



## Grant All-Detail Report

### 2013 - Conservation Drainage Management Grants

**Grant Title** - 2013 - Conservation Drainage Management Grants - Sauk River WD (WSHED)

**Grant ID** - C13-2039

**Organization** - Sauk River WD

<b>Grant Awarded Amount</b>	<b>\$228,587.00</b>	<b>Grant Execution Date</b>	
<b>Required Match Amount</b>	\$57,146.75	<b>Grant End Date</b>	1/1/2020
<b>Required Match %</b>	25%	<b>Grant Day To Day Contact</b>	Lynn Nelson

#### Budget Summary

	Budgeted	Spent	Balance Remaining*
Total Grant Amount	\$228,587.00	\$139,677.90	\$88,909.10
Total Match Amount	\$61,500.00	\$94,367.48	\$-32,867.48
Total Other Funds	\$0.00	\$0.00	\$0.00
<b>Total</b>	<b>\$290,087.00</b>	<b>\$234,045.38</b>	<b>\$56,041.62</b>

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

#### Budget Details

Activity Name	Activity Category	Source Type	Source Description	Budgeted	Spent	Last Transaction Date	Match
BMP Implementation- NUTRIENT LOAD REDUCTION PROJECT	Conservation Drainage	Current State Grant	2013 - Conservation Drainage Management Grants - Sauk River WD (WSHED)	\$148,887.00	\$74,051.61	12/20/2016	N

Activity Name	Activity Category	Source Type	Source Description	Budgeted	Spent	Last Transaction Date	Match
BMP Implementation- NUTRIENT LOAD REDUCTION PROJECT	Conservation Drainage	Landowner Fund	INKIND MATCH- Landowners - in SRWD	\$58,000.00	\$90,848.26	12/20/2016	Y
NUTRIENT LOAD REDUCTION - CONSERVATION DRAINAGE - ADMINISTRATIVE	Administration /Coordination	Current State Grant	2013 - Conservation Drainage Management Grants - Sauk River WD (WSHED)	\$4,200.00	\$4,199.22	12/30/2016	N
NUTRIENT LOAD REDUCTION - CONSERVATION DRAINAGE - ADMINISTRATIVE	Administration /Coordination	Landowner Fund	INKIND MATCH- Landowners - in SRWD	\$500.00			Y
NUTRIENT LOAD REDUCTION - CONSERVATION DRAINAGE - ADMINISTRATIVE	Administration /Coordination	Local Fund	ORGANIZATION MATCHING FUNDS - WITHIN THE SRWD	\$500.00	\$1,075.02	6/30/2016	Y
NUTRIENT LOAD REDUCTION - CONSERVATION DRAINAGE - PROJECT DEVELOPMENT	Project Development	Current State Grant	2013 - Conservation Drainage Management Grants - Sauk River WD (WSHED)	\$7,000.00	\$3,786.68	12/30/2016	N
NUTRIENT LOAD REDUCTION - CONSERVATION DRAINAGE - PROJECT DEVELOPMENT	Project Development	Landowner Fund	INKIND MATCH- Landowners - in SRWD	\$500.00			Y
NUTRIENT LOAD REDUCTION - CONSERVATION DRAINAGE - PROJECT DEVELOPMENT	Project Development	Local Fund	ORGANIZATION MATCHING FUNDS - WITHIN THE SRWD	\$500.00	\$811.09	12/31/2015	Y
NUTRIENT LOAD REDUCTION - CONSERVATION DRAINAGE - TECHNICAL ASSISTANCE	Technical/Engineering Assistance	Current State Grant	2013 - Conservation Drainage Management Grants - Sauk River WD (WSHED)	\$68,500.00	\$57,640.39	12/30/2016	N
NUTRIENT LOAD REDUCTION - CONSERVATION DRAINAGE - TECHNICAL ASSISTANCE	Technical/Engineering Assistance	Landowner Fund	INKIND MATCH- Landowners - in SRWD	\$1,000.00			Y
NUTRIENT LOAD REDUCTION - CONSERVATION DRAINAGE - TECHNICAL ASSISTANCE	Technical/Engineering Assistance	Local Fund	ORGANIZATION MATCHING FUNDS - WITHIN THE SRWD	\$500.00	\$1,633.11	12/31/2015	Y

### Activity Details Summary

Activity Details	Total Action Count	Total Activity Mapped	Proposed Size / Unit	Actual Size / Unit
172M - Alternative Tile Intake - Gravel Inlet	19	1	19 COUNT	19 COUNT
148M - Erosion Control	7	1	7 COUNT	7 COUNT
554 - Drainage Water Management	3	2	2.1 AC	2.1 AC
554 - Drainage Water Management	2	1	1040 LINEAR FEET	1040 LINEAR FEET
554 - Drainage Water Management	1	0	2 COUNT	2 COUNT
587 - Structure for Water Control	2	1	700 LINEAR FEET	700 LINEAR FEET

### Proposed Activity Indicators

Activity Name	Indicator Name	Value & Units	Waterbody	Calculation Tool	Comments
---------------	----------------	---------------	-----------	------------------	----------

### Final Indicators Summary

Indicator Name	Total Value	Unit
<b>SEDIMENT (TSS)</b>	310.55	TONS/YR
<b>PHOSPHORUS (EST. REDUCTION)</b>	1,586.45	LBS/YR
<b>SOIL (EST. SAVINGS)</b>	16.19	TONS/YR

## Grant Activity

### Grant Activity - BMP Implementation- NUTRIENT LOAD REDUCTION PROJECT

<b>Description</b>	BMPs will focus on eligible conservation drainage practices which include side inlet controls, drainage water management plans, structures for water control, open tile inlet replacement, buffers adjacent to side inlets, controlled subsurface drainage, denitrifying bioreactors, nutrient management plans, constructed or restored wetlands, and other approved innovative practices such as iron-enhanced sand filters, to evaluate how these elements can work in concert to provide the highest benefits for costs incurred. Because the Technical Assistance initiative involves some feasibility evaluation, additional detail will be added upon finalization of the feasibility level findings (anticipated in summer 2014.)		
<b>Category</b>	CONSERVATION DRAINAGE		
<b>Start Date</b>		<b>End Date</b>	
<b>Has Rates and Hours?</b>	No		
<b>Actual Results</b>	<p>December 2016 - installed 19 alternative rock tile inlets for a landowner on JD1 and CD6. Installed 7 alternative rock inlets along CD26 and completed 3 drainage and erosion control projects in the CD26 watershed.</p> <p>December 2015: completed 2 drainage projects. 1 landowner backed out of their project. Working with 3 additional landowners.</p> <p>December 2014, completed 2 projects and working with 4 additional landowners.</p> <p>July 2014: SRWD and SWCD have met with landowners to discuss conservation projects on their property.</p>		

#### Activity Action - Rausch

<b>Practice</b>	554 - Drainage Water Management	<b>Count of Activities</b>	1
<b>Description</b>	Installed a grass waterway to slow water down to prevent field erosion and reduce sediment to surface waters.		
<b>Proposed Size / Units</b>	1,040.00 LINEAR FEET	<b>Lifespan</b>	10 Years
<b>Actual Size/Units</b>	1,040.00 LINEAR FEET	<b>Installed Date</b>	30-Oct-14
<b>Mapped Activities</b>	1 Polygon(s)		

#### Final Indicator for Rausch

<b>Indicator Name</b>	PHOSPHORUS (EST. REDUCTION)	<b>Value</b>	402.1
<b>Indicator Subcategory/Units</b>	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	<b>Calculation Tool</b>	RUSLE2 (UPDATED)
<b>Waterbody</b>	Sauk River		

#### Final Indicator for Rausch

<b>Indicator Name</b>	SEDIMENT (TSS)	<b>Value</b>	.175
<b>Indicator Subcategory/Units</b>	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	<b>Calculation Tool</b>	RUSLE2 (UPDATED)
<b>Waterbody</b>	Sauk River		

Activity Action - Wuertz			
Practice	587 - Structure for Water Control	Count of Activities	1
Description	Installed a terrace with perforated tile to slow water down to prevent erosion		
Proposed Size / Units	700.00 LINEAR FEET	Lifespan	10 Years
Actual Size/Units	700.00 LINEAR FEET	Installed Date	12-Nov-14
Mapped Activities	1 Point(s)		

Final Indicator for Wuertz			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	201.25
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	RUSLE2 (UPDATED)
Waterbody	Lake Henry		
Final Indicator for Wuertz			
Indicator Name	SEDIMENT (TSS)	Value	.9
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	RUSLE2 (UPDATED)
Waterbody	Lake Henry		

Activity Action - Revermann			
Practice	554 - Drainage Water Management	Count of Activities	3
Description	earthen diversion and grassed waterway and sediment basin area		
Proposed Size / Units	2.10 AC	Lifespan	10 Years
Actual Size/Units	2.10 AC	Installed Date	24-Nov-15
Mapped Activities	2 Polygon(s)		

Final Indicator for Revermann			
Indicator Name	SEDIMENT (TSS)	Value	279.02
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	CD26- Getchel Creek		
Final Indicator for Revermann			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	320.87
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	CD26 - Getchell Creek		

Activity Action - Weurtz 2			
Practice	554 - Drainage Water Management	Count of Activities	1
Description	Ditch bank side inlet stabilization		
Proposed Size / Units	2.00 COUNT	Lifespan	10 Years
Actual Size/Units	2.00 COUNT	Installed Date	30-Dec-15
Mapped Activities	No		

Final Indicator for Weurtz 2

Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	6.12
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	RUSLE (OLD)
Waterbody	Private ditch to creek		

Final Indicator for Weurtz 2

Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	6.12
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	RUSLE (OLD)
Waterbody	Private ditch to creek		

Final Indicator for Weurtz 2

Indicator Name	SOIL (EST. SAVINGS)	Value	5.34
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	RUSLE2 (UPDATED)
Waterbody	private ditch to creek		

Activity Action - Uhlenkamp R			
Practice	172M - Alternative Tile Intake - Gravel Inlet	Count of Activities	19
Description	covert open tile inlets to closed inlets to protect surface water		
Proposed Size / Units	19.00 COUNT	Lifespan	10 Years
Actual Size/Units	19.00 COUNT	Installed Date	14-Dec-16
Mapped Activities	1 Point(s)		

Final Indicator for Uhlenkamp R

Indicator Name	SEDIMENT (TSS)	Value	29.38
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	RUSLE2 (UPDATED)
Waterbody	Ashley Creek		

Final Indicator for Uhlenkamp R

Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	33.79
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	RUSLE2 (UPDATED)
Waterbody	Ashley Creek		

Activity Action - CD26 side inlets			
Practice	148M - Erosion Control	Count of Activities	7
Description	Install erosion control measures for 7 side inlets to CD26		
Proposed Size / Units	7.00 COUNT	Lifespan	10 Years
Actual Size/Units	7.00 COUNT	Installed Date	29-Jul-16
Mapped Activities	1 Line(s)		

Final Indicator for CD26 side inlets			
Indicator Name	SOIL (EST. SAVINGS)	Value	10.85
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	Other
Waterbody	CD26- Getchell Creek		
Final Indicator for CD26 side inlets			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	12.45
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	Other
Waterbody	CD26 - Getchell Creek		

**Grant Activity - NUTRIENT LOAD REDUCTION - CONSERVATION DRAINAGE - ADMINISTRATIVE**

<p><b>Description</b></p>	<p>The Upland Drainage Conservation Project will target subwatersheds of the public drainage systems within the middle Sauk River region. Bioengineering and other innovative techniques will be utilized to reduce the amount of nutrient and sediment contribution to the Sauk River. CWF dollars will be used for SRWD staff to track project progress and expenditures as well as the required reporting to the funding agencies. Funds will be used for public notices and other legal obligations for this project as listed under state statute 103D and 103E.</p>	
<p><b>Category</b></p>	<p>ADMINISTRATION/COORDINATION</p>	
<p><b>Start Date</b></p>	<p>2-Feb-13</p>	<p><b>End Date</b></p>
<p><b>Has Rates and Hours?</b></p>	<p>No</p>	
<p><b>Actual Results</b></p>	<p>December 2016 : completed year end expenditures and project tracking. submit year end reports                  December 2015: Completed year end expenditures reports and tracking projects.                  July 2014: Completed the year end expenditures report for 2013, and submitted progress report. - In June the SRWD adjusted the workplan to focus on the drainage ditches in the Middle Sauk River area.                   2013: Completed the Budget tracking and project reporting. Tracked project expenditures and matching funds to the project.                  -Developed a scope of services with consultant to conduct technical review of BMPs.</p>	



**Grant Activity - NUTRIENT LOAD REDUCTION - CONSERVATION DRAINAGE - PROJECT DEVELOPMENT**

<p><b>Description</b></p>	<p>The SRWD will contract with Wenck Associates and utilize its project partners to conduct technical evaluations and assessments on the upland areas contributing to private and public drainage systems within the Middle Sauk watershed to identify available areas and specific conservation drainage program BMPs that will provide the greatest runoff volume and nutrient load reductions for the cost. First, SRWD staff and consulting engineer(s) will work with the landowners within the sub-watersheds to identify potential project locations. Then, a summary of costs and load reductions afforded by a selection of the technically feasible BMPs allowed under the grant will be prepared using appropriate modeling and available data. Finally, cost benefit/ feasibility of projects will be evaluated and the projects ranked in order of highest benefit and lowest cost. The SRWD will coordinate with the BWSR to assist in the review of technical findings. Both cost benefit and landowners' willingness to participate will serve as the foundation for citing BMPs. Projects selected must achieve both a high level of nutrient load reduction relative to cost compared with other district projects and be desirable to the landowner. If ideal locations are not identified in the target watershed, the program will be extended to two other high priority drainage systems within the Sauk River Watershed District. The SRWD will also collaborate with the local Soil and Water Conservation District (SWCD) and Natural Resource Conservation Service (NRCS) to work with landowners within the targeted subwatershed to install additional conservation BMPs under the incentive programs administered by the SWCD/NRCS.</p>	
<p><b>Category</b></p>	<p>PROJECT DEVELOPMENT</p>	
<p><b>Start Date</b></p>	<p>2-Feb-13</p>	<p><b>End Date</b></p>
<p><b>Has Rates and Hours?</b></p>	<p>No</p>	
<p><b>Actual Results</b></p>	<p>December 2016 - met with 13 landowners to install alternative rock inlets. Worked with SWCD to select other effective BMPs for two sites in the CD26 watershed. Met with 3 landowners to discuss erosion control bmps and stormwater retention options.</p> <p>December 2015: Met with 4 new landowners. Staff has been working with SWCD to survey sites.</p> <p>July 2014: The SRWD have met with several landowners in the middle Sauk River area along CD26 and CD15. The SWCD and SRWD have met on site with landowners to go over possible options and available programs.</p> <p>2013: Developed a project action plan with milestone schedule to keep SRWD and consultant(s) on track with deliverables.</p> <ul style="list-style-type: none"> <li>- The SRWD made the decision to expand the project to include ditches CD26 and CD15 since they will be undergoing a repair project in 2014.</li> <li>-met with landowners on these two ditches to discuss possible conservation drainage BMPs.</li> <li>-met with Stearns SWCD to go discuss possible projects.</li> </ul>	

## Grant Activity - NUTRIENT LOAD REDUCTION - CONSERVATION DRAINAGE - TECHNICAL ASSISTANCE

<b>Description</b>	Projects will be designed according to NRCS Field Office Technical Guide practice standards. SRWD staff and consulting engineer(s) will conduct project inspections during construction and follow-up to ensure stability of each installed project. The SRWD will also be working with the local SWCD and NRCS to install BMPs along the riparian areas for additional water quality benefits using other funding resources. Long term maintenance for the conservation BMPs installed using CWF dollars will be conducted by the landowner, with assistance from the SRWD, through a site specific Operation and Maintenance Plan (O&M) developed by the SRWD and its consulting engineer(s). Landowners will sign a Financial Assistance Agreement with the SRWD that states they agree to maintain the project for the life of the contract as stated in the O&M Plan or face legal action		
<b>Category</b>	TECHNICAL/ENGINEERING ASSISTANCE		
<b>Start Date</b>	2-Feb-13	<b>End Date</b>	
<b>Has Rates and Hours?</b>	No		
<b>Actual Results</b>	<p>December 2016- completed design plans, cost estimates and inspections for 3 drainage projects and inspected 26 rock inlets. Design plans were generated for 3 landowners and scheduled for completion in spring 2017.</p> <p>December 2015: Redesigned 1 project and completed designs for 3 additional projects. Inspected projects during installation.</p> <p>December 2014: Met with 3 landowners to go over their design plans and assist them with financial contracts. Inspected 2 projects during installation. 1 Landowner put project on hold until spring 2015</p> <p>December 2013: Began project design for 3 landowners. One landowner is waiting for EQIP ranking to proceed with project.</p>		

## Grant Attachments

Document Name	Document Type	Description
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 01/13/2014
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 07/08/2013
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 04/02/2014
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 01/14/2014
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 01/13/2017
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 04/01/2016
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 01/12/2016
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 02/20/2015

Document Name	Document Type	Description
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 01/13/2015
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 06/09/2014
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 06/16/2014
<b>Amendment</b>	Grant	2013 - Conservation Drainage Management Grants - Sauk River WD (WSHED)
<b>Amendment</b>	Grant	2013 - Conservation Drainage Management Grants - Sauk River WD (WSHED)
<b>Modified project area May 2014</b>	Grant	2013 - Conservation Drainage Management Grants - Sauk River WD (WSHED)
<b>Work plan with modifications</b>	Grant	2013 - Conservation Drainage Management Grants - Sauk River WD (WSHED)
<b>grant_app_general-added.rpt</b>	Grant	2013 - Conservation Drainage Management Grants - Sauk River WD (WSHED)
<b>interim 40% approval</b>	Grant	2013 - Conservation Drainage Management Grants - Sauk River WD (WSHED)