



Grant Progress Report

Projects and Practices 2021

Grant Title: Plum Creek Subwatershed Turbidity Reduction

Grant ID: C21-5583

Grantee: Redwood-Cottonwood Rivers Control Area

Fiscal Agent: Redwood-Cottonwood Rivers Control Area

Grant Day-to-Day Contact: Kerry Netzke

Grant Award (\$): \$400,805.00

Required Match (%): 25

Required Match (\$): \$100,201.25

Grant Execution Date: 02/12/2021

Grant End Date: 12/31/2025

	Total Budgeted	Total Spent	Balance Remaining*
Grant Funds	\$400,805.00	\$207,779.31	\$193,025.69
Match Funds	\$490,415.82	\$881,495.84	(\$391,080.02)
Other Funds	\$19,171.01	\$19,171.01	\$0.00
Total	\$910,391.83	\$1,108,446.16	(\$198,054.33)

*Grant balance remaining is the difference between the Awarded Amount and the Spent Amount. Other values compare budgeted and spent amounts.

Project Abstract	
	<p>Plum Creek, 34.1 miles in length, drains 57,682 acres of highly productive agricultural land in Murray and Redwood Counties in southwest Minnesota. Extensive subsurface drainage and open ditches are required to improve crop productivity. Glacial geology and steep topography make the loamy soils very prone to wind and water erosion. Surface water issues within this watershed are a historical priority concern of local leadership. Past diagnostic studies and implementation plans for the Cottonwood River defined specific pollutants, processes affecting transport, and measures to reduce delivery. RCRCA authored a TMDL and implementation plan to address turbidity in 2008. Wenck Associates have drafted a TMDL (2020) estimating a 63% TSS reduction needed (3500 tons/yr) for Plum Creek. This project will install five grade stabilization structures, 3 grass waterways, 2 water and sediment control basins, and 1 streambank restoration. This will be done in partnership with Redwood SWCD and used to compliment an already awarded EPA Focus 319 grant to the Redwood SWCD. These practices will be used to capture sediment from excessive overland flows and provide up to 75% cost-share for landowners. Anticipated goals will</p>

annually reduce 1470 tons of sediment through implementation of these shovel-ready projects. This proposal's sediment reduction goal would constitute 41% toward the Plum Creek TSS reduction goal and 2.1% toward the interim 25% reduction goal set in the Sediment Reduction Strategy for the Minnesota River Basin.

Proposed Measurable Outcomes

Anticipated goals will annually reduce 1470 tons of sediment with these BMPs. This reduction goal would constitute 41% toward the Plum Creek TSS reduction goal and 2.1% toward the 25% reduction goal of MN River Basin Sediment Reduction Strategy.

Budget Details

<i>Activity Name</i>	<i>Category</i>	<i>Source Type</i>	<i>Source Description</i>	<i>Budgeted</i>	<i>Spent</i>	<i>Balance Remaining</i>	<i>Match Fund?</i>
BMP Implementation - Ag Practices	Agricultural Practices	Local Fund	25% local match	\$100,268.33	\$227,800.44	(\$127,532.11)	Y
BMP Implementation - Streambank Stabilization	Streambank or Shoreline Protection	Local Fund	25% local match	\$33,333.33	\$19,720.20	\$13,613.13	Y
BMP - Ag Practices - Holly 21	Agricultural Practices	Other Funds	2021 - SWCD Local Capacity Services (Murray SWCD)	\$6,500.20	\$6,500.20	\$0.00	N
BMP - Ag Practices - Holly 21	Agricultural Practices	Current State Grant	Plum Creek Subwatershed Turbidity Reduction	\$14,171.01	\$14,171.01	\$0.00	N
BMP - Ag Practices - Holly 21	Agricultural Practices	Other Funds	2021 - State Cost-Share Fund (Murray SWCD)	\$7,670.81	\$7,670.81	\$0.00	N
BMP Implementation - Ag Practices	Agricultural Practices	Current State Grant	Plum Creek Subwatershed Turbidity Reduction	\$286,633.99	\$181,332.30	\$105,301.69	N
BMP Implementation - Streambank Stabilization	Streambank or Shoreline Protection	Current State Grant	Plum Creek Subwatershed Turbidity Reduction	\$100,000.00	\$12,276.00	\$87,724.00	N
BMP Implementation - Ag Practices	Agricultural Practices	Other State funds not in eLINK	MN Ag Water Quality Certification Funds	\$5,000.00	\$5,000.00	\$0.00	N

<i>Activity Name</i>	<i>Category</i>	<i>Source Type</i>	<i>Source Description</i>	<i>Budgeted</i>	<i>Spent</i>	<i>Balance Remaining</i>	<i>Match Fund?</i>
BMP - Ag Practices - Holly 21	Agricultural Practices	Federal Funds	Plum Creek Focus 319 funds	\$56,684.04	\$56,684.04	\$0.00	Y
BMP Implementation - Ag Practices	Agricultural Practices	Federal Funds	Focus 319 Funds	\$225,937.17	\$426,201.93	(\$200,264.76)	Y
BMP Implementation - Ag Practices	Agricultural Practices	Federal Funds	EQIP	\$17,861.01	\$94,757.29	(\$76,896.28)	Y
BMP Implementation - Streambank Stabilization	Streambank or Shoreline Protection	Federal Funds	319 Federal funds	\$46,884.60	\$46,884.60	\$0.00	Y
BMP - Ag Practices - Holly 21	Agricultural Practices	Landowner Fund	10% landowner match	\$9,447.34	\$9,447.34	\$0.00	Y

<i>Indicator Category</i>	<i>Proposed Indicator</i>	<i>Total Value</i>	<i>Unit</i>
Water Pollution (Reduction Estimates)	Sediment (Tss)	1470	Tons/Yr

<i>Indicator Category</i>	<i>Final Indicator</i>	<i>Total Value</i>	<i>Unit</i>
Water Pollution (Reduction Estimates)	Phosphorus (Est. Reduction)	106.6	Lbs/Yr
Water Pollution (Reduction Estimates)	Sediment (Tss)	99.4	Tons/Yr
Stormwater Management	Volume Reduced (Acre- Feet/Year)	72.964	Acre-Feet/Yr
Water Pollution (Reduction Estimates)	Phosphorus (Est. Reduction)	1474.2	Lbs/Yr
Water Pollution (Reduction Estimates)	Sediment (Tss)	1848.9	Tons/Yr
Water Pollution (Reduction Estimates)	Soil (Est. Savings)	1280.1	Tons/Yr
Water Pollution (Reduction Estimates)	Phosphorus (Est. Reduction)	57.5	Lbs/Yr
Water Pollution (Reduction Estimates)	Sediment (Tss)	50	Tons/Yr
Water Pollution (Reduction Estimates)	Soil (Est. Savings)	62	Tons/Yr

Grant Activities

Activity Name: BMP - Ag Practices - Holly 21

Activity Category: Agricultural Practices **Staff time?:** No

Description: Installation of a grade stabilization in addition to a grade stabilization restoration in the NE 1/4 of Section 21 of Holly Township, Murray County.

Budget Details

<u>Source Type</u>	<u>Source Description</u>	<u>Budgeted</u>	<u>Spent</u>	<u>Balance Remaining</u>	<u>Last Transaction Date</u>	<u>Match Fund?</u>
Federal Funds	Plum Creek Focus 319 funds	\$56,684.04	\$56,684.04	\$0.00	07/06/2023	Y
Landowner Fund	10% landowner match	\$9,447.34	\$9,447.34	\$0.00	07/06/2023	Y
Current State Grant	2021 - SWCD Local Capacity Services (Murray SWCD)	\$6,500.20	\$6,500.20	\$0.00	07/12/2023	N
Current State Grant	Plum Creek Subwatershed Turbidity Reduction	\$14,171.01	\$14,171.01	\$0.00	07/06/2023	N
Current State Grant	2021 - State Cost-Share Fund (Murray SWCD)	\$7,670.81	\$7,670.81	\$0.00	07/12/2023	N

Final Indicators

<u>Indicator</u>	<u>Total Value</u>	<u>Unit</u>
Sediment (Tss)	50	Tons/Yr
Soil (Est. Savings)	62	Tons/Yr
Phosphorus (Est. Reduction)	57.5	Lbs/Yr

Activity Action Name:	BMP - Ag Practices - Holly 21	Activity Count: 2
Practice Type:	410 - Grade Stabilization Structure	Size/Units: 2 - Count
TA Provider/JAA:	Other	Lifespan: 25 Years
Practice Description:	Installation of a grade stabilization and restoration of an existing grade stabilization in Section 21 of Holly Township, Murray County,	Install Date: 07/06/2023
		Mapped: Yes

Indicator Name	Units	Value	Calculation Tool	Waterbody
Phosphorus (Est. Reduction)	Lbs/Yr	57.5	Other	29091
Soil (Est. Savings)	Tons/Yr	62	Other	29091
Sediment (Tss)	Tons/Yr	50	Other	29091

Activity Name: BMP Implementation - Ag Practices

Activity Category: Agricultural Practices

Staff time?: No

Description: Grant funds will be used to provide 25% cost share to compliment the 50% cost share provided by federal 319 Targeted Watershed funds, for grade stabilizations, WSCBs, grassed waterways and other agricultural practice BMPs within the Plum Creek subwatershed. Projects will be designed using NRCS FOTG standards by Duane Hansel, PE (or his successor) or SW Prairie TSA. Most BMPs will have a minimum 10-yr lifespan; BMPs of a capital investment nature will have a minimum 25-yr lifespan. All necessary permits (if required) will be obtaining prior to encumbering construction funds. Contract assurances will be approved by the RCRC Board of Directors utilizing state cost share contracts with private landowners. Local match of 25% will be provided by the landowners, or a combination of landowner(s) and non-state funding sources. State/federal funding will not exceed 75%.

Staffing for this grant include:

Kerry Netzke, RCRC Executive Director, to provide grant administration and reporting, and CWF contract management.

Joy Bruns, RCRC Office Manager, for CWF bookkeeping and payments.

Duane Hansel, PE, Design Engineer

SW Prairie TSA, Engineering Services

Scott Wold, Redwood SWCD Manager

Brian Pfarr, Redwood SWCD Resource Specialist

Kurt Mathiowetz, Redwood SWCD Water Quality Technician

Redwood SWCD will:

1. Survey project sites for the participating landowners.
2. Assist with the engineered project design and drawings, and clear cultural resources concerns.
3. Assist with CWF contract and voucher signatures.
4. Administer the federal 319 contract and voucher contracts.
5. Provide on-site construction inspection, documentation and as-built information.

Budget Details

<u>Source Type</u>	<u>Source Description</u>	<u>Budgeted</u>	<u>Spent</u>	<u>Balance Remaining</u>	<u>Last Transaction Date</u>	<u>Match Fund?</u>
Other State funds not in eLINK	MN Ag Water Quality Certification Funds	\$5,000.00	\$5,000.00	\$0.00	12/07/2023	N
Current State Grant	Plum Creek Subwatershed Turbidity Reduction	\$286,633.99	\$181,332.30	\$105,301.69	10/15/2024	N
Local Fund	25% local match	\$100,268.33	\$227,800.44	(\$127,532.11)	10/15/2024	Y
Federal Funds	Focus 319 Funds	\$225,937.17	\$426,201.93	(\$200,264.76)	10/15/2024	Y
Federal Funds	EQIP	\$17,861.01	\$94,757.29	(\$76,896.28)	10/15/2024	Y

Actual Results

Results

Date Added

JANUARY 2023: For calendar year 2022, 4 contracts were completed expending 6.7% of the grant (\$27,043.87). Total grant expended is \$155,865.49 (38.9%). Total match to date is \$169,778.52 with total costs of \$677,617.66. Total reductions to date: Sediment (TSS) 1,080.9 T/yr, Phosphorus 1,166.5 lbs/yr, and Soil 1,317.9 T/yr. Additionally, 72.964 acre-feet of floodwater storage has been created.

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Individual contracts completed in 2022 were as follows:

- 1) Holly 8 Grade Stabilization - 4/7/22 start date; 1/11/23 paid date; \$5,442.90 grant; \$9,571.50 landowner; and \$21,771.60 federal funds.
- 2) Holly 9 WSCB - 4/7/22 start date; 8/4/22 paid date; \$2,773.08 grant; \$4,621.80 landowner; and \$11,092.32 federal funds.
- 3) Springdale 35 WSCBs - 5/5/22 start date; 11/3/22 paid date; \$5,794.06 grant; \$9,656.76 landowner; and \$23,176.23 federal funds.
- 4) North Hero 10 NE WSCBs - 12/1/22 start date; 1/11/23 paid date; \$6,687.18 grant; \$11,145.10 landowner, and \$26,748.72 federal funds.

January 2022: To date, 8 contracts have been successfully completed utilizing \$128,821.62 of grant funds. Sediment (TSS) reductions of 926.0 tons/year have been achieved towards the 1,470 tons/year goal. The 25% local match of \$100,201.25 has been surpassed. The Focus 319 funds have been fully expended, and until more funds are secured, this grant will provide up to 75% cost-share with 25% local match for priority projects within the watershed that will help reach the sediment reduction goal.

JANUARY 29, 2024: For calendar year 2023, 4 contracts were completed expending 9.5% of the grant (\$38,052.17). Total grant expended is \$193,917.66 (48.4%). Total match to date is \$782,661.10 with total costs of \$976,578.76.

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Total reductions to date: Sediment (TSS) 1,215.0 T/yr, Phosphorus 1,397.2 lbs/yr, and Soil 1,655.9 T/yr. Additionally, 83.828 acre-feet of floodwater storage has been created.

Results

Date Added

Individual contracts completed in 2023 were as follows: 1) Holly 11 Grade Stabilization - 8/4/22 start date; 8/3/23 paid date; \$20,590.91 grant; \$31,910.17 landowner; \$2,408.00 Area II, and \$82,363.62 federal EQIP funds.

2) Holly 21 Grade Stabilization & Repair - 4/6/23 start date; 7/7/23 paid date; \$14,171.01 grant; \$9,447.34 landowner; \$14,171.01 Murray SWCD; and \$56,684.04 federal EQIP funds.

3) North Hero 10 WSCBs - 9/1/22 start date; 12/7/23 paid date; \$3,290.25; \$16,803.75 landowner, \$5,000.00 MAWQC; and \$42,121.00 federal EQIP funds.

January 2022: To date, 8 contracts have been successfully completed utilizing \$128,821.62 of grant funds. Sediment (TSS) reductions of 926.0 tons/year have been achieved towards the 1,470 tons/year goal. The 25% local match of \$100,201.25 has been surpassed. The Focus 319 funds have been fully expended, and until more funds are secured, this grant will provide up to 75% cost-share with 25% local match for priority projects within the watershed that will help reach the sediment reduction goal.

January 2022: To date, 8 contracts have been successfully completed utilizing \$128,821.62 of grant funds. Sediment (TSS) reductions of 926.0 tons/year have been achieved towards the 1,470 tons/year goal. The 25% local match of \$100,201.25 has been surpassed. The Focus 319 funds have been fully expended, and until more funds are secured, this grant will provide up to 75% cost-share with 25% local match for priority projects within the watershed that will help reach the sediment reduction goal. 1/29/2022 12:00:00 AM 01/29/2024

OCTOBER 17, 2024: Since 1/1/2024, 2 additional contracts were completed that pushed expenditures past 50%. Total grant expended to date is \$207,779.31(51.84%). Total match to date is \$834,611.24 with total costs of \$1,061,561.56. Total reductions to date: Sediment (TSS) 1,431.2 T/yr, Phosphorus 1,638.2 lbs/yr, and Soil 1,909.1 T/yr. Additionally, 84.864 acre-feet of floodwater storage has been created. 10/17/2024 9:33:18 AM

Individual contracts completed in 2024 were as follows: 1) Springdale 34 Waterways - 7/9/24 start date; 10/15/24 paid date; \$5,997.30 grant; \$16,832.75 landowner; \$34,775.28 EQIP; and \$9,725.67 federal 319 funds. 2) North Hero 5 Streambank Stabilization - 6/12/24 start date; 10/15/24 paid date; \$5,929.35 grant; \$9,142.45 landowner (North Hero Township); and \$21,498.00 federal 319 funds.

The sediment reduction goal of 1,470 tons/year is nearly achieved at 1,431.2. The 25% local match of \$100,201.25 has been greatly surpassed due to the federal Focus 319 funds.

Redwood SWCD's first 319 appropriation has been fully expended, and additional funding from another watershed was given to Redwood SWCD. A request to extend this grant appropriation one more year, to 12/31/2025 will be requested in order to maximize the conservation efforts for the Plum Creek watershed by combining Clean Water Funds and federal 319 funding.

Results

Date Added

January 2025 - Since the October 17, 2024 report, there were no additional projects completed by year end.

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Final Indicators

<u>Indicator</u>	<u>Total Value</u>	<u>Unit</u>
Soil (Est. Savings)	1280.1	Tons/Yr
Sediment (Tss)	1848.9	Tons/Yr
Volume Reduced (Acre-Feet/Year)	72.964	Acre-Feet/Yr
Phosphorus (Est. Reduction)	1474.2	Lbs/Yr

Activity Action Name: Holly 9 Dam Restoration	Activity Count: 1
Practice Type: 410 - Grade Stabilization Structure	Size/Units: 1 - Count
TA Provider/JAA: Other	Lifespan: 25 Years
Practice Description: Restoration of an existing small dam	Install Date: 08/04/2022
	Mapped: Yes

Indicator Name	Units	Value	Calculation Tool	Waterbody
Volume Reduced (Acre-Feet/Year)	Acre-Feet/Yr	1.036	Other	29046
Phosphorus (Est. Reduction)	Lbs/Yr	42.6	Other	29046
Sediment (Tss)	Tons/Yr	37	Other	29046
Soil (Est. Savings)	Tons/Yr	50	Other	29046

Activity Action Name:	Holly 2 Grade Stabilization	Activity Count: 1
Practice Type:	410 - Grade Stabilization Structure	Size/Units: 1 - Count
TA Provider/JAA:	Other	Lifespan: 25 Years
Practice Description:	Construction of a grade stabilization structure	Install Date: 08/05/2021
		Mapped: Yes

Indicator Name	Units	Value	Calculation Tool	Waterbody
Soil (Est. Savings)	Tons/Yr	294	Other	29047
Phosphorus (Est. Reduction)	Lbs/Yr	190.9	Other	29047
Sediment (Tss)	Tons/Yr	166	Other	29047
Volume Reduced (Acre-Feet/Year)	Acre-Feet/Yr	25.529	Other	29047

Activity Action Name:	Springdale 25	Activity Count: 1
Practice Type:	412 - Grassed Waterway and Swales	Size/Units: 2575 - Linear Feet
TA Provider/JAA:	SWCD	Lifespan: 10 Years
Practice Description:	Installation of a new grassed waterway.	Install Date: 08/05/2021
		Mapped: Yes

Indicator Name	Units	Value	Calculation Tool	Waterbody
Phosphorus (Est. Reduction)	Lbs/Yr	43.2	Bwsr Calc (Gully Stabilization)	29045
Sediment (Tss)	Tons/Yr	37.6	Bwsr Calc (Gully Stabilization)	29045
Soil (Est. Savings)	Tons/Yr	37.6	Bwsr Calc (Gully Stabilization)	29045

Activity Action Name:	Springdale 23/24 Road Retention	Activity Count: 1
Practice Type:	410 - Grade Stabilization Structure	Size/Units: 1 - Count
TA Provider/JAA:	Other	Lifespan: 25 Years
Practice Description:	Construction of a Road Retention between sections 23 and 24 of Springdale Township, Redwood County	Install Date: 11/04/2021
		Mapped: Yes

Indicator Name	Units	Value	Calculation Tool	Waterbody
Phosphorus (Est. Reduction)	Lbs/Yr	147.2	Other	29043
Sediment (Tss)	Tons/Yr	128	Other	29043
Soil (Est. Savings)	Tons/Yr	134	Other	29043
Volume Reduced (Acre-Feet/Year)	Acre-Feet/Yr	36.258	Other	29.043

Activity Action Name:	Holly 3 Grade Stabilizations	Activity Count: 5
Practice Type:	638 - Water and Sediment Control Basin	Size/Units: 5 - Count
TA Provider/JAA:	TSA	Lifespan: 10 Years
Practice Description:	Five 638/410 structures in the NE 1/4 of Section 3 of Holly Township, Murray County.	Install Date: 12/02/2021
		Mapped: Yes

Indicator Name	Units	Value	Calculation Tool	Waterbody
Soil (Est. Savings)	Tons/Yr	130.1	Bwsr Calc (Gully Stabilization)	29046
Phosphorus (Est. Reduction)	Lbs/Yr	149.6	Bwsr Calc (Gully Stabilization)	29046
Sediment (Tss)	Tons/Yr	130.1	Bwsr Calc (Gully Stabilization)	29046

Activity Action Name:	Holly 7 Grade Stabization	Activity Count: 1
Practice Type:	410 - Grade Stabilization Structure	Size/Units: 1 - Count
TA Provider/JAA:	Other	Lifespan: 10 Years
Practice Description:	Construction of a grade stabilization in Section 7 of Holly Township, Murray County.	Install Date: 11/04/2021
		Mapped: Yes

Indicator Name	Units	Value	Calculation Tool	Waterbody
Sediment (Tss)	Tons/Yr	14	Other	29088
Soil (Est. Savings)	Tons/Yr	14	Other	29088
Phosphorus (Est. Reduction)	Lbs/Yr	16.1	Other	29088

Activity Action Name:	Springdale 22_1	Activity Count: 3
Practice Type:	638 - Water and Sediment Control Basin	Size/Units: 3 - Count
TA Provider/JAA:	TSA	Lifespan: 10 Years
Practice Description:	Construction of 3 638s in Section 22 of Springdale Township, Redwood County.	Install Date: 11/04/2021
		Mapped: Yes

Indicator Name	Units	Value	Calculation Tool	Waterbody
Phosphorus (Est. Reduction)	Lbs/Yr	26.9	Bwsr Calc (Gully Stabilization)	29043
Soil (Est. Savings)	Tons/Yr	23.4	Bwsr Calc (Gully Stabilization)	29043
Sediment (Tss)	Tons/Yr	23.4	Bwsr Calc (Gully Stabilization)	29043

Activity Action Name:	Springdale 22_2	Activity Count: 1
Practice Type:	410 - Grade Stabilization Structure	Size/Units: 1 - Count
TA Provider/JAA:	TSA	Lifespan: 10 Years
Practice Description:	Construction of a grade stabilization structure adjacent to Plum Creek in Section 22 of Springdale Township, Redwood County.	Install Date: 12/02/2021
		Mapped: Yes

Indicator Name	Units	Value	Calculation Tool	Waterbody
Soil (Est. Savings)	Tons/Yr	34.1	Bwsr Calc (Gully Stabilization)	29043
Phosphorus (Est. Reduction)	Lbs/Yr	39.2	Bwsr Calc (Gully Stabilization)	29043
Sediment (Tss)	Tons/Yr	34.1	Bwsr Calc (Gully Stabilization)	29043

Activity Action Name:	Springdale 35 WSCBs	Activity Count: 4
Practice Type:	638 - Water and Sediment Control Basin	Size/Units: 4 - Count
TA Provider/JAA:	TSA	Lifespan: 10 Years
Practice Description:	Construction of 4 WSCBs in the SE1/4 of Section 35, Springdale Twp.	Install Date: 11/03/2022
		Mapped: Yes

Indicator Name	Units	Value	Calculation Tool	Waterbody
Soil (Est. Savings)	Tons/Yr	106.4	Bwsr Calc (Gully Stabilization)	29046
Sediment (Tss)	Tons/Yr	37.2	Bwsr Calc (Gully Stabilization)	29046
Phosphorus (Est. Reduction)	Lbs/Yr	42.8	Bwsr Calc (Gully Stabilization)	29046

Activity Action Name:	Holly 8 Grade Stabilizations	Activity Count: 2
Practice Type:	410 - Grade Stabilization Structure	Size/Units: 2 - Count
TA Provider/JAA:	TSA	Lifespan: 10 Years
Practice Description:	Installation of 2 grade stabilizations as designed.	Install Date: 01/11/2023
		Mapped: Yes

Indicator Name	Units	Value	Calculation Tool	Waterbody
Soil (Est. Savings)	Tons/Yr	21.6	Bwsr Calc (Gully Stabilization)	29046
Sediment (Tss)	Tons/Yr	7.6	Bwsr Calc (Gully Stabilization)	29046
Phosphorus (Est. Reduction)	Lbs/Yr	8.7	Bwsr Calc (Gully Stabilization)	29046

Activity Action Name:	North Hero 10 NE WSCBs	Activity Count: 4
Practice Type:	638 - Water and Sediment Control Basin	Size/Units: 4 - Count
TA Provider/JAA:	TSA	Lifespan: 10 Years
Practice Description:	Installation of 4 WSCBs as designed.	Install Date: 01/11/2023
		Mapped: Yes

Indicator Name	Units	Value	Calculation Tool	Waterbody
Sediment (Tss)	Tons/Yr	4.4	Bwsr Calc (Gully Stabilization)	29048
Phosphorus (Est. Reduction)	Lbs/Yr	5	Bwsr Calc (Gully Stabilization)	29048
Soil (Est. Savings)	Tons/Yr	47.7	Bwsr Calc (Gully Stabilization)	29048

Activity Action Name:	Springdale 34 Waterways	Activity Count:	3
Practice Type:	412 - Grassed Waterway and Swales	Size/Units:	4.48 - Acres
TA Provider/JAA:	TSA	Lifespan:	10 Years
Practice Description:	Installation of 3 waterways as designed in the E 1/2 of Section 34, Springdale Township	Install Date:	10/15/2024
		Mapped:	Yes

Indicator Name	Units	Value	Calculation Tool	Waterbody
Sediment (Tss)	Tons/Yr	66.9	Bwsr Calc (Gully Stabilization)	29044
Soil (Est. Savings)	Tons/Yr	191.2	Bwsr Calc (Gully Stabilization)	29044
Phosphorus (Est. Reduction)	Lbs/Yr	77	Bwsr Calc (Gully Stabilization)	29044

Activity Action Name:	North Hero 10 WSCBs, Grade Stabilization	Activity Count:	7
Practice Type:	638 - Water and Sediment Control Basin	Size/Units:	7 - Count
TA Provider/JAA:	TSA	Lifespan:	10 Years
Practice Description:	Installation of 7 WSCBs as designed.	Install Date:	12/07/2023
		Mapped:	Yes

Indicator Name	Units	Value	Calculation Tool	Waterbody
Sediment (Tss)	Tons/Yr	68.6	Bwsr Calc (Gully Stabilization)	29048
Soil (Est. Savings)	Tons/Yr	196	Bwsr Calc (Gully Stabilization)	29048
Phosphorus (Est. Reduction)	Lbs/Yr	78.9	Bwsr Calc (Gully Stabilization)	29048

Activity Action Name:	Holly 11 Grade Stabilization	Activity Count: 1
Practice Type:	410 - Grade Stabilization Structure	Size/Units: 1 - Count
TA Provider/JAA:	Other	Lifespan: 25 Years
Practice Description:	Installation of a grade stabilization in the Plum Creek subwatershed of the Cottonwood River.	Install Date: 08/03/2023
		Mapped: Yes

Indicator Name	Units	Value	Calculation Tool	Waterbody
Sediment (Tss)	Tons/Yr	274	Other	29046
Phosphorus (Est. Reduction)	Lbs/Yr	151.8	Other	29046

Activity Action Name:	Springdale 13/24 Grade Stabilization	Activity Count: 1
Practice Type:	410 - Grade Stabilization Structure	Size/Units: 1 - Count
TA Provider/JAA:	Other	Lifespan: 25 Years
Practice Description:	Construction of a grade stabilization structure on the section line between sections 13 and 24 of Springdale Township, Redwood County.	Install Date: 11/04/2021
		Mapped: Yes

Indicator Name	Units	Value	Calculation Tool	Waterbody
Sediment (Tss)	Tons/Yr	820	Other	29043
Volume Reduced (Acre-Feet/Year)	Acre-Feet/Yr	10.141	Other	29043
Phosphorus (Est. Reduction)	Lbs/Yr	454.3	Other	29043

Activity Name: BMP Implementation - Streambank Stabilization

Activity Category: Streambank or Shoreline Protection

Staff time?: No

Description: Grant funds will be used to provide 25% cost share to compliment the 50% cost share provided by federal 319 Targeted Watershed funds, for streambank stabilization/shoreline protection BMPs within the Plum Creek subwatershed. Projects will protect infrastructure and reduce in-channel sediment contributions. All necessary permits (DNR & USACE) will be obtained before encumbering funds if the project does not qualify for the DNR Public Water Works General Permit (#2005-4215) held by RCRCA. NRCS FOTG design standards by Duane Hansel, PE (or his successor) or SW Prairie TSA with the BMPs having a minimum 10-yr lifespan. Contract assurances will be approved by the RCRCA Board of Directors utilizing state cost share contracts with private landowners. Local match of 25% will be provided by the landowner, or a combination of landowner(s) and other non-state funding sources.

State/federal funding will not exceed 75%.

Additionally, a signed agreement with the landowner will be executed to acknowledge that financial assurance in the amount of 20% of the project cost will be provided by the landowner in the event that future repair/maintenance of the project becomes necessary.

Staffing for this grant include:

Kerry Netzke, RCRCA Executive Director - grant administration and reporting, and CWF contract management.

Joy Bruns, RCRCA Office Manager - CWF bookkeeping and payments.

Duane Hansel, PE, Design Engineer

SW Prairie TSA, Engineering Services

Scott Wold, Redwood SWCD Manager

Brian Pfarr, Redwood SWCD Resource Specialist

Kurt Mathiowetz, Redwood SWCD Water Quality Technician

Redwood SWCD will:

1. Survey project sites for the participating landowners.
2. Assist with the engineered project design and drawings, and clear cultural resource concerns.

3. Assist with CWF contract and voucher signatures.
4. Administer the federal 319 contract and voucher contracts.
5. Provide on-site construction inspection, documentation and as-built information.

Budget Details

<u>Source Type</u>	<u>Source Description</u>	<u>Budgeted</u>	<u>Spent</u>	<u>Balance Remaining</u>	<u>Last Transaction Date</u>	<u>Match Fund?</u>
Federal Funds	319 Federal funds	\$46,884.60	\$46,884.60	\$0.00	10/15/2024	Y
Current State Grant	Plum Creek Subwatershed Turbidity Reduction	\$100,000.00	\$12,276.00	\$87,724.00	10/15/2024	N
Local Fund	25% local match	\$33,333.33	\$19,720.20	\$13,613.13	10/15/2024	Y

Actual Results

Results Date Added

January 2023: One streambank stabilization was completed this calendar year as detailed below: 2/10/2021 4:23:24 PM
 North Hero 10 Streambank - 7/7/22 start date; 9/1/22 paid date; \$6,346.65 grant; \$10,577.75 landowner; and \$25,386.60 319 Funds.

January 2022: To date, no streambank stabilizations have been contracted, however there is a project currently undergoing survey and feasibility analysis.

OCTOBER 17, 2024: Since 1/1/2024, 2 additional contracts were completed that pushed expenditures past 50%. One of these projects was the 10/17/2024 9:50:17 AM
 North Hero 5 Streambank Stabilization - 6/12/24 start date; 10/15/24 paid date; \$5,929.35 grant; \$9,142.45 landowner (North Hero Township); and \$21,498.00 federal 319 funds. With the sediment reduction goal nearly achieved and the 25% local match greatly surpassed due to the federal Focus 319 funds, a request to extend this grant appropriation one more year, to 12/31/2025 will be requested in order to maximize the conservation efforts for the Plum Creek watershed by combining Clean Water Funds and federal 319 funding.

January 2025: Since the October 17, 2024 report, no other streambank stabilizations were completed by year end. 1/28/2025 9:34:43 AM

Final Indicators

<u>Indicator</u>	<u>Total Value</u>	<u>Unit</u>
Sediment (Tss)	99.4	Tons/Yr
Phosphorus (Est. Reduction)	106.6	Lbs/Yr

Activity Action Name:	North Hero 10	Activity Count: 1
Practice Type:	580 - Streambank and Shoreline Protection	Size/Units: 360 - Linear Feet
TA Provider/JAA:	Other	Lifespan: 10 Years
Practice Description:	Streambank stabilization completed as designed with riprap and one streambarb.	Install Date: 09/01/2022
		Mapped: Yes

Indicator Name	Units	Value	Calculation Tool	Waterbody
Phosphorus (Est. Reduction)	Lbs/Yr	76.6	Bwsr Calc (Stream & Ditch Stabilization)	29048
Sediment (Tss)	Tons/Yr	66.6	Other	29048

Activity Action Name:	North Hero 5 Streambank Stabilization	Activity Count: 2
Practice Type:	580 - Streambank and Shoreline Protection	Size/Units: 260 - Linear Feet
TA Provider/JAA:	Other	Lifespan: 10 Years
Practice Description:	Streambank stabilizations installed on 2 bends of Plum Creek	Install Date: 10/15/2024
		Mapped: Yes

Indicator Name	Units	Value	Calculation Tool	Waterbody
Sediment (Tss)	Tons/Yr	32.8	Bwsr Calc (Stream & Ditch Stabilization)	29048
Phosphorus (Est. Reduction)	Lbs/Yr	30	Bwsr Calc (Stream & Ditch Stabilization)	29048