

# **Grant All-Detail Report 2013 - Conservation Drainage Management Grants**

**Grant Title -** 2013 - Conservation Drainage Management Grants - Rock (SWCD) **Grant ID** - C13-6372

**Organization - Rock SWCD** 

Grant Awarded Amount	\$63,775.00	Grant Execution Date	
Required Match Amount	\$15,943.75	Grant End Date	1/1/2020
Required Match %	25%	<b>Grant Day To Day Contact</b>	

## **Budget Summary**

	Budgeted	Spent	Balance Remaining*
Total Grant Amount	\$63,775.00	\$20,883.32	\$42,891.68
Total Match Amount	\$75,838.49	\$28,363.58	\$47,474.91
Total Other Funds	\$0.00	\$0.00	\$0.00
Total	\$139,613.49	\$49,246.90	\$90,366.59

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

## **Budget Details**

						Last	Match
	Activity					Transaction	ing
Activity Name	Category	Source Type	Source Description	Budgeted	Spent	Date	Fund
Conservation Drainage Place Holder Projects	Conservation Drainage	Current State Grant	2013 - Conservation Drainage Management Grants - Rock (SWCD)	\$17,354.09			N
Conservation Drainage Place Holder Projects	Conservation Drainage	Federal Funds	2013 EQIP	\$29,244.90			Υ
Conservation Drainage Place Holder Projects	Conservation Drainage	Landowner Fund	2013 CWF Landowner Costs	\$9,000.00			Υ

Activity Name	Activity Category	Source Type	Source Description	Budgeted	Spent	Last Transaction Date	Match ing Fund
FY13 CDMG Administration / Coordination	Administration /Coordination	Current State Grant	2013 - Conservation Drainage Management Grants - Rock (SWCD)	\$1,400.00	\$1,400.00	12/31/2015	N
FY13 CDMG Administration / Coordination	Administration /Coordination	Local Fund	FY13 Conservation Drainage Mgmt. Grant Match Fund	\$378.30	\$378.30	12/31/2015	Υ
FY13 CWCDMG Design & establishment of 4 drainage demonstration sites	Technical/Engi neering Assistance	Current State Grant	2013 - Conservation Drainage Management Grants - Rock (SWCD)	\$5,025.00	\$2,551.00	11/19/2013	N
FY13 CWCDMG Design & establishment of 4 drainage demonstration sites	Technical/Engi neering Assistance	Local Fund	FY13 Conservation Drainage Mgmt. Grant Match Fund	\$12,000.00	\$10,055.6 9	12/31/2014	Υ
FY13 CWCDMG Develop and Target Protocols	Project Development	Current State Grant	2013 - Conservation Drainage Management Grants - Rock (SWCD)	\$11,700.00	\$17.44	10/21/2013	N
FY13 CWCDMG Develop and Target Protocols	Project Development	Local Fund	FY13 Conservation Drainage Mgmt. Grant Match Fund	\$4,800.00			Υ
FY13 CWCDMG Organize & facilitate farmer lead working groups	Project Development	Current State Grant	2013 - Conservation Drainage Management Grants - Rock (SWCD)	\$3,450.00			N
FY13 CWCDMG Organize & facilitate farmer lead working groups	Project Development	Local Fund	FY13 Conservation Drainage Mgmt. Grant Match Fund	\$1,400.00	\$114.30	10/21/2013	Y
FY13 CWCDMG Workshops & Field Days	Project Development	Current State Grant	2013 - Conservation Drainage Management Grants - Rock (SWCD)	\$10,200.00	\$2,268.97	10/21/2013	N
FY13 CWCDMG Workshops & Field Days	Project Development	Local Fund	FY13 Conservation Drainage Mgmt. Grant Match Fund	\$6,200.00	\$5,000.00	12/31/2013	Υ
Paul Arends Conservation Drainage Project	Conservation Drainage	Current State Grant	2013 - Conservation Drainage Management Grants - Rock (SWCD)	\$14,645.91	\$14,645.9 1	11/18/2013	N
Paul Arends Conservation Drainage Project	Conservation Drainage	Federal Funds	2013 EQIP	\$9,815.29	\$9,815.29	11/18/2013	Υ
Paul Arends Conservation Drainage Project	Conservation Drainage	Landowner Fund	2013 CWF Landowner Costs	\$3,000.00	\$3,000.00	11/18/2013	Υ

# **Activity Details Summary**

Activity Details	Total Action Count	Total Activity Mapped	Proposed Size / Unit	Actual Size / Unit
747 - Denitrfying Bioreactor	2	0	0 COUNT	1 COUNT
747 - Denitrfying Bioreactor	1	1	1 COUNT	1 COUNT
747 - Denitrfying Bioreactor	0	0	0 COUNT	0 COUNT

# **Proposed Activity Indicators**

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

# **Final Indicators Summary**

Indicator Name	Total Value	Unit
PATHOGENS (E. COLI)	165.00	CFU
NUTRIENTS (NITRATE)	666.00	LBS/YR
PHOSPHORUS (EST. REDUCTION)	90.00	LBS/YR

# **Grant Activity**

Grant Activity - Conservation Drainage Place Holder Projects							
Description	Design and establish up to 3 controlled draina	age demonstration sites on existing patterr	n tiled or intensively tiled crop				
	fields utilizing wood chip bioreactors, saturate	ed buffers, and water control structures.					
Category	CONSERVATION DRAINAGE						
Start Date	1-Apr-13	1-Apr-13 End Date 31-Dec-15					
Has Rates and Hours?	No						
Actual Results	2013:						
	Established a controlled drainage demonstrat	·					
	control structure to allow water monitoring a	ind a wood chip bioreactor with sampling a	iccess points to allow water				
	monitoring.	monitoring.					
	2014 and 2015:	2014 and 2015:					
	No additional sites were constructed due to la	ack of producer interest.					

	Activity Action	- Legacy N	ligrated Data				
	Practice		747 - Denitrfying Bioreactor	Count of Activities		0	
	Description						
	<b>Proposed Size</b>	/ Units	0.00 COUNT	Lifespar	n		10 Years
	Actual Size/Ur	nits	0.00 COUNT	Installed	d Date		
	Activity Action	ı - Legacy IV	ligrated Data				
	Practice		747 - Denitrfying Bioreactor	Count of Activities			1
	Description		Exact location to be determined				
	<b>Proposed Size</b>	/ Units	COUNT	Lifespan			15 Years
	Actual Size/Ur	nits	1.00 COUNT	Installed	d Date		
Final Indicator for	· Legacy Migra	ted Data					
<b>Indicator Name</b>		PHOSPHO	RUS (EST. REDUCTION)		Value	30	
		DLLUTION (REDUCTION ESTIMATES) LB	SS/YR	Calculation Tool	Unkr	nown	
Waterbody							
Final Indicator for	· Legacy Migra						
Indicator Name		PATHOGE	NS (E. COLI)		Value	55	

Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) CFU	Calculation Tool	Unknown
Waterbody			
Final Indicator for Legacy Migra	ited Data		
Indicator Name	NUTRIENTS (NITRATE)	Value	222
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	<b>Calculation Tool</b>	Unknown
Waterbody			

	Activity Action	ı - Legacy N	Nigrated Data			
	Practice		747 - Denitrfying Bioreactor	Count o	f Activities	1
	Description		Exact location to be determined			
	<b>Proposed Size</b>	/ Units	COUNT	Lifespar	1	15 Years
	Actual Size/Ur	nits	1.00 COUNT	Installed	l Date	
Final Indicator for	r Legacy Migra	ted Data				
Indicator Name		NUTRIENT	TS (NITRATE)		Value	222
Indicator Subcate	gory/Units	WATER PO	OLLUTION (REDUCTION ESTIMATES) LBS/YR		Calculation Tool	Unknown
Waterbody						
Final Indicator for	r Legacy Migra	ted Data				
Indicator Name		PATHOGE	GENS (E. COLI)		Value	55
Indicator Subcate	gory/Units	WATER PO	OLLUTION (REDUCTION ESTIMATES) CF	·U	Calculation Tool	Unknown
Waterbody						
Final Indicator for Legacy Migrated Data		ted Data				
Indicator Name PHOSPHO		RUS (EST. REDUCTION)		Value	30	
Indicator Subcategory/Units WATER PO		POLLUTION (REDUCTION ESTIMATES) LBS/YR		Calculation Tool	Unknown	
Waterbody						

#### **Grant Activity - FY13 CDMG Administration / Coordination**

#### Description

Staff from Rock SWCD (Douglas Bos, Denise Severtson and Mary Thompson) will be responsible for the adminstration and coordination of this grant. Douglas Bos will be the lead person to facilitate the project with coordination and planning provided by Mark Dittrich, MDA. The Rock River Watershed's environmental and SWCD offices of Pipestone, Murray, Rock, and Nobles Counties will provide technical and advisory support for the planning and promotion of the field days. Denise Severtson and Mary Thompson will be resonsible for all Elink, website, and final reporting documents for the project. Rock SWCD will work with the landowner involved in the project and setup up the landowner contracts.

31-Dec-15

**End Date** 

#### Category

**Start Date** 

Has Rates and Hours?
Actual Results

ADMINISTRATION/COORDINATION

No

2013:

1-Apr-13

Staff member Bos worked with Nobles, Murray and Pipestone counties to locate locations to install a conservation drainage management project within each of their counties. Bos was also the lead person working with Mark Dittrich from MDA with each of these potential projects along with the project in Rock County that was installed in 2013. Bos planned, promoted and facilitated the Field day that took place on 9-5-2013 for the Rock County project. Bos worked with the Rock County producer to get all details figured out for the Rock County Site. Staff Severtson worked on the financials for the Rock County project along with all reporting that was done for this grant thus far.

#### 2014 and 2015:

Staff actively pursued potential controlled drainage sites in the Rock River Watershed. Four potential sites were identified and investigated but the producers decided not to pursue the projects.

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## Grant Activity - FY13 CWCDMG Design & establishment of 4 drainage demonstration sites Description Design and establish up to 4 controlled drainage demonstration sites on existing pattern tiled or intensively tiled crop fields utilizing woodchip bioreactors, saturated buffers and water control structures. The Southwest Prairie TSA Engineer, Russell Hoogendoorn will be designing these structures and will provide the technical sign off on these projects. These structures are designed according to NRCS practice standards. They will be drainage demonstration sites to encourage and allow farmers to see first hand how they could fit these into their own operations. Category TECHNICAL/ENGINEERING ASSISTANCE **End Date** 1-Apr-13 31-Dec-15 **Start Date** Has Rates and Hours? No 2013: **Actual Results** Paid the Southwest Prairie TSA for the design, installation, & check out of the Paul Arends conservation drainage management project. 2014 and 2015: Actively pursued additional sites for a control structure and bioreactor installation.

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# **Grant Activity - FY13 CWCDMG Develop and Target Protocols** Description Develop and target protocol to implement user friendly yardsticks (taking working groups and devloping where these practices will best fit both environmentally and practically) on most vulnerable landscapes. Yardsticks will be based upon field measurements and seasonal observations of drainage intensity, water availability, soil and plant growth/stress. This information matrix will support multipurpose drainage education and outreach, assist with conservation rationale for targeting resources. This initiative does not include construction activities. Dollars were inadvertently listed on the grant as Construction. Category PROJECT DEVELOPMENT **End Date Start Date** 1-Apr-13 31-Dec-15 **Has Rates and Hours?** No 2014: **Actual Results** Paid Busse Plumbing & Heating for access points that were installed in order to take water samples from the Arends Conservation Drainage Management Project. 2015: No further development of protocols were developed due to lack of producer interest.

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### **Grant Activity - FY13 CWCDMG Organize & facilitate farmer lead working groups**

Description

Organize and facilitate farmer lead working groups involving agency staff, tiling contractors, and University research staff to engage and review region specific data for implementation of multipurpose drainage for SW Minnesota.

This initiative does not include construction activities. Dollars were inadvertently listed on the grant as Construction.

**Category** 

PROJECT DEVELOPMENT

**Start Date** 

**Actual Results** 

End Date 31-Dec-15

Has Rates and Hours?

No

9/18/2013:

1-Apr-13

Held a farmer led working group meeting to discuss benefits of bioreactors and potential future projects.

2014 and 2015:

Due to lack of producer interest no further meetings have been held.

#### **Grant Activity - FY13 CWCDMG Workshops & Field Days**

Description

Plan, promote and facilitate one workshop, and two field days to educate and demonstrate the benefits of multipurpose drainage to area producers, crop consultants, tiling contractors and area conservation staff.

This initiative does not include construction activities. Dollars were inadvertently listed on the grant as Construction.

Category

PROJECT DEVELOPMENT

**Start Date** 

1-Apr-13 End Date 31-Dec-15

Has Rates and Hours?
Actual Results

No

9-5-2013:

A successful Conservation Drainage Management Workshop and Field day, with 105 attending, was held in Luverne with the Arends Project. Such expenses included: printing costs, postage, supplies, transportation, advertising, meeting facility rent and meal.

2014 and 2015:

No additional workshop and field days were held due lack of additional sites to showcase.

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Grant Activity - Paul Arends Conservation Drainage Project						
Description	Design and build a controlled drainage demonstration site on existing pattern tiled or intensively tile crop field utilizing					
	wood chip bioreactor,and wa	wood chip bioreactor,and water control structures				
Category	CONSERVATION DRAINAGE	CONSERVATION DRAINAGE				
Start Date	15-Jul-13	End Date	18-Nov-13			
Has Rates and Hours?	No					
Actual Results	Cumulative shifts in spending	from originally approved budgeted activity	y category amounts up to 20% not exceeding			
	\$10,000, can be approved by	\$10,000, can be approved by the Grantee. Project received more money in the amount of \$ 2,210.46 or 18%. The				
	construction of the denitrifying	construction of the denitrifying woodchip bioreactor was completed on 9-9-2013. The dimension of the finished				
	bioreactor is 30' wide by 80' l	ong by 4' deep. The layout of the bioreacto	or was altered to avoid utility lines in the area.			

	Activity Action - Legacy Migrated Data							
	Practice		747 - Denitrfying Bioreactor Count		of Activities		1	
Description								
	Proposed Size / Units		1.00 COUNT	Lifespan		10 Years		
	Actual Size/Units		1.00 COUNT	<b>Installed Date</b>			18-Nov-13	
Final Indicator for Legacy Migrated Data								
Indicator Name		NUTRIENTS (NITRATE)			Value		222	
Indicator Subcategory/Units		WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR			Calculation Tool	Unknown		
Waterbody								
Final Indicator for Legacy Migrated Data								
Indicator Name		PATHOGENS (E. COLI)			Value	55		
Indicator Subcategory/Units WA		WATER PO	WATER POLLUTION (REDUCTION ESTIMATES) CFU		Calculation Tool	Unknown		
Waterbody								
Final Indicator for Legacy Migrated Data								
Indicator Name PHOS		PHOSPHO	OSPHORUS (EST. REDUCTION)				30	
Indicator Subcategory/Units WAT		WATER PO	POLLUTION (REDUCTION ESTIMATES) LBS		S/YR Calculation Tool Un		Jnknown	
Waterbody								

# **Grant Attachments**

Document Name	Document Type	Description
2013 CDWM Grant 3232016 notes	Journal	Journal Dated - 03/23/2016
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 02/12/2014
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 03/25/2014
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 01/22/2015
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 01/27/2014
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 01/23/2015
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 03/23/2016
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 01/29/2016
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 01/29/2016
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 01/21/2016
Disbursement Log	Grant	2013 - Conservation Drainage Management Grants - Rock (SWCD)
Final Financial	Grant	2013 - Conservation Drainage Management Grants - Rock (SWCD)
Final Financial Report	Grant	2013 - Conservation Drainage Management Grants - Rock (SWCD)
Record of Payment to Landowners	Grant	2013 - Conservation Drainage Management Grants - Rock (SWCD)
Reporting extension	Journal	Journal Dated - 01/29/2016
Rock FY13 App. budget page.pdf	Grant	2013 - Conservation Drainage Management Grants - Rock (SWCD)
grant_app_general-added.rpt	Grant	2013 - Conservation Drainage Management Grants - Rock (SWCD)
reporting email	Journal	Journal Dated - 02/12/2014