

Workplan / Grant Application / Project Summary Report
Buffer Strips in the Cannon River Watershed

Submitted by: **Rice SWCD**

Grant Fund Type: CWF Clean Water Assistance Grants

Fund Year: 2010

<i>Total Grant Amount:</i>	\$150,000.00	<i>Amount Budgeted for this Workplan:</i>	\$150,000.00	<i>Amount Spent for this workplan:</i>	\$7,560.00	<i>Amount Not Spent on this workplan:</i>	\$142,440.00
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BMP Detail Summary

Number of BMP's Installed	BMP Name	Shape Type	Linear Ft.	Total Acres	Total Mapped BMPs	Soil Loss Reduction Tons/Yr	Sediment Reduction Tons/Yr	Phosphorus Reduction Lbs/Yr
18	Filter Strip - 393	BMP Polygon		108.16	18	460.77	1,864.32	2,824.16
Total # installed BMPs: 18						460.77	1,864.32	2,824.16
Total # mapped BMPs: 18						Tons/Yr	Tons/Yr	Lbs/Yr

Initiative Name: **Rice SWCD Buffer Strip Fund Administration**

Initiative Name: **Rice SWCD Buffer Strip Fund Administration** *Initiative Type:* Admin/Coordination

Year: 2010

Description

Funds will be used for administering grant funds, review and approval of applications, etc.

Actual Results

no activity to date

Comments

<u>FUND(s)</u>	<u>Budgeted</u>	<u>Approved</u>	<u>Spent</u>	<u>First Spend Date</u>	<u>Last Spend Date</u>
1. 2010 - Clean Water Assistance - Rice (SWCD)	7,500.00	0.00	0.00		
2. Buffer Strips in the Cannon River Watershed	0.00	0.00	121.63	2/28/11	2/28/11
Totals:	7,500.00	0.00	121.63		

Initiative Name: **Public Waters Mapping**

<u>Initiative Name:</u> Public Waters Mapping	<u>Initiative Type:</u> Inventory/Mapping
<u>Year:</u> 2010	
<u>Description</u> Mapping land use adjacent to public waters in Waseca and Lesueur Counties.	
<u>Actual Results</u> GIS mapping has been completed within the 300 foot public water shoreline area for all of the public waters in Waseca and LeSueur Counties. The GIS mapping includes the landuses for the shoreline area.	
<u>Comments</u>	

<u>FUND(s)</u>	<u>Budgeted</u>	<u>Approved</u>	<u>Spent</u>	<u>First Spend Date</u>	<u>Last Spend Date</u>
1. 2010 - Clean Water Assistance - Rice (SWCD)	5,400.00	0.00	5,400.00	11/2/10	11/2/10
Totals:	5,400.00	0.00	5,400.00		

Initiative Name:

Technical and Engineering Assistance

Initiative Name: **Technical and Engineering Assistance**

Initiative Type: Technical and Engineering

Year: 2010

Description

Technical assistance will be provided by Rice SWCD Technician Danielle Waldschmidt for the counties of Rice, Steele, and Waseca. Goodhue SWCD Technician Beau Kennedy will provide assistance in Goodhue County. Other SWCD staff in each county may be directed to provide assistance on projects as well.

Actual Results

no activity to date

Comments

FUND(s)

	<u>Budgeted</u>	<u>Approved</u>	<u>Spent</u>	<u>First Spend Date</u>	<u>Last Spend Date</u>
1. 2010 - Clean Water Assistance - Rice (SWCD)	27,420.00	0.00	0.00		
Totals:	27,420.00	0.00	0.00		

Initiative Name:

Incentive payment guidelines

Initiative Name: **Incentive payment guidelines**

Initiative Type: Land Water Treatment

Year: 2010

Description

Pay \$60 per acre of buffers x 10 years for a payment of \$600 per acre on contracts where the landowner will enroll in the Continuous CRP program. On land not to be enrolled in CRP, a payment of \$80 per acre of buffer x 10 years for a payment of \$800 per acre will be made. No compensation will be provided for seed or establishment costs but will be counted as in-kind dollars. Perennial grass vegetation and or an approved tree plan will be required. First priority will be given to sites in the Cannon River Watershed. Secondary priority will be given to all other applications that lie within Goodhue, Rice, Steele, or Waseca counties.

Actual Results

One buffer has been installed in Goodhue County. Other landowners have monies approved for their project with installation occurring in the spring of 2011.

As of January 2011 there are an additional 128 acres of filter strips that will be installed in the Spring 2011 and another 5.6 acres that is pending approval.

Comments

FUND(s)

	<u>Budgeted</u>	<u>Approved</u>	<u>Spent</u>	<u>First Spend Date</u>	<u>Last Spend Date</u>
1. 2010 - Clean Water Assistance - Rice (SWCD)	0.00	0.00	0.00		
Totals:	0.00	0.00	0.00		

L&W Project Name:

Practice Incentive Payment Placeholder

BMP(s)

0.
None

POLLUTION REDUCTION ESTIMATE(s)

None

FUND(s)

	<u>Budgeted</u>	<u>Approved</u>	<u>Spent</u>	<u>First Spend Date</u>	<u>Last Spend Date</u>
1. 2010 - Clean Water Assistance - Rice (SWCD)	39,132.00	0.00	0.00		
2. Buffer Strips in the Cannon River Watershed	37,500.00	0.00	0.00		
Totals:	76,632.00	0.00	0.00		

L&W Project Name: **Buffer Strips in the Cannon River Watershed Match**

BMP(s)
0.
None

POLLUTION REDUCTION ESTIMATE(s)
None

<u>FUND(s)</u>	<u>Budgeted</u>	<u>Approved</u>	<u>Spent</u>	<u>First Spend Date</u>	<u>Last Spend Date</u>
1. 2010 - Clean Water Assistance - Rice (SWCD)	0.00	0.00	0.00		
2. Buffer Strips in the Cannon River Watershed	37,500.00	37,500.00	0.00		
Totals:	37,500.00	37,500.00	0.00		

L&W Project Name: **1091518 Vegetated Buffer Planting**

BMP(s)
1. Filter Strip-393
Mapped = Yes

POLLUTION REDUCTION ESTIMATE(s)
-Water Pollution (Reduction Estimates)
Phosphorus (est. reduction) 52.07 Lbs/Yr
Sediment (TSS) 43.04 Tons/Yr
Soil (est. savings) 13.38 Tons/Yr

<u>FUND(s)</u>	<u>Budgeted</u>	<u>Approved</u>	<u>Spent</u>	<u>First Spend Date</u>	<u>Last Spend Date</u>
1. 2010 - Clean Water Assistance - Rice (SWCD)	2,160.00	2,160.00	2,160.00	11/2/10	11/2/10
2. Buffer Strips in the Cannon River Watershed	966.60	0.00	966.60	1/31/11	1/31/11
Totals:	3,126.60	2,160.00	3,126.60		

L&W Project Name: **1052018 Vegetated Buffer Planting**

BMP(s)
1. Filter Strip-393
Mapped = Yes

POLLUTION REDUCTION ESTIMATE(s)
-Water Pollution (Reduction Estimates)
Phosphorus (est. reduction) 303.38 Lbs/Yr
Sediment (TSS) 218.19 Tons/Yr
Soil (est. savings) 61.45 Tons/Yr

<u>FUND(s)</u>	<u>Budgeted</u>	<u>Approved</u>	<u>Spent</u>	<u>First Spend Date</u>	<u>Last Spend Date</u>
1. 2010 - Clean Water Assistance - Rice (SWCD)	7,440.00	7,440.00	0.00		
Totals:	7,440.00	7,440.00	0.00		

L&W Project Name: **1061934 Vegetated Buffer Planting**

<u>BMP(s)</u>	
1. Filter Strip-393	<i>Mapped = Yes</i>

<u>POLLUTION REDUCTION ESTIMATE(s)</u>	
-Water Pollution (Reduction Estimates)	
Phosphorus (est. reduction)	321.79 Lbs/Yr
Sediment (TSS)	183.65 Tons/Yr
Soil (est. savings)	64.92 Tons/Yr

<u>FUND(s)</u>	<u>Budgeted</u>	<u>Approved</u>	<u>Spent</u>	<u>First Spend Date</u>	<u>Last Spend Date</u>
1. 2010 - Clean Water Assistance - Rice (SWCD)	7,860.00	7,860.00	0.00		
Totals:	7,860.00	7,860.00	0.00		

L&W Project Name: **1062122 Vegetated Buffer Planting**

<u>BMP(s)</u>	
1. Filter Strip-393	<i>Mapped = Yes</i>

<u>POLLUTION REDUCTION ESTIMATE(s)</u>	
-Water Pollution (Reduction Estimates)	
Phosphorus (est. reduction)	303.46 Lbs/Yr
Sediment (TSS)	176.44 Tons/Yr
Soil (est. savings)	42.13 Tons/Yr

<u>FUND(s)</u>	<u>Budgeted</u>	<u>Approved</u>	<u>Spent</u>	<u>First Spend Date</u>	<u>Last Spend Date</u>
1. 2010 - Clean Water Assistance - Rice (SWCD)	5,100.00	5,100.00	0.00		
Totals:	5,100.00	5,100.00	0.00		

L&W Project Name: **1081920 Vegetated Buffer Planting**

<u>BMP(s)</u>	
1. Filter Strip-393	<i>Mapped = Yes</i>

<u>POLLUTION REDUCTION ESTIMATE(s)</u>	
-Water Pollution (Reduction Estimates)	
Phosphorus (est. reduction)	227.98 Lbs/Yr
Sediment (TSS)	164.58 Tons/Yr
Soil (est. savings)	33.70 Tons/Yr

<u>FUND(s)</u>	<u>Budgeted</u>	<u>Approved</u>	<u>Spent</u>	<u>First Spend Date</u>	<u>Last Spend Date</u>
1. 2010 - Clean Water Assistance - Rice (SWCD)	4,080.00	4,080.00	0.00		
Totals:	4,080.00	4,080.00	0.00		

L&W Project Name: **108193 Vegetated Buffer Planting**

<u>BMP(s)</u>	
1. Filter Strip-393	<i>Mapped = Yes</i>

<u>POLLUTION REDUCTION ESTIMATE(s)</u>	
-Water Pollution (Reduction Estimates)	
Phosphorus (est. reduction)	525.49 Lbs/Yr
Sediment (TSS)	307.16 Tons/Yr
Soil (est. savings)	34.69 Tons/Yr

<u>FUND(s)</u>	<u>Budgeted</u>	<u>Approved</u>	<u>Spent</u>	<u>First Spend Date</u>	<u>Last Spend Date</u>
1. 2010 - Clean Water Assistance - Rice (SWCD)	4,200.00	4,200.00	0.00		
Totals:	4,200.00	4,200.00	0.00		

L&W Project Name: **106218 Vegetated Buffer Planting**

<u>BMP(s)</u>	
1. Filter Strip-393	<i>Mapped = Yes</i>

<u>POLLUTION REDUCTION ESTIMATE(s)</u>	
-Water Pollution (Reduction Estimates)	
Phosphorus (est. reduction)	27.70 Lbs/Yr
Sediment (TSS)	15.47 Tons/Yr
Soil (est. savings)	7.93 Tons/Yr

<u>FUND(s)</u>	<u>Budgeted</u>	<u>Approved</u>	<u>Spent</u>	<u>First Spend Date</u>	<u>Last Spend Date</u>
1. 2010 - Clean Water Assistance - Rice (SWCD)	960.00	960.00	0.00		
Totals:	960.00	960.00	0.00		

L&W Project Name: **105209 Vegetated Buffer Planting**

<u>BMP(s)</u>	
1. Filter Strip-393	Mapped = Yes

<u>POLLUTION REDUCTION ESTIMATE(s)</u>	
-Water Pollution (Reduction Estimates)	
Phosphorus (est. reduction)	230.78 Lbs/Yr
Sediment (TSS)	191.93 Tons/Yr
Soil (est. savings)	35.68 Tons/Yr

<u>FUND(s)</u>	<u>Budgeted</u>	<u>Approved</u>	<u>Spent</u>	<u>First Spend Date</u>	<u>Last Spend Date</u>
1. 2010 - Clean Water Assistance - Rice (SWCD)	4,320.00	4,320.00	0.00		
Totals:	4,320.00	4,320.00	0.00		

L&W Project Name: **105195 Vegetated Buffer Planting**

<u>BMP(s)</u>	
1. Filter Strip-393	Mapped = Yes

<u>POLLUTION REDUCTION ESTIMATE(s)</u>	
-Water Pollution (Reduction Estimates)	
Phosphorus (est. reduction)	205.06 Lbs/Yr
Sediment (TSS)	122.83 Tons/Yr
Soil (est. savings)	36.33 Tons/Yr

<u>FUND(s)</u>	<u>Budgeted</u>	<u>Approved</u>	<u>Spent</u>	<u>First Spend Date</u>	<u>Last Spend Date</u>
1. 2010 - Clean Water Assistance - Rice (SWCD)	3,660.00	3,660.00	0.00		
Totals:	3,660.00	3,660.00	0.00		

L&W Project Name: **105191 Vegetated Buffer Planting**

<u>BMP(s)</u>	
1. Filter Strip-393	Mapped = Yes

<u>POLLUTION REDUCTION ESTIMATE(s)</u>	
-Water Pollution (Reduction Estimates)	
Phosphorus (est. reduction)	64.76 Lbs/Yr
Sediment (TSS)	51.21 Tons/Yr
Soil (est. savings)	49.06 Tons/Yr

<u>FUND(s)</u>	<u>Budgeted</u>	<u>Approved</u>	<u>Spent</u>	<u>First Spend Date</u>	<u>Last Spend Date</u>
1. 2010 - Clean Water Assistance - Rice (SWCD)	5,940.00	5,940.00	0.00		
Totals:	5,940.00	5,940.00	0.00		

L&W Project Name: **105202 Vegetated Buffer Planting**

<u>BMP(s)</u>	
1. Filter Strip-393	<i>Mapped = Yes</i>

<u>POLLUTION REDUCTION ESTIMATE(s)</u>	
-Water Pollution (Reduction Estimates)	
Phosphorus (est. reduction)	120.82 Lbs/Yr
Sediment (TSS)	70.18 Tons/Yr
Soil (est. savings)	18.34 Tons/Yr

<u>FUND(s)</u>	<u>Budgeted</u>	<u>Approved</u>	<u>Spent</u>	<u>First Spend Date</u>	<u>Last Spend Date</u>
1. 2010 - Clean Water Assistance - Rice (SWCD)	2,220.00	2,220.00	0.00		
Totals:	2,220.00	2,220.00	0.00		

L&W Project Name: **1062031 Vegetated Buffer Planting**

<u>BMP(s)</u>	
1. Filter Strip-393	<i>Mapped = Yes</i>

<u>POLLUTION REDUCTION ESTIMATE(s)</u>	
-Water Pollution (Reduction Estimates)	
Phosphorus (est. reduction)	13.75 Lbs/Yr
Sediment (TSS)	9.78 Tons/Yr
Soil (est. savings)	4.96 Tons/Yr

<u>FUND(s)</u>	<u>Budgeted</u>	<u>Approved</u>	<u>Spent</u>	<u>First Spend Date</u>	<u>Last Spend Date</u>
1. 2010 - Clean Water Assistance - Rice (SWCD)	600.00	600.00	0.00		
Totals:	600.00	600.00	0.00		

L&W Project Name: **1061931 Vegetated Buffer Planting**

<u>BMP(s)</u>	
1. Filter Strip-393	<i>Mapped = Yes</i>

<u>POLLUTION REDUCTION ESTIMATE(s)</u>	
-Water Pollution (Reduction Estimates)	
Phosphorus (est. reduction)	18.39 Lbs/Yr
Sediment (TSS)	12.86 Tons/Yr
Soil (est. savings)	13.10 Tons/Yr

<u>FUND(s)</u>	<u>Budgeted</u>	<u>Approved</u>	<u>Spent</u>	<u>First Spend Date</u>	<u>Last Spend Date</u>
1. 2010 - Clean Water Assistance - Rice (SWCD)	1,320.00	1,320.00	0.00		
Totals:	1,320.00	1,320.00	0.00		

L&W Project Name: **105205 Vegetated Buffer Planting**

<u>BMP(s)</u>	
1. Filter Strip-393	<i>Mapped = Yes</i>

<u>POLLUTION REDUCTION ESTIMATE(s)</u>	
-Water Pollution (Reduction Estimates)	
Phosphorus (est. reduction)	12.39 Lbs/Yr
Sediment (TSS)	10.11 Tons/Yr
Soil (est. savings)	1.98 Tons/Yr

<u>FUND(s)</u>	<u>Budgeted</u>	<u>Approved</u>	<u>Spent</u>	<u>First Spend Date</u>	<u>Last Spend Date</u>
1. 2010 - Clean Water Assistance - Rice (SWCD)	240.00	240.00	0.00		
Totals:	240.00	240.00	0.00		

L&W Project Name: **1111618 Vegetated Buffer Planting**

<u>BMP(s)</u>	
1. Filter Strip-393	<i>Mapped = Yes</i>

<u>POLLUTION REDUCTION ESTIMATE(s)</u>
None

<u>FUND(s)</u>	<u>Budgeted</u>	<u>Approved</u>	<u>Spent</u>	<u>First Spend Date</u>	<u>Last Spend Date</u>
1. 2010 - Clean Water Assistance - Rice (SWCD)	5,440.00	5,440.00	0.00		
Totals:	5,440.00	5,440.00	0.00		

L&W Project Name: **1111436 Vegetated Buffer Planting**

<u>BMP(s)</u>	
1. Filter Strip-393	<i>Mapped = Yes</i>

<u>POLLUTION REDUCTION ESTIMATE(s)</u>
None

<u>FUND(s)</u>	<u>Budgeted</u>	<u>Approved</u>	<u>Spent</u>	<u>First Spend Date</u>	<u>Last Spend Date</u>
1. 2010 - Clean Water Assistance - Rice (SWCD)	8,048.00	8,048.00	0.00		
Totals:	8,048.00	8,048.00	0.00		

L&W Project Name: **1112017 Vegetated Buffer Planting**

<u>BMP(s)</u>	
1. Filter Strip-393	<i>Mapped = Yes</i>

<u>POLLUTION REDUCTION ESTIMATE(s)</u>	
-Water Pollution (Reduction Estimates)	
Phosphorus (est. reduction)	323.22 Lbs/Yr
Sediment (TSS)	234.06 Tons/Yr
Soil (est. savings)	33.21 Tons/Yr

<u>FUND(s)</u>	<u>Budgeted</u>	<u>Approved</u>	<u>Spent</u>	<u>First Spend Date</u>	<u>Last Spend Date</u>
1. 2010 - Clean Water Assistance - Rice (SWCD)	5,360.00	5,360.00	0.00		
Totals:	5,360.00	5,360.00	0.00		

L&W Project Name: **111205 Vegetated Buffer Planting**

<u>BMP(s)</u>	
1. Filter Strip-393	<i>Mapped = Yes</i>

<u>POLLUTION REDUCTION ESTIMATE(s)</u>	
-Water Pollution (Reduction Estimates)	
Phosphorus (est. reduction)	73.12 Lbs/Yr
Sediment (TSS)	52.83 Tons/Yr
Soil (est. savings)	9.91 Tons/Yr

<u>FUND(s)</u>	<u>Budgeted</u>	<u>Approved</u>	<u>Spent</u>	<u>First Spend Date</u>	<u>Last Spend Date</u>
1. 2010 - Clean Water Assistance - Rice (SWCD)	1,600.00	1,600.00	0.00		
Totals:	1,600.00	1,600.00	0.00		

Program Specific Workplan Items

Needed TMDL Load Reduction (If Applicable):

Secondary benefits of this project include: Reductions in phosphorus will result. Education of landowners on impacts of sediment will result.

Success for this application will be measured by: BWSR Pollution estimators

If the project addresses a TMDL, what portion of the required load reduction will this address? Approximately 3.7 %

What is the Total Maximum Daily Load for the pollutant you are addressing? 83 tons/day TSS

The pollutant causing the impariment is: Sediment

How is the hydrologic impact calculated? Army Corp Rational Method

What is the estimated amount of hydrologic befenit? 4 acre feet per 10 year storm event

By what mechanism is this project affecting hydrology? 1.00

8 Digit HUC Code (81 Majors) 07040002

Estimated Reduction Pollutant #3

Pollutant #3

Estimated Reduction Pollutant #2 1443 pounds per year

Pollutant #2 Phosphorus

Estimated Reduction Pollutant #1 1141 tons per year

Pollutant #1 Sediment

What hydrology impacts will this project have? This project will reduce sediment, nutrients, and runoff to the Cannon River.

Water Plan Reference: Rice County Water Plan 2009-2014 page 32, Goal 1, Obj. 3, Action items 1-3, Goodhue County Water Plan page 26, Obj. 2 action item 1, Steele County Water Plan 2007-2016 page 10, Obj. 3 Waseca Co Water Plan 2009-2018, page 39 Goal 1, step 2, page 43 Goal, step 19

TMDL Reference: 2007 Lower Cannon River Turbidity TMDL Implementation Plan October 2009 page 32, Action items A-3 and A-4

Watershed Name (81 Majors) Cannon River Watershed

Name of Water Resource targeted for activities: Cannon River

TMDL finalized and implementation plan approved? Y

Project Description:

Primary Pollutant Targeted: Sediment

Estimated Amount of Primary Pollutant Reduction: sss

Secondary Pollutant Targeted:

Estimated Amount of Secondary Pollutant Reduction:

Additional Pollutant Targeted:

Estimated Amount of Additional Pollutant Reduction:

Estimated number of plans/designs to be completed (if applicable):