



Grant All-Detail Report Projects and Practices 2018

Grant Title - Rock County Rural Water Nitrogen Reduction

Grant ID - C18-6000

Organization - Rock SWCD

Original Awarded Amount	\$78,930.00	Grant Execution Date	4/3/2018
Required Match Amount	\$19,732.50	Original Grant End Date	12/31/2020
Required Match %	25%	Grant Day To Day Contact	
Current Awarded Amount	\$78,930.00	Current End Date	12/31/2020

Budget Summary

	Budgeted	Spent	Balance Remaining*
Total Grant Amount	\$78,930.00	\$15,550.00	\$63,380.00
Total Match Amount	\$44,310.00	\$4,848.42	\$39,461.58
Total Other Funds	\$0.00	\$0.00	\$0.00
Total	\$123,240.00	\$20,398.42	\$102,841.58

**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	Matching Fund
Administration	Administration /Coordination	Local Fund	In-Kind	\$5,200.00	\$4,388.92	12/31/2020	Y
Cover Crop Incentive	Agricultural Practices	Current State Grant	Rock County Rural Water Nitrogen Reduction	\$51,240.00	\$14,800.00	11/16/2020	N
Cover Crop Incentive	Agricultural Practices	Landowner Fund	In-kind	\$6,615.00	\$299.50	11/16/2020	Y

Activity Name	Activity Category	Source Type	Source Description	Budgeted	Spent	Last Transaction Date	Matching Fund
Perennial Crop Establishment	Agricultural Practices	Current State Grant	Rock County Rural Water Nitrogen Reduction	\$10,650.00	\$750.00	6/15/2020	N
Perennial Crop Establishment	Agricultural Practices	Landowner Fund	In-Kind	\$21,300.00	\$160.00	8/6/2018	Y
Split Application Nitrogen	Non-Structural Management Practices	Current State Grant	Rock County Rural Water Nitrogen Reduction	\$17,040.00			N
Split Application Nitrogen	Non-Structural Management Practices	Landowner Fund	In-Kind	\$3,195.00			Y
Technical Assistance	Technical/Engineering Assistance	Local Fund	In-Kind	\$8,000.00			Y

Activity Details Summary

Activity Details	Total Action Count	Total Activity Mapped	Proposed Size / Unit	Actual Size / Unit
328 - Conservation Crop Rotation	1	1	5 AC	5 AC
340 - Cover Crop	148	1	148 AC	148 AC

Proposed Activity Indicators

Activity Name	Indicator Name	Value & Units	Waterbody	Calculation Tool	Comments
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Final Indicators Summary

Indicator Name	Total Value	Unit
NITROGEN	6,612.00	LBS/YR

Grant Activity

Grant Activity - Administration

Description

Administration of the program will include hours for meetings, landowner contacts, grant administration, and reporting. Reporting will include tracking of the outcomes and adoption rates within the Rock County Rural Water Wellhead Protection Area which is the scope of the grant. Conducted by Soil and Water Conservation District staff at 130 total hours over the three-year grant. This funding is classified as county appropriation. \$40 per hour equals \$5,200. Operation and administration of funds for these incentives to implement cover crops, perennial crop establishment and split application of nitrogen associated with this grant and work plan will follow Rock SWCD Board Policy for Non-Structural Land Management Implementation and be contracted with private landowners through Rock SWCD Board approval.

Category	ADMINISTRATION/COORDINATION		
Start Date	3-Apr-18	End Date	31-Dec-20
Has Rates and Hours?	No		
Actual Results	<p>Staff provided landowners with information and assistance on the implementation of cover crops, perennial crop establishment and split nitrogen application. Assistance also provided with contracts, board approval, review of invoices, payment and reporting.</p> <p>Assistant Director: 32 x 60.35 = 1931.20</p> <p>Technician: 2 x 43.36 = 86.72</p> <p>Office Manager: 8.25 x 27.59 = 227.62</p> <p>Total: 2,245.54</p> <p>2019: Staff continued to reach out and provide information as they did in 2018. There has been no further interest.</p> <p>Assistant Director: 20 x 61.52 = 1230.40</p> <p>2020: Staff continued to reach out and provide information as they did in 2018 and 2019.</p> <p>Assistant Director: 14 x 58.65 = 821.10</p> <p>Office Manager: 2.75 x 33.41 = 91.88</p> <p>Total - 912.98</p>		

Description

Cost share to utilize cover crops on row crop rotations on 60% of the targeted acres which are within the Rock County Rural Water (RCRW) Wellhead Protection Area (WPA). RCRW WPA has a large portion that is highly vulnerable as per Minnesota Department of Health; nitrate test results have an upward trend in nitrates with several wells above the drinking water standard. Targeted acres were figured by taking the amount of ag acres within RCRW WPA (2846 acres) and establishing a goal of 25% of that land utilizing the BMP's this grant covers (711 acres) with a 60% goal of those acres in cover crops (427 acres). Goal acres were assessed by the effectiveness of this practice for reducing nitrate-nitrogen through data from U of M Extension and the U of Iowa. Reducing N-NO3 in all the production wells is a goal for the overall project. Cost share will be flat rate of \$40 per acre per year for three years, of which a contract will be signed by the producer identifying the 3-year plan of cover crop establishment and rotation on the same parcel according to district policy. Goal of 427 acres utilizing this cover crop incentive @ \$40 per acre over the three-year grant equals \$51,240. Seeding will be in accordance to NRCS standard number 340. Sites will be inspected initially and annually. Inspections will be conducted by SWCD personnel that are certified in ecological job class approval by NRCS. Reimbursement after bill submittal from participating producers. Producer match for cover crop establishment activity will be based on a contract signed by producer and documentation will be submitted and approved. Rates of services and products are estimated using local knowledge by SWCD employee knowledge and information for the University of Iowa Farm Custom Rate Publication of 2017. In-kind to include \$15 per acre for termination of the cover crop annually; each year for a 3-year contract. \$15 per acre per year with cover crop acre goal of 427 acres equaling \$6615.

Category	AGRICULTURAL PRACTICES		
Start Date	15-Jun-20	End Date	31-Dec-20
Has Rates and Hours?	No		
Actual Results	<p>2018 - We have contacted the farmers in the DWSMA and most are hesitant to use cover crops and don't want to commit for three years.</p> <p>2019 - We have contacted all the landowners in the Highly Vulnerable Areas again. The landowners are not interested in raising alfalfa, most are hesitant to use cover crops and many feel the three year commitment is too hard to work with due to weather and flooding issues. We are currently approaching one of the landowners with other options to seed the sensitive area to pasture. If we can come up with an agreeable option we will ask for an amendment. Good news is that the awareness of the sensitivity of the wells has encouraged some of landowners to enroll their ground in CREP and RIM.</p> <p>2020 - One landowner has committed to cover crops for 148 acres/\$50 per acre. Due to the upcoming expiration date of the grant BWSR was contacted and, upon their advisement, the landowner was paid for the 1st and 3rd year in the 1st year. Rock SWCD will be responsible to confirm planting of cover crops with the landowner in years 2 and 3. \$14,800 was paid on contract RCRWNR-2 for Brent Fluit.</p>		

Activity Action - RCRWNR-2 Brent Fluit			
Practice	340 - Cover Crop	Count of Activities	148
Description	<p>2020 - One landowner has committed to cover crops for 148 acres/\$50 per acre. Due to the upcoming expiration date of the grant BWSR was contacted and, upon their advisement, the landowner was paid for the 1st and 3rd year in the 1st year. Rock SWCD will be responsible to confirm planting of cover crops with the landowner in years 2 and 3.</p> <p>\$14,800 was paid on contract RCRWNR-2 for Brent Fluit.</p>		
Proposed Size / Units	148.00 AC	Lifespan	3 Years
Actual Size/Units	148.00 AC	Installed Date	16-Nov-20
Mapped Activities	1 Polygon(s)	Technical Assistance Provider	SWCD

Final Indicator for RCRWNR-2 Brent Fluit			
Indicator Name	NITROGEN	Value	6512
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	Literature Value
Waterbody	Rock County Rural Water Aquifer		

Grant Activity - Perennial Crop Establishment

<p>Description</p>	<p>Cost share to seed alfalfa, grass, Kernza Grain, or other perennial cash crop known to scavenge NO3-N on 10% of targeted acres which are within the Rock County Rural Water (RCRW) Wellhead Protection Area (WPA). RCRW WPA has a large portion that is highly vulnerable by the Minnesota Department of Health; nitrate test results have an upward trend in nitrates with several wells above the drinking water standard. Targeted acres were figured by taking the amount of ag acres within RCRW WPA (2846 acres) and establishing a goal of 25% of that land utilizing the BMP's this grant covers (711 acres). Goal acres of 10% of perennial vegetation (71 acres) were assessed by utilizing local knowledge of the SWCD employees and the producers of the area on the markets and the need for perennial vegetation acres for livestock production. NRCS standard for conservation crop rotation #328 would provide guidance for the technical authority to consider for a contract of perennial crop establishment under this grant. Cost share will include \$100 per acre for the first year which will occur after verification of planting by a technical representative with technical authority; with additional \$50 per acre on the third year of establishment according to district policy. Goal of 10% of the acre target with 71-acre goal @ \$150 per acre equals \$10,650. Reimbursement will be after bill submittal and site inspection and conducted by SWCD that are certified in ecological practices. Annual inspections will be conducted over 3-year contract. Producer/landowner match will be tied in with a contract signed by the producer/landowner and documentation will be provided. Match for perennial vegetation the initial year will include \$15 seedbed preparation and \$15 chemical application on estimated 71 acres equaling \$2130. Additional cost for cutting raking baling estimated at \$100 per acre per year equaling \$21300.</p>		
<p>Category</p>	<p>AGRICULTURAL PRACTICES</p>		
<p>Start Date</p>	<p>3-Apr-18</p>	<p>End Date</p>	<p>31-Dec-20</p>
<p>Has Rates and Hours?</p>	<p>No</p>		
<p>Actual Results</p>	<p>Contract RCRWNR-1 Jim Ladd: Perennial vegetation 5 acres/\$100 acre for year one. \$500 paid 8-6-2018. Total invoice \$660.00</p> <p>Contract RCRWNR-1 Jime Ladd: Perennial vegetation 5 acres/\$50 per acre for year 3 payment. Assistant Director, Doug Bos, verified the stance from year one was still in place.</p>		

Activity Action - RCRWNR-1 Jim Ladd			
Practice	328 - Conservation Crop Rotation	Count of Activities	1
Description	Contract RCRWNR-1 Jim Ladd: Perennial vegetation 5 acres/\$100 acre for year one. \$500 paid 8-6-2018. Total invoice \$660.00 Contract RCRWNR-1 Jime Ladd: Perennial vegetation 5 acres/\$50 per acre for year 3 payment. Assistant Director, Doug Bos, verified the stance from year one was still in place.		
Proposed Size / Units	5.00 AC	Lifespan	3 Years
Actual Size/Units	5.00 AC	Installed Date	3-Apr-18
Mapped Activities	1 Polygon(s)	Technical Assistance Provider	SWCD

Final Indicator for RCRWNR-1 Jim Ladd			
Indicator Name	NITROGEN	Value	100
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	Literature Value
Waterbody	Rock County Rural Water Aquifer		

Grant Activity - Split Application Nitrogen

<p>Description</p>	<p>Utilization of extra side dress application for corn rotation on 30% of targeted acres within the RCRW WPA. RCRW WPA has a large portion that is highly vulnerable as per Minnesota Department of Health; nitrate test results have an upward trend in nitrates with several wells above the drinking water standard. Targeted acres were figured by taking the amount of ag acres within RCRW WPA (2846 acres) and establishing a goal of 25% of that land utilizing the BMP's this grant covers (711 acres) with a goal of 30% of these acres utilizing side dress application of nitrogen (213 acres). Technical guidance and practice methods for this practice will be according to recommendations by the University of Minnesota Extension for corn in Coarse Textured Soils and proper credit of previous crop. http://www.extension.umn.edu/agriculture/nutrient-management/nitrogen/docs/08556-coarsesoilsMN.pdf. On non-corn rotation years such as a soybean crop, cover crops must be utilized to fulfill a three-year contract for this incentive. Incentives will include \$20 per acre for corn crop years estimating 2 of the 3 years; 1 of 3 years estimated to be in cover crops @ \$40 per acre. Amounts for this incentive were calculated using 213 acres @ \$20 per acre for 2 years totaling \$8520 and cost share for cover crops at a flat rate of \$40 per acre for one year at \$8520 totaling \$17,040. Site inspections will be annual and reimbursement will occur after bill submittal. Cover crops will need to be planted in accordance to NRCS #340 standard. Inspections will be conducted by SWCD certified in ecological job class approval. Producer/landowner match for cover crop establishment will be tied in with a contract signed by the landowner and documentation will be provided. Landowner match with one year of cover crop in bean rotation at \$15 per year equals \$3195 for 1 year of the rotation.</p>		
<p>Category</p>	<p>NON-STRUCTURAL MANAGEMENT PRACTICES</p>		
<p>Start Date</p>	<p>3-Apr-18</p>	<p>End Date</p>	<p>31-Dec-20</p>
<p>Has Rates and Hours?</p>	<p>No</p>		
<p>Actual Results</p>	<p>2018 - We have contacted the farmers in the DWSMA. They want to split apply nitrogen but most are hesitant to use cover crops and don't want make a three year commitment to a cropping system they are unsure of.</p> <p>2019 - We have contacted all the landowners in the Highly Vulnerable Areas again. The landowners are not interested in raising alfalfa, most are hesitant to use cover crops and many feel the three year commitment is too hard to work with due to weather and flooding issues. We are currently approaching one of the landowners with other options to seed the sensitive area to pasture. If we can come up with an agreeable option we will ask for an amendment. Good news is that the awareness of the sensitivity of the wells has encouraged some of landowners to enroll their ground in CREP and RIM.</p>		

Grant Activity - Technical Assistance

Description	Technical assistance of the program will include hours for assisting producers with incentive establishment criteria and site inspections with technical approval. A Soil Health, Cover Crop regional workshop and field day will be planned to incorporate the work area. This educational event will have multiple agencies and local and specialist knowledge presented. One on one contact with producers within the work area will be made to encourage participation in this project. Technical assistance will be conducted by Soil and Water Conservation District staff at around \$40 per hour for 200 hours of the three-year grant. Person certified in ecological job class approval by NRCS. This funding is local match, classified as county appropriation. \$40 per hour equals \$8000.	
Category	TECHNICAL/ENGINEERING ASSISTANCE	
Start Date	End Date	
Has Rates and Hours?	No	
Actual Results	<p>2018 - We have contacted the farmers in the DWSMA. They want to split apply nitrogen but most are hesitant to use cover crops and don't want make a three year commitment to a cropping system they are unsure of.</p> <p>2019 - We have contacted all the landowners in the Highly Vulnerable Areas again. The landowners are not interested in raising alfalfa, most are hesitant to use cover crops and many feel the three year commitment is too hard to work with due to weather and flooding issues. We are currently approaching one of the landowners with other options to seed the sensitive area to pasture. If we can come up with an agreeable option we will ask for an amendment. Good news is that the awareness of the sensitivity of the wells has encouraged some of landowners to enroll their ground in CREP and RIM.</p>	

Grant Attachments

Document Name	Document Type	Description
2018 Competitive Grant	Grant Agreement	2018 Competitive Grant - Rock SWCD
2018 Competitive Grant executed	Grant Agreement	2018 Competitive Grant - Rock SWCD
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 04/06/2020
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 01/27/2021
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 04/08/2019
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 02/03/2020
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 04/03/2020
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 03/11/2019
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 01/31/2019

Document Name	Document Type	Description
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 02/10/2021
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 02/05/2021
Application	Workflow Generated	Workflow Generated - Application - 08/09/2017
C18-6000 Reconciliation B Checklist	Journal	Journal Dated - 02/05/2021
Expenditures Report Attached for Reconciliation	Grant	Rock County Rural Water Nitrogen Reduction
Financial Report	Grant	Rock County Rural Water Nitrogen Reduction
Return Funds Report	Grant	Rock County Rural Water Nitrogen Reduction
Rock County Rural Water 2017 Project Map	Grant	Rock County Rural Water Nitrogen Reduction
Rock SWCD CY18 eLINK Reporting Needs	Journal	Journal Dated - 03/11/2019
Work Plan	Workflow Generated	Workflow Generated - Work Plan - 03/15/2018
Work Plan	Workflow Generated	Workflow Generated - Work Plan - 03/27/2018
Work Plan	Workflow Generated	Workflow Generated - Work Plan - 03/27/2018
Work Plan	Workflow Generated	Workflow Generated - Work Plan - 12/20/2017
Work Plan	Workflow Generated	Workflow Generated - Work Plan - 04/02/2018
Work Plan	Workflow Generated	Workflow Generated - Work Plan - 02/28/2018
Work Plan	Workflow Generated	Workflow Generated - Work Plan - 02/08/2018
Work Plan	Workflow Generated	Workflow Generated - Work Plan - 01/24/2018
Work Plan	Workflow Generated	Workflow Generated - Work Plan - 03/27/2018
grantmap_19114_2017-08-08_09-26-16-AM.jpg	Grant	Rock County Rural Water Nitrogen Reduction