

Workplan / Grant Application / Project Summary Report
SRWD STORMWATER INITIATIVE PROJECT

Submitted by: **Sauk River WD WSHED**

Grant Fund Type: CWF Runoff Reduction

Fund Year: 2011

<i>Total Grant Amount:</i>	\$287,500.00	<i>Amount Budgeted for this Workplan:</i>	\$287,500.00	<i>Amount Spent for this workplan:</i>	\$0.00	<i>Amount Not Spent on this workplan:</i>	\$287,500.00
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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
Total # installed BMPs:						Tons/Yr	Tons/Yr	Lbs/Yr
Total # mapped BMPs:								

Initiative Name: **SRWD - STORMWATER PROGRAM - PROJECT DEVELOPMENT**

Initiative Name: **SRWD - STORMWATER PROGRAM - PROJECT DEVELOPMENT** **Initiative Type:** Project Development

Year: 2011

Description

Install 5-10 stormwater treatment and retention projects within the SRWD to capture nutrients from stormwater before it reaches nearby surface waters and to minimize stormwater volume reducing flooding concerns and velocity at the discharge point. The SRWD will work with the Cities of Osakis, Sauk Centre, Melrose, Spring Hill, St. Martin, Richmond, Cold Spring, Rockville, Waite Park, St. Joseph and St. Cloud to install rain gardens and stormwater retention basins. The District will also work with the following public schools to install raingardens: Sauk Centre, Roccoi, and Osakis. The SRWD will work with the Area 2 Technical Service Area Engineers and consulting Engineers to design the stormwater projects for maximum and effective treatment.

Actual Results

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. LOCAL IN-KIND MATCH WITHIN THE SRWD	5,000.00	5,000.00	0.00		
2. SAUK RIVER WATER QUALITY PROTECTION PHASE III - CWP	5,000.00	5,000.00	0.00		
3. 2011 - Runoff Reduction - Sauk River WD (WSHED)	26,550.00	26,550.00	0.00		
4. LOWER SAUK RIVER WATER QUALITY PROTECTION CWP	5,000.00	5,000.00	0.00		
5. OSAKIS LAKE ENHANCEMENT CONTINUATION PROJECT -CWP	2,500.00	2,500.00	0.00		
6. ORGANIZATION MATCHING PROJECT FUNDS within the SRWD	2,500.00	2,500.00	0.00		
Totals:	46,550.00	46,550.00	0.00		

Initiative Name:

SRWD - STORMWATER PROGRAM - TECHNICAL ASSISTANCE AND ENGINEERING

<u>Initiative Name:</u>	<u>SRWD - STORMWATER PROGRAM - TECHNICAL ASSISTANCE AND ENGINEERING</u>	<u>Initiative Type:</u>	Technical and Engineering
<u>Year:</u>	2011		
<u>Description</u>	<p>SRWD staff, consulting engineers (Wenck & Associates (and others), plant nursery staff, landscape specialists and Area 2 Technical Service Engineers will be involved in project design, plant selection, project installation, project inspections, and project certification.</p> <p>Technical staff will be involved in 5-10 stormwater management projects throughout the Sauk River Watershed.</p> <p>The SRWD and consultants will follow the NRCS Technical Guide and the MN Pollution Control Stormwater Technical Guide for the Stormwater Initiative. Technical standards will be followed to ensure project success.</p>		
<u>Actual Results</u>			
<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. LOCAL IN-KIND MATCH WITHIN THE SRWD	5,000.00	5,000.00	0.00		
2. LOWER SAUK RIVER WATER QUALITY PROTECTION CWP	2,500.00	2,500.00	0.00		
3. 2011 - Runoff Reduction - Sauk River WD (WSHED)	21,950.00	21,950.00	0.00		
4. SAUK RIVER WATER QUALITY PROTECTION PHASE III - CWP	2,500.00	2,500.00	0.00		
5. OSAKIS LAKE ENHANCEMENT CONTINUATION PROJECT -CWP	2,500.00	2,500.00	0.00		
Totals:	34,450.00	34,450.00	0.00		

Initiative Name:

SRWD - STORMWATER PROGRAM - ADMINISTRATION, TRACKING AND REPORT

Initiative Name: **SRWD - STORMWATER PROGRAM - ADMINISTRATION, TRACKING AND REPORTING** Initiative Type: Admin/Coordination

Year: 2011

Description

The SRWD will be facilitating and tracking the stormwater initiative project. Expenditures, contracts and reporting will be done by the SRWD staff.

Actual Results

Comments

With the combining of the Shoreland Protection grant and the Runoff Reduction grant, the total grant dollars through this workplan are \$435,289. These funds are divided among three project initiatives/programs 1)Rain Garden Initiative, 2)Riparian Restoration Initiative and 3) Stormwater Reduction Initiative.

<u>FUND(s)</u>	<u>Budgeted</u>	<u>Approved</u>	<u>Spent</u>	<u>First Spend Date</u>	<u>Last Spend Date</u>
1. LOCAL IN-KIND MATCH WITHIN THE SRWD	2,000.00	2,000.00	0.00		
2. OSAKIS LAKE ENHANCEMENT CONTINUATION PROJECT -CWP	500.00	500.00	0.00		
3. 2011 - Runoff Reduction - Sauk River WD (WSHED)	9,000.00	9,000.00	0.00		
4. ORGANIZATION MATCHING PROJECT FUNDS within the SRWD	100.00	100.00	0.00		
5. LOWER SAUK RIVER WATER QUALITY PROTECTION CWP	1,500.00	1,500.00	0.00		
6. SAUK RIVER WATER QUALITY PROTECTION PHASE III - CWP	1,000.00	1,000.00	0.00		
Totals:	14,100.00	14,100.00	0.00		

Initiative Name: **SRWD - RAIN GARDEN PROGRAM - PROJECT DEVELOPMENT**

Initiative Name: **SRWD - RAIN GARDEN PROGRAM - PROJECT DEVELOPMENT** Initiative Type: Project Development

Year: 2011

Description

The SRWD will be working with the local school, municipalities and private landowners to select project sites. The SRWD, Area 2 Technical Service Engineers, the District's consulting engineers will assist the public and private landowners in site selection, project design, bioengineering material selection, plant selection and project budgets/cost estimates.

Actual Results

Comments

This Shoreland Improvement initiative has been attached to the Runoff Reduction workplan to allow for blending of funds for administrative efficiency.

<u>FUND(s)</u>	<u>Budgeted</u>	<u>Approved</u>	<u>Spent</u>	<u>First Spend Date</u>	<u>Last Spend Date</u>
1. 2011 - Shoreland Improvement - Sauk River WD (WSHED)	1,500.00	1,500.00	0.00		
2. LOWER SAUK RIVER WATER QUALITY PROTECTION CWP	1,500.00	1,500.00	0.00		
3. SAUK RIVER WATER QUALITY PROTECTION PHASE III - CWP	1,500.00	1,500.00	0.00		
4. ORGANIZATION MATCHING PROJECT FUNDS within the SRWD	2,500.00	2,500.00	0.00		
5. OSAKIS LAKE ENHANCEMENT CONTINUATION PROJECT -CWP	500.00	500.00	0.00		
6. 2011 - Runoff Reduction - Sauk River WD (WSHED)	0.00	0.00	0.00		
7. LOCAL IN-KIND MATCH WITHIN THE SRWD	2,500.00	2,500.00	0.00		
Totals:	10,000.00	10,000.00	0.00		

Initiative Name:

SRWD - RAIN GARDEN PROGRAM - TECHNICAL ASSISTANCE AND ENGINEERIN

Initiative Name:

SRWD - RAIN GARDEN PROGRAM - TECHNICAL ASSISTANCE AND ENGINEERING

Initiative Type:

Technical and Engineering

Year: 2011

Description

SRWD staff will be working with Wenck and Associates, Area 2 Technical Service Engineers, selected landscape specialists and nursery staff of Glacial Ridge Growers to install 10-15 rain gardens within the Sauk River watershed. Rian garden designs will be such to accomodate soil types, watershed size and runoff volume. The SRWD and consultants will be following the University of Wisconsin Extension Rain Garden Guide book and the MN Pollution Control Stormwater Technical Guide for the rain garden initiative. Technical standards will be followed to ensure project success.

Actual Results

Comments

This Shoreland Improvement initiative has been attached to the Runoff Reduction workplan to allow for blending of funds for administrative efficiency.

<u>FUND(s)</u>	<u>Budgeted</u>	<u>Approved</u>	<u>Spent</u>	<u>First Spend Date</u>	<u>Last Spend Date</u>
1. LOCAL IN-KIND MATCH WITHIN THE SRWD	5,000.00	5,000.00	0.00		
2. ORGANIZATION MATCHING PROJECT FUNDS within the SRWD	500.00	500.00	0.00		
3. 2011 - Shoreland Improvement - Sauk River WD (WSHED)	15,500.00	15,500.00	0.00		
4. SAUK RIVER WATER QUALITY PROTECTION PHASE III - CWP	1,000.00	1,000.00	0.00		
5. LOWER SAUK RIVER WATER QUALITY PROTECTION CWP	1,000.00	1,000.00	0.00		
6. 2011 - Runoff Reduction - Sauk River WD (WSHED)	0.00	0.00	0.00		
7. OSAKIS LAKE ENHANCEMENT CONTINUATION PROJECT -CWP	500.00	500.00	0.00		
Totals:	23,500.00	23,500.00	0.00		

Initiative Name:

SRWD - RAIN GARDEN PROGRAM - ADMIN - CONTRACTS, TRACKING AND REP(

Initiative Name: **SRWD - RAIN GARDEN PROGRAM - ADMIN - CONTRACTS, TRACKING AND REPORTING**

Initiative Type: Admin/Coordination

Year: 2011

Description

Staff will work with landowners to complete their cost share contract agreements and record them at the corresponding county. SRWD staff will be tracking each BMP project and associated expenses. The funds from this CWF project will be tracked through the SRWD's book keeping system (Banyon) and recorded in Elink.

Actual Results

Comments

This Shoreland Improvement initiative has been attached to the Runoff Reduction workplan to allow for blending of funds for administrative efficiency. With the combining of the Shoreland Protection grant and the Runoff Reduction grant, the total grant dollars through this workplan are \$435,289. These funds are divided among three project initiatives/programs 1)Rain Garden Initiative, 2)Riparian Restoration Initiative and 3) Stormwater Reduction Initiative.

FUND(s)

	<u>Budgeted</u>	<u>Approved</u>	<u>Spent</u>	<u>First Spend Date</u>	<u>Last Spend Date</u>
1. LOCAL IN-KIND MATCH WITHIN THE SRWD	5,000.00	5,000.00	0.00		
2. SAUK RIVER WATER QUALITY PROTECTION PHASE III - CWP	200.00	200.00	0.00		
3. OSAKIS LAKE ENHANCEMENT CONTINUATION PROJECT -CWP	100.00	100.00	0.00		
4. LOWER SAUK RIVER WATER QUALITY PROTECTION CWP	200.00	200.00	0.00		
5. 2011 - Shoreland Improvement - Sauk River WD (WSHED)	6,382.00	6,382.00	0.00		
6. ORGANIZATION MATCHING PROJECT FUNDS within the SRWD	1,000.00	1,000.00	0.00		
7. 2011 - Runoff Reduction - Sauk River WD (WSHED)	0.00	0.00	0.00		
Totals:	12,882.00	12,882.00	0.00		

Initiative Name:

SRWD - RIPARIAN RESTORATION PROGRAM - PROJECT DEVELOPMENT

Initiative Name: **SRWD - RIPARIAN RESTORATION PROGRAM - PROJECT DEVELOPMENT**

Initiative Type: Project Development

Year: 2011

Description

SRWD staff will be working with the Douglas, Todd, Pope and Stearns County SWCD staff as well as local municipalities and public schools to install 5-10 riparian restoration projects. The SRWD, with assistance from the SWCD staff, will work with public entities and private landowners for site location and to develop their project plan. This project will begin by restoring approximately 400 linear feet of river bank along the Sauk River using bioengineering and native plants to create a buffer zone and provide schools with a "Living Classroom" education site. The other sites installed on public property will be utilized by the SRWD for adult education workshops and public tours. Other riparian projects will be along streams and lakes shore throughout the Sauk River Watershed.

Actual Results

Comments

This Shoreland Improvement initiative has been attached to the Runoff Reduction workplan to allow for blending of funds for administrative efficiency.

<u>FUND(s)</u>	<u>Budgeted</u>	<u>Approved</u>	<u>Spent</u>	<u>First Spend Date</u>	<u>Last Spend Date</u>
1. OSAKIS LAKE ENHANCEMENT CONTINUATION PROJECT -CWP	1,000.00	1,000.00	0.00		
2. SAUK RIVER WATER QUALITY PROTECTION PHASE III - CWP	1,000.00	1,000.00	0.00		
3. Osakis Lake Enhancement Continuation Project - Sauk River WD (WSHED)	0.00	0.00	0.00		
4. 2011 - Runoff Reduction - Sauk River WD (WSHED)	0.00	0.00	0.00		
5. ORGANIZATION MATCHING PROJECT FUNDS within the SRWD	2,500.00	2,500.00	0.00		
6. 2011 - Shoreland Improvement - Sauk River WD (WSHED)	6,025.00	6,025.00	0.00		
7. Lower Sauk River Water Quality Protection Project - Sauk River WD (WSHED)	0.00	0.00	0.00		
8. LOCAL IN-KIND MATCH WITHIN THE SRWD	2,500.00	2,500.00	0.00		
9. LOWER SAUK RIVER WATER QUALITY PROTECTION CWP	1,000.00	1,000.00	0.00		
Totals:	14,025.00	14,025.00	0.00		

Initiative Name:

SRWD - RIPARIAN RESTORATION PROGRAM - TECHNICAL ASSISTANCE AND E

Initiative Name:

SRWD - RIPARIAN RESTORATION PROGRAM - TECHNICAL ASSISTANCE AND ENGINEERING

Initiative Type:

Technical and Engineering

Year: 2011

Description

The SRWD will be working with Areaa 2 Technical Service Engineers, Wenck and Associates, landscape specialist, Todd, Douglas and Stearns County SWCD, and Glacial Ridge Growers to restore approximately 400 linear feet of river bank along the Sauk River using bioengineering and native plants to create a native buffer zone. An additional 5-10 riparian restoration projects will be installed along streams and lakeshore throughout the Sauk River Watershed. The SRWD and consultants will be following the MN DNR shoreland guide, the NRCS Technical Guide and the MN Pollution Control Stormwater Technical Guide for the Riparian Restoration initiative. Technical standards will be followed to ensure project success.

Actual Results

Comments

This Shoreland Improvement initiative has been attached to the Runoff Reduction workplan to allow for blending of funds for administrative efficiency.

<u>FUND(s)</u>	<u>Budgeted</u>	<u>Approved</u>	<u>Spent</u>	<u>First Spend Date</u>	<u>Last Spend Date</u>
1. OSAKIS LAKE ENHANCEMENT CONTINUATION PROJECT -CWP	500.00	500.00	0.00		
2. 2011 - MRBI - Stearns (SWCD)	0.00	0.00	0.00		
3. LOCAL IN-KIND MATCH WITHIN THE SRWD	1,500.00	1,500.00	0.00		
4. Lower Sauk River Water Quality Protection Project - Sauk River WD (WSHED)	0.00	0.00	0.00		
5. SAUK RIVER WATER QUALITY PROTECTION PHASE III - CWP	1,000.00	1,000.00	0.00		
6. ORGANIZATION MATCHING PROJECT FUNDS within the SRWD	1,000.00	1,000.00	0.00		
7. 2011 - Shoreland Improvement - Sauk River WD (WSHED)	8,500.00	8,500.00	0.00		
8. LOWER SAUK RIVER WATER QUALITY PROTECTION CWP	1,000.00	1,000.00	0.00		
9. Osakis Lake Enhancement Continuation Project - Sauk River WD (WSHED)	0.00	0.00	0.00		
10. 2011 - Runoff Reduction - Sauk River WD (WSHED)	0.00	0.00	0.00		
Totals:	13,500.00	13,500.00	0.00		

Initiative Name: **SRWD - RIPARIAN RESTORATION PROGRAM - ADMIN - TRACKING AND REPORT**

Initiative Name: SRWD - RIPARIAN RESTORATION PROGRAM - ADMIN - TRACKING AND REPORTING **Initiative Type:** Admin/Coordination

Year: 2011

Description

The SRWD staff will be facilitating this CWF project. Staff will be tracking each riparian restoration project throughout each phase of the project. Time and expenses will be tracked for each project and reported into Elink.

Actual Results

Comments

This Shoreland Improvement initiative has been attached to the Runoff Reduction workplan to allow for blending of funds for administrative efficiency. With the combining of the Shoreland Protection grant and the Runoff Reduction grant, the total grant dollars through this workplan are \$435,289. These funds are divided among three project initiatives/programs 1) Rain Garden Initiative, 2) Riparian Restoration Initiative and 3) Stormwater Reduction Initiative.

<u>FUND(s)</u>	<u>Budgeted</u>	<u>Approved</u>	<u>Spent</u>	<u>First Spend Date</u>	<u>Last Spend Date</u>
1. ORGANIZATION MATCHING PROJECT FUNDS within the SRWD	100.00	100.00	0.00		
2. 2011 - Runoff Reduction - Sauk River WD (WSHED)	0.00	0.00	0.00		
3. 2011 - Shoreland Improvement - Sauk River WD (WSHED)	6,382.00	6,382.00	0.00		
4. Osakis Lake Enhancement Continuation Project - Sauk River WD (WSHED)	0.00	0.00	0.00		
5. LOWER SAUK RIVER WATER QUALITY PROTECTION CWP	1,000.00	1,000.00	0.00		
6. SAUK RIVER WATER QUALITY PROTECTION PHASE III - CWP	1,000.00	1,000.00	0.00		
7. Lower Sauk River Water Quality Protection Project - Sauk River WD (WSHED)	0.00	0.00	0.00		
8. OSAKIS LAKE ENHANCEMENT CONTINUATION PROJECT -CWP	500.00	500.00	0.00		
Totals:	8,982.00	8,982.00	0.00		

L&W Project Name:

TEMPORARY - STORMWATER MANAGEMENT PROJECTS WITHIN SRWD

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. 2011 USDA Funds	10,000.00	10,000.00	0.00		
2. 2011 - Runoff Reduction - Sauk River WD (WSHED)	230,000.00	230,000.00	0.00		
3. SAUK RIVER WATER QUALITY PROTECTION PHASE III - CWP	5,000.00	5,000.00	0.00		
4. LOCAL IN-KIND MATCH WITHIN THE SRWD	65,000.00	65,000.00	0.00		
5. LOWER SAUK RIVER WATER QUALITY PROTECTION CWP	5,000.00	5,000.00	0.00		
6. ORGANIZATION MATCHING PROJECT FUNDS within the SRWD	5,000.00	5,000.00	0.00		
Totals:	320,000.00	320,000.00	0.00		

L&W Project Name: **TEMP - RAIN GARDENS IN THE SRWD**

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. ORGANIZATION MATCHING PROJECT FUNDS within the SRWD	2,500.00	2,500.00	0.00		
2. 2011 - Shoreland Improvement - Sauk River WD (WSHED)	37,500.00	37,500.00	0.00		
3. LOCAL IN-KIND MATCH WITHIN THE SRWD	4,500.00	4,500.00	0.00		
4. 2011 - Runoff Reduction - Sauk River WD (WSHED)	0.00	0.00	0.00		
Totals:	44,500.00	44,500.00	0.00		

L&W Project Name: **TEMP - RIPARIAN RESTORATION IN THE SRWD**

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. 2011 - Shoreland Improvement - Sauk River WD (WSHED)	66,000.00	66,000.00	0.00		
2. 2011 - Runoff Reduction - Sauk River WD (WSHED)	0.00	0.00	0.00		
3. ORGANIZATION MATCHING PROJECT FUNDS within the SRWD	2,500.00	2,500.00	0.00		
4. LOCAL IN-KIND MATCH WITHIN THE SRWD	16,500.00	16,500.00	0.00		
Totals:	85,000.00	85,000.00	0.00		

Program Specific Workplan Items

Needed TMDL Load Reduction (If Applicable):

What is the estimated amount of hydrologic benefit?

By what mechanism is this project affecting hydrology? 1.00

8 Digit HUC Code (81 Majors) 16.00

Water Plan Reference:

Stearns County Local Water Management Plan (2008-2017) page38
Goal 2, Objective B, 5: Seek out and assist with stormwater management and/or erosion control retrofit projects. Particularly around lakes and rivers & Page 42, Goal 3, Objective B: Improve water resources that are listed as impaired and protect those that are not impaired SRWD 2003-2012 OVERALL PLAN Page 179, Section 3, Goal 1, Objective E: Reduce the levels of sediment and phosphorus runoff in the District & Page 38, Objective C, 2: Public education and outreach to increase public awareness and understanding of stormwater runoff and erosion control issues.

TMDL Reference:

The individual runoff reduction projects will be designed to have a 90% sediment removal and 60% phosphorus removal when possible. This meets or exceeds the 50% reduction prescribed by the Lower Sauk River TMDL, Sauk Lake TMDL and the Sauk River Chain of Lakes TMDL. It will also address the recommendation listed in the Osakis Lake Diagnostic study (1992)

Project Description:

The Sauk River Stormwater Runoff Reduction Project is watershed –wide effort to reduce the amount of nutrients delivered by stormwater area surface waters. Funds will be used to technically and financially assist local schools and municipalities with their stormwater project design and installation.

The stormwater reduction projects installed on school grounds and public property will assist in the SRWD education efforts by serving as demonstration sites for the general public to view. Students from local schools will participate in the implementation of these rain gardens projects as part of their ecology class curriculum. Follow-up maintenance will be incorporated into the class curriculum as well.

Installing rain gardens and retention basin will provide more storage space during major rain events or snowmelt and more water retention time, thereby increasing groundwater recharge and reduce flooding concerns.

In addition, this project will restore 5-10 bank erosion sites and rain gardens along Osakis Lake, Sauk Lake, and the Sauk River and on public grounds for cities and schools within the SRWD. Additional sites will be done private properties along the Sauk River and other riparian areas within teh SRWD. These public property sites will be utilized by the SRWD as outdoor classroomsfor youth and adult education workshops and public tours.

Primary Pollutant Targeted:

PHOSPHORUS

Estimated Amount of Primary Pollutant Reduction:

710 pounds per year

Secondary Pollutant Targeted:

SEDIMENT

Estimated Amount of Secondary Pollutant Reduction:

23.7 tons per year

Additional Pollutant Targeted:

Total Suspended Solids

Estimated Amount of Additional Pollutant Reduction:

13.2 tons/year

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

5-10