



Grant All-Detail Report Projects and Practices 2017

Grant Title - Water Quality Improvements on the Mallery Jersey Dairy Farm

Grant ID - C17-2042

Organization - Chisago SWCD

Original Awarded Amount	\$60,000.00	Grant Execution Date	3/13/2017
Required Match Amount	\$15,000.00	Original Grant End Date	12/31/2019
Required Match %	25%	Grant Day To Day Contact	Craig Mell
Current Awarded Amount	\$60,000.00	Current End Date	12/31/2019

Budget Summary

	Budgeted	Spent	Balance Remaining*
Total Grant Amount	\$60,000.00	\$60,000.00	\$0.00
Total Match Amount	\$15,000.00	\$19,449.19	\$-4,449.19
Total Other Funds	\$0.00	\$0.00	\$0.00
Total	\$75,000.00	\$79,449.19	\$-4,449.19

**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	Current State Grant	Water Quality Improvements on the Mallery Jersey Dairy Farm	\$2,000.00	\$1,797.00	4/9/2019	N
Construction	Agricultural Practices	Current State Grant	Water Quality Improvements on the Mallery Jersey Dairy Farm	\$41,000.00	\$39,418.00	10/8/2019	N

Activity Name	Activity Category	Source Type	Source Description	Budgeted	Spent	Last Transaction Date	Matching Fund
Construction	Agricultural Practices	Landowner Fund		\$15,000.00	\$19,449.19	6/25/2019	Y
Technical Assistance/Engineering	Technical/Engineering Assistance	Current State Grant	Water Quality Improvements on the Mallery Jersey Dairy Farm	\$17,000.00	\$18,785.00	4/9/2019	N

Activity Details Summary

Activity Details	Total Action Count	Total Activity Mapped	Proposed Size / Unit	Actual Size / Unit
410 - Grade Stabilization Structure	1	1	0.1 AC	0.1 AC
362 - Diversion	1	1	558 LINEAR FEET	558 LINEAR FEET
472 - Access Control	1	1	471 LINEAR FEET	471 LINEAR FEET
468 - Lined Waterway or Outlet	1	1	244 LINEAR FEET	245 LINEAR FEET
638 - Water and Sediment Control Basin	3	3	817 LINEAR FEET	821 LINEAR FEET

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
SEDIMENT (TSS)	257.60	TONS/YR
SOIL (EST. SAVINGS)	82.60	TONS/YR
PHOSPHORUS (EST. REDUCTION)	94.99	LBS/YR

Grant Activity

Grant Activity - Administration	
Description	Carry out administrative duties associated with executing the grant agreement, fulfilling reporting requirements, preparing contracts, tracking activities and hours, etc. Craig Mell, District Administrator will be responsible for activities including grant agreements, contracts, time tracking, and reporting to the SWCD Board. Mary Jo Youngbauer will be responsible for reporting.
Category	ADMINISTRATION/COORDINATION
Start Date	3-May-17 End Date
Has Rates and Hours?	Yes
Actual Results	<p>As of January 4, 2018 The Chisago SWCD Board approved the certification and repayment for the Mallery Jerseys grade stabilization and lined waterway project on 11/14/17. Elink reporting is up to date.</p> <p>As of January 10, 2019 Elink reporting is up to date.</p> <p>As of October 11, 2019 Projects have been reported and Elink is up to date. Grant ready to close.</p>

Description

Cost share funding for implementation of designed BMPs. Practices on the preliminary design include fencing, heavy use protection, clean water diversion, grade stabilization, critical area planting, lined waterway, and stilling basins. Together, the practices are expected to reduce the total phosphorus load to the St. Croix River by 18 pounds per year and reduce the sediment load to the river by 18 tons per year. A map of preliminary project locations is attached.

NRCS Standards will be used. Standards will include: Fence (382), Heavy Use Area Protection (561), Diversion (362), Grade Stabilization Structure (410), Critical Area Planting (342), Lined Waterway or Outlet (468), and Sediment Basin (350).

The landowner is responsible for soliciting bids for the project and for hiring a contractor. In some cases, the landowner signs a document that allows the Chisago SWCD to solicit bids on the landowners' behalf. When bids are received, the Chisago SWCD reviews them to ensure that the costs are reasonable and within the budget allotted for the project. The SWCD has a list of contractors that we have worked with on prior projects that the landowner can use if they choose. The landowner is also free to solicit bids from companies not on the list. Once the SWCD has approved bids as being acceptable and within the budget limits (or the landowner has agreed to pay any costs above and beyond the SWCD's project), the landowner makes the final decision on which bid to accept.

Category	AGRICULTURAL PRACTICES		
Start Date	23-Aug-17	End Date	09-Jul-19
Has Rates and Hours?	No		
Actual Results	<p>As of November 14, 2017</p> <p>Construction is finished on grade stabilization structure, water and sediment control basin, fencing for access control, heavy use protection area, and gutter installation for clean water diversion. The project excludes about 300 cattle from accessing the area around the grade stabilization structure and in the sensitive area at the top of several large gullies. The WASCOB is above the gullies and outlets at the bottom of the steep slope. Heavy use protection allows the cattle to cross the sensitive area between the pond outlet and the top of the hill with minimum disturbance. Gutters were installed and piped to the outlet at the pond; the water previously ran across the open feedlot into the pond.</p> <p>As of January 4, 2018</p> <p>No additional construction has taken place since last update.</p> <p>As of February 13, 2018</p> <p>The SWCD Board approved moving \$7,000 from the Conservation activity budget to the Technical Assistance/Engineering activity budget to complete a Comprehensive Nutrient Management Plan (CNMP) on the farm. A completed CNMP is required to help leverage future federal funding from the EQIP program to install additional conservation practices on the Mallery Farm.</p> <p>As of January 10, 2019</p> <p>Local staff Shane Hultman and NRCS staff Jason Rehn assisted Mike Mayer (engineer) in survey work for the Comprehensive Nutrient Management Plan.</p> <p>As of July 9, 2019</p> <p>Three WASCOBs were installed to reduce gully and rill erosion on the edges of fields east of HWY 95. Per CNMP, an animal waste storage facility was installed in summer/fall. (cost shared with CWF WQIMJ 19-1)</p>		

Activity Action - Grade Stabilization			
Practice	410 - Grade Stabilization Structure	Count of Activities	1
Description			
Proposed Size / Units	0.10 AC	Lifespan	10 Years
Actual Size/Units	0.10 AC	Installed Date	6-Oct-17
Mapped Activities	1 Point(s)		

Final Indicator for Grade Stabilization			
Indicator Name	SEDIMENT (TSS)	Value	150
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	RUSLE2 (UPDATED)
Waterbody	St. Croix River		

Activity Action - WASC0B			
Practice	468 - Lined Waterway or Outlet	Count of Activities	1
Description			
Proposed Size / Units	244.00 LINEAR FEET	Lifespan	10 Years
Actual Size/Units	245.00 LINEAR FEET	Installed Date	6-Sep-17
Mapped Activities	1 Line(s)		

Final Indicator for WASC0B			
Indicator Name	SEDIMENT (TSS)	Value	25
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	RUSLE2 (UPDATED)
Waterbody	St. Croix River		

Activity Action - Fencing			
Practice	472 - Access Control	Count of Activities	1
Description			
Proposed Size / Units	471.00 LINEAR FEET	Lifespan	10 Years
Actual Size/Units	471.00 LINEAR FEET	Installed Date	19-Oct-17
Mapped Activities	1 Polygon(s)		

Activity Action - Gutters			
Practice	362 - Diversion	Count of Activities	1
Description			
Proposed Size / Units	558.00 LINEAR FEET	Lifespan	10 Years
Actual Size/Units	558.00 LINEAR FEET	Installed Date	30-Aug-17
Mapped Activities	1 Line(s)		

Activity Action - WASCObS			
Practice	638 - Water and Sediment Control Basin	Count of Activities	3
Description	Two WASCObS less than 4ft tall at 309 and 224 LF, One WASCOb between 6-8ft tall at 288 LF installed to control gully erosion off field edges.		
Proposed Size / Units	817.00 LINEAR FEET	Lifespan	10 Years
Actual Size/Units	821.00 LINEAR FEET	Installed Date	9-Jul-19
Mapped Activities	3 Point(s)		

Final Indicator for WASCObS			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	94.99
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	Lower St.Croix		
Final Indicator for WASCObS			
Indicator Name	SEDIMENT (TSS)	Value	82.6
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	Lower St.Croix		
Final Indicator for WASCObS			
Indicator Name	SOIL (EST. SAVINGS)	Value	82.6
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	Lower St.Croix		

Grant Activity - Technical Assistance/Engineering

<p>Description</p>	<p>Development of final design plan set, construction staking, construction oversight, and check out of construction projects. Working with contractors to install the project as designed to meet specifications.</p> <p>Engineering and project certification will be provided by NRCS engineers Marvin Kunkel and Nicole Sternquist. The primary SWCD staff person who will be involved with technical assistance and engineering is Shane Hultman. He has Job Approval Authority (engineering) for critical area planting (max level 3), lined waterway/outlet (max level 1), grade stabilization (max level 1 for investigation and evaluation), stream crossing (max level 1 for investigation and evaluation), and underground outlet (max level 1 for investigation and evaluation, and construction). For a complete list of JAA, contact the SWCD.</p>		
<p>Category</p>	<p>TECHNICAL/ENGINEERING ASSISTANCE</p>		
<p>Start Date</p>	<p>3-May-17</p>	<p>End Date</p>	<p>10-Jan-19</p>
<p>Has Rates and Hours?</p>	<p>Yes</p>		
<p>Actual Results</p>	<p>As of January 4, 2018 The design for a lined waterway and grade stabilization project was designed and certified by Marv Kunkel, NRCS Civil Engineering Technician.</p> <p>As of February 13, 2018 The SWCD Board approved moving \$7,000 from the Conservation activity budget to the Technical Assistance/Engineering activity budget to complete a Comprehensive Nutrient Management Plan (CNMP) on the farm. A completed CNMP is required to help leverage future federal funding from the EQIP program to install additional conservation practices on the Mallery Farm.</p> <p>As of January 10, 2019 Shane Hultman (SWCD) and Jason Rehn (NRCS) assisted Mike Mayer in surveying needed for the Comprehensive Nutrient Management Plan.</p> <p>As of October 11, 2019 Shane Hultman (SWCD) and Jason Rehn (NRCS) completed project construction monitoring and as-builts for WASCObS for the HWY 95 fields.</p>		

Grant Attachments

Document Name	Document Type	Description
2017 Competitive Grant	Grant Agreement	2017 Competitive Grant - Chisago SWCD
2017 Competitive Grant executed	Grant Agreement	2017 Competitive Grant - Chisago SWCD
2018-01-17_Request ot revise work plan	Journal	Journal Dated - 01/26/2018
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 10/25/2019
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 10/25/2019
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 01/30/2019
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 10/11/2019
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 01/30/2019
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 01/10/2019
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 01/26/2018
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 01/04/2018
Application	Workflow Generated	Workflow Generated - Application - 08/03/2016
BC Work Plan Comments 3-9-2017	Journal	Journal Dated - 03/10/2017
Financial Report	Grant	Water Quality Improvements on the Mallery Jersey Dairy Farm
Financial Report Closeout	Grant	Water Quality Improvements on the Mallery Jersey Dairy Farm
Mallery Jerseys Dairy Farm Projects	Grant	Water Quality Improvements on the Mallery Jersey Dairy Farm
Work Plan	Workflow Generated	Workflow Generated - Work Plan - 03/10/2017
Work Plan	Workflow Generated	Workflow Generated - Work Plan - 02/27/2017
Work Plan	Workflow Generated	Workflow Generated - Work Plan - 12/14/2016
Work Plan	Workflow Generated	Workflow Generated - Work Plan - 01/26/2018
grantmap_16587_2016-08-03_09-35-13-AM.jpg	Grant	Water Quality Improvements on the Mallery Jersey Dairy Farm