamination. Contaminated surface water moving through the soil carries pollutants into groundwater resources, resulting in an underground plume of polluted groundwater that may become unsuitable for drinking water.[3] In Minnesota, pesticides shown to disrupt hormone activity have been detected in surface waters.[4]

---

[1] Dich, J., Zahm, SH, Adami, HO. (1997). Pesticides and Cancer. *Cancer Causes Control*. May; 8(3), 420-43.
[2] Swackhamer, D. et al. (2010). Understanding Sources of Aquatic Contaminants of Emerging Concern. LCCMR Project Addendum. Available online: https://www.lccmr.leg.mn/documents/peer_review/2010/addendums/subd_5a_swackhamer_v1.pdf.
[3] *See* Joyce Latimer, Mike Goatley, Greg Evanylo, Bonnie Appleton. (2009). Groundwater Quality and the Use of Lawn and Garden Chemicals by Homeowners. Virginia Tech and Virginia State University: Virginia Cooperative Extension. *Available online:* https://www.pubs.ext.vt.edu/426/426-059/426-059.html.
[4] Swackhamer, D. et al. (2010). Understanding Sources of Aquatic Contaminants of Emerging Concern. LCCMR Project Addendum. Available online: https://www.lccmr.leg.mn/documents/peer_review/2010/addendums/subd_5a_swackhamer_v1.pdf.

Some municipalities in Canada have restricted pesticide use for aesthetic purposes, including on golf courses, due to health effects concerns including the relation between surface-applied pesticide exposure and occurrence of cancer.[5] A 2006 study reviewing medical literature on herbicide and pesticide exposure notes that "the balance of epidemiological research suggests the 2,4-D [a common herbicide used to kill weeds in grass] can be persuasively linked to cancers, neurological impairment and reproductive problems. These may arise from 2,4-D itself, from breakdown products or dioxin contamination, or from a combination of chemicals."[6] The University of Texas MD Anderson Cancer Center also notes that, although evidence is limited, the International Agency for Research on Cancer linked certain herbicides, such as those containing glyphosate (2,4-D) with an increased risk of cancer.[7] According to the non-profit group Beyond Pesticides, of the 36 most commonly used lawn care pesticides registered prior to 1984, "14 are probable or possible carcinogens, 15 are linked with birth defects, 21 with reproductive defects, 24 with neurotoxicity, 22 with liver or kidney damage, and 3 are sensitizers and/or irritants."[8] Additionally, "[a] child in a household using home and garden pesticides is 6.5 times more likely to develop leukemia than in a home that does not." A 2012 National Institute of Health study of companion animals exposed to lawn care products demonstrated an association between use of specific law care products and a greater risk of canine malignant lymphoma.[9]

Ideas for how this issue could be solved:

We have identified one potential solution:

1. Ban the use of carcinogenic pesticides and herbicides on residential and commercial lawns and encourage adoption of alternatives such as PRFCT lawns.

Anticipated support or opposition from other governmental units?

Minnesota Department of Health lists pesticides as a chemical of special concern to children's health and many be interested in partnering on legislation. The Minnesota Department of Agriculture offers voluntary turfgrass pesticide use Best Management Practices "to bring awareness to homeowners and lawn care companies on proper and judicious use of pesticides for homeowners, lawn care companies, and golf course managers to help protect water resources, humans, and non-target organisms including pollinators." These BMPs include using non-chemical pest control methods.

This issue is of importance to (check one):

---

[5] Loren D. Knopper & David R.S. Lean. (2010) Carcinogenic and Genotoxic Potential of Turf Pesticides Commonly used on Golf Courses. Journal of Toxicology and Environmental Health, Part B. Vol. 7, 2004: 4, 267-279. Available online: https://www.tandfonline.com/doi/full/10.1080/10937400490452697?scroll=top&needAccess=true.

[6] Meg Sears, C. Robin Walker, Richard HC van der Jagt, Paul Claman. (2006) Pesticide assessment: Protecting public health on the home turf. Pedistrics & Child Health, vol. 11: 4, 229-234. Available online: https://academic.oup.com/pch/article/11/4/229/2648275.

[7] Kellie Bramlet. (2016) Lawn Care and Your Cancer Risk. University of Texas MS Anderson Cancer Center. Available online: https://www.mdanderson.org/publications/focused-on-health/lawncare-cancer-risk.h26Z1590624.html.

[8] Beyond Pesticides. Commonly Asked Wuestions About Chemical Lawn Care. Available online: https://www.beyondpesticides.org/programs/lawns-and-landscapes/overview/faq-chemical-lawn-care.

[9] Takashima-Uebehlhoer BB, Barber LG, Zagarins SE, Procter-Gray E, Gollenberg AL, Moore AS, Bertone-Johnson ER. (2012) Household chemical exposures and the risk of canine malignant lymphoma, a model for non-Hodgkin's lymphoma. 112:171-176. Available online: https://www.ncbi.nlm.nih.gov/pubmed/22222006.

The entire state	X
Only our region	
Only our district	

Resolution to Ban the Use of Pesticides and Herbicides that are Known Carcinogens on Residential and Commercial Lawns

Whereas watershed districts engage in conserving the state's natural resources "by land use planning, flood control, and other conservation projects by using sound scientific principles for the protection of the public health and welfare and the provident use of the natural resources." Minn. Stat. 103D.201, subd. 1;

Whereas human and environmental health concerns arise from the use of health harming and potentially carcinogenic pesticides and herbicides on commercial and residential lawns because surface application exposes humans and animals to potential carcinogens, and surface water carries pesticide and herbicide pollution through soil and into groundwater sources that can affect drinking water and environmental health;

Whereas eliminating the use of specific pesticides and herbicides on lawns will reduce surface interaction with these health-harming, potential carcinogens, and limit their entry into groundwater;

Whereas the Minnesota Department of Health lists pesticides as a chemical of special concern to children's and the Minnesota Department of Agriculture promotes turfgrass pesticide use BMPs including using non-chemical pest controls;

Therefore, be it resolved that the Minnesota Association of Watershed Districts will seek legislation in partnership with the Minnesota Department of Health and Minnesota Department of Agriculture to achieve the following:

a) Ban the use of carcinogenic pesticides and herbicides on residential and commercial lawns.

Background Information 2019 MAWD Resolution

Proposing District: Riley Purgatory Bluff Creek Watershed District

Contact Name: Claire Bleser, Administrator

Phone Number: 952-607-6512

Email Address: cbleser@rpbcwd.org

Resolution Title: RESOLUTION to Limit Wake Boat Activities that Directly Cause Shoreline Erosion and Spread Aquatic Invasive Species

Background that led to the submission of this resolution:

Riley Purgatory Bluff Creek Watershed District seeks to address erosion and shoreland health challenges through the water quality strategies included in its 2018 10-Year Watershed Management Plan, issues that fall within one of the plan's primary focus areas: improving and protecting water quality. In its Watershed Management Plan, the District maintains that healthy shoreland areas are a key element of healthy hydrologic systems and provide habitat to support wildlife viability. Shoreland benefits can be compromised by erosion and sedimentation, among other resource threats. The District seeks to minimize the negative impacts of erosion and sedimentation – decreasing water depth, degrading water quality, smothering of fish and wildlife habitat – that result in major contributions to water pollution, recognizing that erosion and sedimentation are often accelerated by human activities. The District also seeks to minimize the spread and reduce the adverse ecological impacts of aquatic invasive species (AIS).

Public groups and the scientific community have observed water quality issues, including scouring of lake bottoms by boat waves, sediment disturbance and damage to aquatic plants, damage to shoreline areas, and negative impacts to aquatic animals, that are linked to the large wakes created by wake boats on lakes. The current design of many wake boat ballast tanks does not enable the tanks to be completely drained or fully decontaminated, presenting an additional concern about transport of AIS. While most of the discussion has focused on wake boats, the same issues may arise with any water craft designed or operated in a manner to create wakes larger than wakes created by ordinary boats, including but not limited to boats with ballast, fins, trim tabs, or similar design features.

A 2019 University of Minnesota Aquatic Invasive Species Research Center study showed that that large-volume water holding ballast tanks of wake boats, which have the capacity to take on the most water of similar recreational boats, provide zebra mussels and larvae the greatest opportunity for inter-lake transport. These boats are not designed to fully drain all ballast tank water.[1]

[1] Dave Orrick. (2019) Zebra Mussel's Best Friend: Wakeboard Boats, New U Study Finds. Livewell also Tested. Accessed through the Minnesota Aquatic Invasive Species Research Center (MAISRC), https://www.maisrc.umn.edu/news/wakeboards.

A 2018 report from the Oregon State Legislature summarizes studies on the various effects of wake boats, noting that boat speed is a primary factor in influencing wave size.[2] Also cited in this report is a report by the Scientific and Technical Advisory Committee to the Chesapeake Bay Program that demonstrates a positive correlation between the size of boat wakes and the extent of shoreline erosion as well as sediment resuspension and nearshore turbidity.[3]

A report to the City Council of Prior Lake, Indiana assesses environmental impacts from high speed boats on the state's lakes. The report summarizes studies focused on ecological impacts caused by waves, including shore and bank erosion, decreased water clarity, water quality degradation, and harm to aquatic plant and animal species. Shallow waters feel the most direct impacts of boat wakes, as well as shoreline areas adjacent to less than 1,000 feet of open water, making near-shore habitat where water depth is approximately 10 feet or less– the littoral zone—the most important to protect.[4]

In spring 2019, Vermont considered legislation presented in Senate Bill 69 "to restrict or prohibit the use of wake boats in certain public waters."[5] The bill as introduced proposes to limit wake boat speed within 200 feet of shoreline, imposing a $500 fine per violation, and proposes to restrict use of wake boats in certain public waters based on the size of the water body, the use of adjacent land, scenic beauty, or other recreational factors. [6] While the bill did not progress in the 2019 session, it may be re-introduced during a future session.

Ideas for how this issue could be solved:

We have identified three potential concurrent solutions:

1. Limiting wake boats to areas of lakes sufficiently distanced from shorelines to allow boat-generated waves to adequately dissipate and lessen energy before coming into impact with lake shorelines; and

2. Banning wake boats wakes in shallow lake areas where waves created by wake boats detrimentally impact sediment, aquatic vegetation, and aquatic habitat; and

3. Requiring wake boats to be designed, and existing boats to be modified, to enable complete drainage and decontamination of ballast tanks to stop the spread of AIS.

---

[2] Item E: Staff report on safety around wake sports statewide. (2018) Oregon State Legislature. Available online: https://olis.leg.state.or.us/liz/2018R1/Downloads/CommitteeMeetingDocument/144261. *See also* Sara Mercier-Blais & Yves Prairie. (2014) Project evaluation of the impact of the waves created by the type of boats wakeboat on the shores of Lake Memphremagog and Lovering; Ruprecht, Glamore, Cogland. (2015) Wakesurfing: Some Wakes are More Equal than Others. Available online: https://www.researchgate.net/publication/294799932_Wakesurfing_Some_Wakes_are_More_Equal_than_Others.

[3] *Id. See also* USDA NRCS. (1997) Slope Protection for Dams and Lakeshores: Minnesota Technical Note 2 (reviewing shoreline erosion processes and causes).

[4] City of Prior Lake, Agenda Item #16. Iformation Item: A review of environmental impacts from high speed boats on Indiana's public freshwater lakes; Administrative Cause no. 10-029V. Available online: https://www.cityofpriorlake.com/documents/WSUM/info17.pdf.

[5] Bruce Durgin. (2019) Wakeboard Boats Believed to Damage Lakes. The Federation of Vermont Lakes and Ponds. Available online: http://vermontlakes.org/wp-content/uploads//FOVLAP-Newsletter-Spring-2019-Final-digital.pdf

[6] Vermont Legislature (2019). Bill as Introduced: S.69. Available online: https://legislature.vermont.gov/Documents/2020/Docs/BILLS/S-0069/S-0069%20As%20Introduced.pdf

Anticipated support or opposition from other governmental units?

Minnesota DNR is already engaged in an education campaign, "Own Your Wake - for Everyone's Sake," encouraging responsible boat use near shorelines. DNR also actively promotes state AIS law, requiring boat ballast tanks to be emptied by a shoreline or waterway before being transported. We anticipate seeking DNR support for and leadership of legislation reflecting joint ideas of how to solve issues caused by wake boating.

This issue is of importance to (check one):

The entire state	X
Only our region	
Only our district	

Resolution to Limit Wake Boat Activities that Directly Cause Shoreline Erosion and Spread Aquatic Invasive Species

Whereas watershed districts engage in conserving the state's natural resources "by land use planning, flood control, and other conservation projects by using sound scientific principles for the protection of the public health and welfare and the provident use of the natural resources." Minn. Stat. 103D.201, subd. 1;

Whereas wake boats driven in Minnesota lakes result in scouring of lake bottoms, disturbance of lake sediment and damage to aquatic plants, erosion of lake shoreline, disturbance of and damage to aquatic animals, and transfer of water in boat ballast tanks – many of which are not designed to drain completely or to be decontaminated – that results in transfer of aquatic invasive species (AIS) among Minnesota lakes;

Whereas opportunities to limit the water quality impacts of wake boats include: restricting where within and in what waterbodies wake boats are allowed; defining the depth of water in which wake boats are allowed to create a wake; and requiring wake boats to be designed, and existing boats to be modified, to enable complete drainage and decontamination of ballast tanks to stop the spread of AIS;

Whereas the Minnesota Department of Natural Resources is engaged in an education campaign, "Own Your Wake - for Everyone's Sake," encouraging responsible boat use near shorelines, and also actively promotes state AIS law, requiring boat ballast tanks to be emptied by a shoreline or waterway before being transported;

Whereas other states have begun to regulate wake boat minimum distance from shoreline requirements and limit in what water bodies wake boating may take place; these regulations can serve as guidelines for regulations in Minnesota;

Therefore, be it resolved that the Minnesota Association of Watershed Districts will work with the Minnesota Department of Natural Resources to seek legislation to achieve one or more of the following:

a) limiting wake boating to areas of lakes sufficiently distanced from shorelines to allow boat-generated waves to adequately dissipate and lessen energy before coming into impact with lake shorelines;

b) banning wake boats wakes in shallow lake areas where waves created by wake boats detrimentally impact sediment, aquatic vegetation, and aquatic habitat; and

c) requiring new and existing wake boats to be able to completely drain and decontaminate their ballast tanks.

Background Information
2020 MAWD Resolution

Proposing District:	Riley Purgatory Bluff Creek Watershed District
Contact Name:	Claire Bleser, Administrator
Phone Number:	952-607-6512
Email Address:	cbleser@rpbcwd.org
Resolution Title:	RESOLUTION to limit excessive use of groundwater for the purpose of watering urban and suburban landscapes during summer months

Background that led to the submission of this resolution:

Riley Purgatory Bluff Creek Watershed District seeks to address depletion of valuable groundwater resources in Minnesota. 60% of homeowners with irrigation systems in the Twin Cities Metro Area used far more water than they needed to water their lawns[1]. The use of groundwater to irrigate urban and suburban lawns during particular hours of the day during the summer poses needless use of such water during times when evaporation rates are highest, thus wasting precious water resources, many of which take thousands of years to replenish.

Watering lawns (either via landscape irrigation system or manual watering) between noon and sundown generally results in higher evaporation rates than watering morning hours. Watering lawns in the evening has the potential to make lawns susceptible to disease when hot and humid conditions are combined with excess moisture. Watering lawns in the early morning is the most ideal as evaporation demands are low and wind deflection is less of an issue.[2]

Irrigating urban and suburban lawns during or shortly after precipitation events, when soils are saturated, not only wastes a significant amount of groundwater, but also increases runoff and potential pollution of streams, lakes and wetlands.

Ideas for how this issue could be solved:

[1]University of Minnesota Extension, *Planting Grass Seed? Most Twin Citians water lawns 'way too much',* 2017, https://twin-cities.umn.edu/planting-grass-seed-most-twin-citians-water-lawns-way-too-much

[2] University of Minnesota Extension Turfgrass Science and Metropolitan Council, *Efficient Water Use On Twin Cities Lawn Through Assessment, Research, and Demonstration,* 2016, https://metrocouncil.org/Wastewater-Water/Publications-And-Resources/WATER-SUPPLY-PLANNING/Twin-Cities-Lawn-Irrigation-System-Surveys-And-Ass.aspx

Background Information
2020 MAWD Resolution

Encourage the Department of Minnesota Natural Resources to investigate statewide regulations of urban and suburban lawn watering practices. Including but not limited to:

- Restricting the hours during which irrigation of lawns is allowed
- Enforcement of Minnesota State Statue 103G.298 requiring that "all automatically operated landscape irrigation systems shall have furnished and installed technology that inhibits or interrupts operation of the landscape irrigation system during periods of sufficient moisture. The technology must be adjusted either by the end user or the professional practitioner of landscape irrigation services."
- Require all companies engaged in the installation or maintenance of landscape irrigation systems to be trained and certified in the installation and use of EPA water sense technologies.
- Require all companies engaged in the installation or maintenance of landscape irrigation systems to register with the DNR and pay an annual fee to be divided among the cities and counties in which they do business based upon the amount of business done in each city and county.
- Require all companies engaged in the installation or maintenance of landscape irrigation systems to certify that the systems comply with restrictions regarding sensor technology as well as time restrictions.

Anticipated support or opposition from other governmental units?

Cities faced with providing adequate water supplies should support reasonable restrictions on the use of ground water to avoid the expense of drilling new wells and building new treatment facilities.

(Check one) This issue is of importance to:

Only our district	_____
Only our region	_____
The entire state	X_____

Background Information
2020 MAWD Resolution

Resolution to Limit Excessive Use of Groundwater for the Purpose of Watering Urban and Suburban Landscapes During Summer Months

Whereas groundwater resources are often used in excess to water urban and suburban landscapes, primarily lawns.

Whereas evaporation rates are highest during the hours between noon and dusk and watering landscapes in the evening has the potential to increase susceptibility to plant diseases.

Whereas the ideal time to water lawns and urban and suburban landscapes is in the early morning, due to the low evaporation demands and lessened effects of wind deflection.

Whereas excess watering of urban and suburban landscapes can cause increased runoff and therefore pollution to streams, wetlands, and lakes.

Therefore, be it resolved that the Minnesota Association of Watershed Districts encourages the Department of Minnesota Natural Resources to investigate statewide regulations of urban and suburban lawn watering practices. Including but not limited to:

- Restricting the hours during which irrigation of lawns is allowed
- Enforcement of Minnesota State Statue 103G.298 requiring that "all automatically operated landscape irrigation systems shall have furnished and installed technology that inhibits or interrupts operation of the landscape irrigation system during periods of sufficient moisture. The technology must be adjusted either by the end user or the professional practitioner of landscape irrigation services."
- Require all companies engaged in the installation or maintenance of landscape irrigation systems to be trained and certified in the installation and use of EPA water sense technologies.
- Require all companies engaged in the installation or maintenance of landscape irrigation systems to register with the DNR and pay an annual fee to be divided among the cities and counties in which they do business based upon the amount of business done in each city and county.
- Require all companies engaged in the installation or maintenance of landscape irrigation systems to certify that the systems comply with restrictions regarding sensor technology as well as time restrictions.

National Soil Health Day Resolution: Government

To Whom It May Concern:

Dedicating every June 23 as a day to recognize soil as an essential natural resource, and soils professionals as playing a critical role in managing our soil resources.

The STATE (GOVERNMENT BODY) OF _____ (DATE) _____

considered and agreed to

RESOLUTION

Recognizing soil as an essential natural resource, and soils professionals as playing a critical role in managing our State's (GOVERNMENT BODY) soil resources.
Whereas soil, plant, animal, and human health are intricately linked and the sustainable use of soil affects climate, water and air quality, human health, biodiversity, food safety, and agricultural production;
Whereas soil is a dynamic system which performs many functions and services vital to human activities and ecosystems;
Whereas, despite soil's importance to human health, the environment, nutrition and food, feed, fiber, and fuel production, there is little public awareness of the importance of soil protection;
Whereas the degradation of soil can be rapid, while the formation and regeneration processes can be very slow;
Whereas protection of our State (GOVERNMENT BODY) soil based on the principles of preservation and enhancement of soil functions, prevention of soil degradation, mitigation of detrimental use, and restoration of degraded soils is essential to the long-term prosperity of our State, Counties & Cities;
Whereas legislation in the areas of organic, industrial, chemical, biological, and medical waste pollution prevention and control should consider soil protection provisions;
Whereas legislation on climate change, water quality, agriculture, and rural development should offer a coherent and effective legislative framework for common principles and objectives that are aimed at protection and sustainable use of soils in the United States;

National Soil Health Day Resolution: Government

Whereas legislation in the areas of organic, industrial, chemical, biological, and medical waste pollution prevention and control should consider soil protection provisions;
Whereas legislation on climate change, water quality, agriculture, and rural development should offer a coherent and effective legislative framework for common principles and objectives that are aimed at protection and sustainable use of soils in this State (GOVERNMENT BODY);
Whereas soil contamination coupled with poor or inappropriate soil-management practices continues to leave contaminated sites unremediated; and
Whereas soil can be managed in a sustainable manner, which preserves its capacity to deliver ecological, economic, and social benefits, while maintaining its value for future generations: Now, therefore, be it

Resolved, That the State (GOVERNMENT BODY) —

(1) recognizes it as necessary to improve knowledge, exchange information, and develop and implement best practices for soil management, soil restoration, carbon sequestration, and long-term use of the State's soil resources;
(2) recognizes the important role of soil scientists and soils professionals, who are well-equipped with the information and experience needed to address the issues of today and those of tomorrow in managing the State's soil resources;
(3) commends soil scientists and soils professionals for their efforts to promote education, outreach, and awareness necessary for generating more public interest in and appreciation for soils; and
(4) acknowledges the promise of soil scientists and soils professionals to continue to enrich the lives of all Americans by improving stewardship of the soil, combating soil degradation, and ensuring the future protection and sustainable use of our air, soil, and water resources.

SIGNATURE(S) _____

DATE: _____

RILEY PURGATORY BLUFF CREEK
WATERSHED DISTRICT

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

August 7, 2020
To: The RPBCWD Board of Managers
Re: Fairway Woods Condominium Association Application for a Watershed Stewardship Grant

The District received has received one application for a Watershed Stewardship Grant for an amount greater than $10,000. As per the updated grant process, the application was reviewed by the Stewardship Grant Application Review Committee and a funding recommendation made. The application is now being presented to the Board of Managers for a final approval decision. In addition, because the grant request is greater than $20,000, a public hearing will be necessary.

Applicant: Fairway Woods Condominium Association
Project Title: Fairway Woods Meadow Lands Creation
Description: An asphalt tennis court was installed on the property around 1980 and has since fallen into disrepair. The tennis court borders a wetland and a woodland area rich in wildlife. In order to restore the area a demolition company, Bituminous Roadways, Inc. will remove the hard surface areas in the area including the tennis court, a walking trail, fencing and posts, and net posts. The same company will grade the area to create a natural flow pattern. A conservation fence will be constructed during the construction period. Presently there are invasive species in the tennis court and surrounding areas. Invasive species will be removed. A cover crop of oat will be planted along with a seed mix of native grasses and meadow flowers. The invasive species removal, planting and maintenance will be done by Seed to Site, LLC.

Total eligible costs: $30,180.00 **Grant request:** $20,000.00
Recommended Grant Amount: $20,000.00

Recommendation rationale:
Upon review, the Stewardship Grant Application Review Committee identified that this project meets water quality goals identified in the 10-Year Plan by incorporating habitat protection and enhancement, establishing a natural corridor for wildlife habitat and migration, and minimizes pollutant loading to nearby water resources. The project also meets water quantity goals identified in the 10-year plan by promoting infiltration. The project site is located at the bottom of a slope, adjacent to Purgatory creek and as such provides the benefit of slowing and infiltrating water before it reaches the creek. In addition, the project site falls within the 100 year flood plain, and as such this conversion of impervious surface to native prairie has the potential to store water and reduce the impact of potential floods.

Please find attached the application for your consideration.

Sincerely,

B Lauer
Groundwater and Stewardship Program Coordinator

Watershed Stewardship Grant Application Report

Form: Watershed Stewardship Grant Application

Applicant type	Residential (homeowner)
Name	Janie Paulus (Fairway Woods Assoc)
Mailing address	14398 Fairway Drive, 1, 14398 Faairway Drive, Eden Prairie, 55433
Phone	6127025694
Email	janepaulus@edinarealty.com
Primary contact information is the same as above	true
Name	Janie, Paulus
Phone	
Email	janepaulus@edinarealty.com
Have you had a site visit with the CCSWCD (Seth Ristow) or Watershed District technician?	Yes
Project title	Fairway Woods Meadow Lands Creation
Projected total project cost ($)	30180.00
Grant amount requested ($)	20000.00
Estimated start date	01-Oct-2020
Estimated completion date	26-Oct-2020
Type of project	Habitat restoration
if you selected "other", please describe:	Convert asphalt tennis court to a meadow land
My project is within the Riley Purgatory Bluff Creek Watershed District	true

Project address	Fairway Drive, 14398 Fairway Dr, Eden Prairie,, 55344
Property ID number (PID)	200000
Please describe the current condition of the property, relevant site history, and past management	The asphalt tennis court was installed in around 1980 and has fallen into disarray. It is an underused part of the association. It does boarder a wetlands and nature area with much wildlife. It is the desire of the association to remove the tennis courts and fencing and create a meadow land where the wildlife can live and residents can enjoy a quiet place to reflect and enjoy nature.
Please describe the project in detail, including any site issues you are hoping to address through it.	A demolition company will remove the hard surface areas of this area including a walking trail, tennis courts, fencing and posts, and net posts within the tennis court. The same company after removal will use the bobcat to create a grade that is a natural runoff to the wetlands. A conservation fence will be erected during this construction period. At this point, until the court surface is removed, we do not know what fill is below the asphalt. We are budgeting for clean top soil to be brought in prior to seeding. The removal of the asphalt surface will help with water runoff that comes off the three hills surrounding the tennis court. The trail presently floods after rains due to poor drainage. Presently, evasive spieces, have been identified growing in the area and harming the wetlands. These plants would be removed and the area maintained to be free of these plants.
Summarize your workplan. How will the project be completed?	The demolition company would remove present hard surfaces, fencing and posts, Soil would be prepared for seed planting. Oat seeds would be planted along with the natural grass seed 70% and 30% meadow land flowers. The oat seeds would be a cover crop helping the grass and flower seeds to get established.
Who will be completing the work, and where will you be purchasing supplies/ equipment from?	Bituminous Roadways, Inc. 1520 Commerce Drive, Mendota Heights will do the demolition and removal of debris and soil prep. Seed to Site, of Saint Peter will do the seeding and maintaining of the meadow lands for five years. They will be supplying all the seeds.

Which water quality goals from the District's 10-year plan does your project meet? My project...	Minimizes the negative impacts of erosion and sedimentation through the District's regulatory, education and outreach, and incentive programs, Incorporates habitat protection or enhancement into development and redevelopment projects, Establishes and preserves natural corridors for wildlife habitat and migration, Uses natural materials and bioengineering for the maintenance and restoration of shorelines and streambanks, Minimizes pollutant loading to water resources
Which water quantity goals from the District's 10-year plan does your project meet? My project...	Enhances the natural function of the floodplain and maintains floodplain storage volume, Promotes infiltration, where feasible, as a best management practice to reduce runoff volume, improve water quality, and promote aquifer recharge., Implements conservation practices (e.g. water reuse) to protect creeks, lakes and wetlands.
How will your project increase awareness of water resource issues and/ or clean water practices/ projects?	Residents and those walking through the neighborhood will see how to integrate a townhouse association that when built in the 1980's use much asphalt and did not do a natural blending of the residences to the wetlands and wildlife. Though the complex over the years has attempted to take the land from its prairie beginnings, the prairie and its wildlife continues to thrive. The creation of this meadow will show residents and visitors that it is never to let to allow nature to restore itself to its original state.
May we share your project with the community on our website, social media, or other media?	Yes
Could we highlight your project on a tour or training event? (with prior notice and agreement)	Yes
I understand that if my project is approved for funding, I/ my organization will enter into a maintenance agreement with the Riley Purgatory Bluff Creek Watershed District	true
How will the project be monitored and maintained?	There is a garden committee of the association that will work with Seed to Site to be trained on maintaining of a meadow land. The garden committee will monitor the meadow lands and not the landscaping company hired by the association.

I understand that if my project is approved for funding I must submit a project report within 30 days of completing my project and a yearly report containing updates on maintenance and function of the project.	true
What variables will track and report? How will you track these variables?	Photos will be taken to show the growth pattern of the grasses and natural plants. Where noted, reseeding will be done to keep the meadow thriving. When advised a burn will take place to help the meadows thrive.
File Upload	 4505_Balfanz_Scan.pdf
Name	Janie Paulus
Role	Committee chair
Date	07-Jul-2020
I/ we submit this application for consideration for a 2020 Watershed Stewardship Grant	true
Added Time	08-Jul-2020 09:48:04
Referrer Name	http://www.rpbcwd.org/grants/watershed-stewardship-grants-1/stewardship-grant-application/watershed-stewardship-grant-application
Task Owner	mswope@rpbcwd.org

Bituminous Roadways, Inc.

Your Preferred Pavement Partner Since 1946

1520 Commerce Drive | Mendota Heights | MN | 55120
651-686-7001 (P) | 651-687-9857 (F)
www.bitroads.com | info@bitroads.com

To:	FAIRWAY WOODS TOWNHOMES	**Contact:**	JANE PAULUS
Address:	14308 FAIRWAY DRIVE	**Phone:**	(612) 702-5694
	EDEN PRAIRIE, MN 55344	**Fax:**	
Project Name:	FAIRWAY WOODS TENNIS COURT REMOVAL	**Bid Number:**	
Project Location:	14353 FAIRWAY DRIVE, EDEN PRAIRIE, MN	**Bid Date:**	6/5/2020
Attachments:	Fairway Woods Measurements.png		

Item Description	Total Price
ASPHALT TRAIL REPLACEMENT	
3" Bituminous Trail Pavement Replacement (156 SY) - Remove Existing 8' Wide Bituminous Surface To Accommodate A 3 Inch Pavement Section At 6' Wide. Dispose Of Off Site. - Shape And Compact Existing Aggregate Base. - Furnish And Install A 3 Inch (Compacted Thickness) MN/DOT 2360 Type SPWEA330B Bituminous Wearing Course.	$5,960.00
Total Price for above ASPHALT TRAIL REPLACEMENT Items:	**$5,960.00**
TENNIS COURT RESTORATION	
Mobilization (1 Each) - Mobilization	$870.00
Fence Removal - Remove Existing Fence And Dispose Of At Approved Site.	$4,370.00
Excavation - Excavate Existing Asphalt And Class 5 On Tennis Court And Trail To Accommodate Topsoil Replacement. Dispose Of Material Off-site.	$9,150.00
Restore Landscape And Install Topsoil - Landscape Restoration, Including Topsoil And Grading. Excludes Maintenance.	$9,400.00
Total Price for above TENNIS COURT RESTORATION Items:	**$23,790.00**

Notes:

- All work to be completed in 2020.
- Proposed Work Does Not Include: Landscape Restoration, Irrigation Repair/Restoration, Private Utility Locates/Repairs, Sub-soil Corrections, Erosion Control, Towing Charges, Permits and Fees, Multiple Mobilizations, Surveying or any Unforseen Conditions, Guarantee on drainage or ponding of water on lots with less than 1% slope.
- Noted Addn: None
- For more information: www.bitroads.com

Payment Terms:

This proposal is subject to credit approval and is valid for 15 calendar days, after which time price quotes may be withdrawn without notice. This quote is based on standard AGC subcontract language and shall become a rider to any contract.

Payment due upon receipt of invoice. A finance charge of 1 1/2% per month (18% per year) will be charged on any balance over 30 days past invoice date, unless otherwise agreed upon in writing. We gladly accept Visa, Mastercard, Discover & American Express.

ACCEPTED: The above prices, specifications and conditions are satisfactory and are hereby accepted. **Buyer:** _____ **Signature:** _____ **Date of Acceptance:** _____	**CONFIRMED:** **BITUMINOUS ROADWAYS, INC. - MENDOTA HEIGHTS** **Authorized Signature:** _____ **Estimator:** Jack Peterson (651) 600-1210 petersonj@bitroads.com

SEED TO SITE LLC

06/15/2020

Pollinator Patch

Purgatory Creek Grant Proposal

c/o Janie Paulson

14398 Fairway Drive

Eden Prairie, MN 55344

Thank you for showing interest in improving the ecological quality of your neighborhood and watershed! You have a unique opportunity to remove impervious surface and return it to native plants that will benefit water quality, provide food and homes for pollinators and increase the beauty of your living space.

A prairie is not a quick installation, but it will require less maintenance than a formal garden as it matures. The important steps are site preparation, seed mix selection, monitoring and management. Seed to site is a professional native landscaper with experience in all steps of this process.

The preliminary assessment revealed the need for invasive species management before installment and during establishment. Buckthorn and Garlic mustard are present in the adjacent woodlands and would undoubtedly encroach on your new prairie. We recommend cutting and treating buckthorn in the fall of 2020, followed by pulling seedlings each spring for 4 seasons. Garlic mustard should likewise be pulled each spring to deplete the seed bank.

The following quote encompasses all steps in the process of your new addition except for concrete removal and black dirt addition.

Prairie (6000ft^2)

Seed	$300
Seeding and design	$200
Mowing	$150
Monitoring (4 seasons)	$1,960
Prescribed Burn (year 3 or 4)*	$600

Invasive Species removal and management

Buckthorn (5 seasons)	$1,980
Garlic mustard (4 seasons)	$1200

Total	$6,390

* Seed to Site LLC contracts with a professional, licensed burn crew for all prescribed fires.

Fairway Woods, Eden Prairie, MN
Mesic, short to mid-height Prairie/Savanna mix

Grasses
Side-oat's grama (Bouteloua curtipendula)
Kalm's brome (Bromus kalmii)
Bicknell's sedge (Carex bicknellii)
Short-beaked sedge (Carex brevior)
Canada wild rye (Elymus canadensis)
Bottlebrush grass (Elymus hystrix)
Silky wild rye (Elymus villosus)
June grass (Koeleria macrantha)
Little bluestem (Schizachyrium scoparium)

Forbs
Yarrow (Achillea millefolium)
Blue hyssop (Agastache foeniculum)
Leadplant (Amorpha canescens)
Thimbleweed (Anemone cylindrica)
Columbine (Aquilegia canadensis)
Canada milkwetch (Astragalus canadensis)
American bellflower (Campanulastrum americanum)
Partridge pea (Chamaecrista fasciculata)
White Prairie Clover (Dalea candida)
Purple Prairie Clover (Dalea pupurea)
Large-leaved aster (Eurybia macrophylla)
Prairie alumroot (Heuchera richardsonii)
Round-headed bushclover (Lespedeza capitata)
Rough blazing star (Liatris aspera)
False Solomon's seal (Maianthemum racemosum)
Wild bergamot (Monarda fistulosa)
Virginia mountain mint (Pycnanthemum virginianum)
Prairie rose (Rosa arkansana)
Black-eyed Susan (Rudbeckia hirta)
Zig-Zag goldenrod (Solidago flexicaulis)
Gray goldenrod (Solidago nemoralis)
Upland white goldenrod (Solidago ptarmicoides)
Lindley's aster (Symphyotrichum ciliolatum)
Calico aster (Symphyotrichum lateriflorum)
Early meadow rue (Thalictrum dioicum)
Hoary vervain (Verbena stricta)
Culver's root (Veronicastrum viginicum)
Golden Alexander (Zizia aurea)

Fairway woods tennis court and asphalt trail to be removed and meadow land established.

Wet lands adjoining the tennis court property.

Habitat next to the tennis court. Look closely and you will see a deer.

This picture demonstrates how 3 hills have runoff to the tennis court. Water presently pools. Meadow land will restore proper drainage.