



Grant All-Detail Report Projects and Practices 2019

Grant Title - 2019 Mallery Jerseys Comprehensive Nutrient Management Plan Implementation

Grant ID - C19-1781

Organization - Chisago SWCD

Original Awarded Amount	\$105,000.00	Grant Execution Date	3/5/2019
Required Match Amount	\$26,250.00	Original Grant End Date	12/31/2021
Required Match %	25%	Grant Day To Day Contact	Craig Mell
Current Awarded Amount	\$105,000.00	Current End Date	12/31/2021

Budget Summary

	Budgeted	Spent	Balance Remaining*
Total Grant Amount	\$105,000.00	\$105,000.00	\$0.00
Total Match Amount	\$26,250.00	\$26,250.00	\$0.00
Total Other Funds	\$56,000.00	\$58,867.19	\$-2,867.19
Total	\$187,250.00	\$190,117.19	\$-2,867.19

**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	2019 Mallery Jerseys Comprehensive Nutrient Management Plan ..	\$5,000.00	\$5,325.50	10/9/2019	N
Construction	Agricultural Practices	Current State Grant	2019 Mallery Jerseys Comprehensive Nutrient Management Plan ..	\$80,000.00	\$80,000.00	10/8/2019	N

Activity Name	Activity Category	Source Type	Source Description	Budgeted	Spent	Last Transaction Date	Matching Fund
Construction	Agricultural Practices	Federal Funds	Landowner - Federal Funds	\$26,250.00	\$26,250.00	10/8/2019	Y
Construction	Agricultural Practices	Other Funds	Water Quality Improvements on the Mallery Jersey Dairy Farm	\$41,000.00	\$39,418.00	10/8/2019	N
Construction	Agricultural Practices	Other Funds		\$15,000.00	\$19,449.19	6/25/2019	Y
Technical/Engineering	Technical/Engineering Assistance	Current State Grant	2019 Mallery Jerseys Comprehensive Nutrient Management Plan ..	\$20,000.00	\$19,674.50	10/9/2019	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
362 - Diversion	1	5	502 LINEAR FEET	1564 LINEAR FEET
472 - Access Control	1	1	471 LINEAR FEET	471 LINEAR FEET
561 - Heavy Use Area Protection	1	2	0.05 AC	0.04 AC
362 - Diversion	1	5	350 LINEAR FEET	348 LINEAR FEET
342 - Critical Area Planting	1	1	1.5 AC	2 AC
533 - Pumping Plant	1	1	1 COUNT	1 COUNT
468 - Lined Waterway or Outlet	1	1	244 LINEAR FEET	245 LINEAR FEET
635 - Vegetated Treatment Area	1	1	0.5 AC	0.53 AC
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
Construction	FECAL COLIFORM	1110000000000000 CFU/YR	St. Croix River	MINNFARM	
Construction	PHOSPHORUS FEEDLOT (EST. REDUCTION)	76 LBS/YR	St. Croix River	MINNFARM	
Construction	BOD 5	1110 LBS/YR	St. Croix River	MINNFARM	
Construction	COD	4998 LBS/YR	St. Croix River	MINNFARM	
Construction	NITROGEN	265 LBS/YR	St. Croix River	MINNFARM	

Final Indicators Summary

Indicator Name	Total Value	Unit
BOD 5	1,110.00	LBS/YR
FECAL COLIFORM	1,110,000,000,000,000.0 0	CFU/YR
SEDIMENT (TSS)	257.60	TONS/YR
SOIL (EST. SAVINGS)	82.60	TONS/YR
COD	4,998.00	LBS/YR
NITROGEN	265.00	LBS/YR
PHOSPHORUS (EST. REDUCTION)	94.99	LBS/YR
PHOSPHORUS FEEDLOT (EST. REDUCTION)	76.00	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. The Chisago SWCD Conservation Technician will be responsible for reporting. We plan to continue to host local farmer meetings and events, tours of best management practices that include demonstrations about pertinent topics, such as soil health. Once completed we will highlight this project and the benefits to water quality and soil health from Ag. BMPs.	
Category	ADMINISTRATION/COORDINATION	
Start Date	10-Apr-19	End Date 11-Oct-19
Has Rates and Hours?	Yes	
Actual Results	As of October 11, 2019 Elink is up to date. Grant is ready for closeout.	

Grant Activity - Construction

Description	<p>Cost share funds for implementation of designed BMPs. In 2018, a Comprehensive Nutrient Management Plan was completed for the farm and identified several additional practices that should be implemented to further reduce impact on water quality of the St. Croix River. Practices on the preliminary design include implementation of best management practices identified in the Comprehensive Nutrient Management Plan, including a waste storage basin, stacking slab, critical area planting, earthen diversions, concrete diversion, fencing to reduce lot size, mulching, wastewater transfer system and pump, heavy use protection, silt fence, subsurface drain, underground outlet, waste transfer, and vegetated treatment area. NRCS Standards will be followed for all practices listed above. The proposed practices will reduce the phosphorus, nitrogen, fecal coliform, chemical oxygen demand (COD), and biochemical oxygen demand (BOD) by 76 pounds (83%), 265 pounds (85%), 111 E+13 cfu (50%), 4,998 pounds (86%), and 1,110 pounds (86%), respectively. 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.</p>		
Category	AGRICULTURAL PRACTICES		
Start Date	10-Apr-19	End Date	11-Oct-19
Has Rates and Hours?	No		
Actual Results	<p>As of October 11, 2019</p> <p>The animal waste storage facility including a stacking slab, concrete feedlots, a vegetated treatment area and fence were installed to help satisfy Mallery Jerseys' CNMP.</p>		

Activity Action - Critical Area Planting			
Practice	342 - Critical Area Planting	Count of Activities	1
Description			
Proposed Size / Units	1.50 AC	Lifespan	10 Years
Actual Size/Units	2.00 AC	Installed Date	26-Sep-19
Mapped Activities	1 Polygon(s)		

Final Indicator for Critical Area Planting			
Indicator Name	COD	Value	4998
Indicator Subcategory/Units	MinnFARM LBS/YR	Calculation Tool	MINNFARM

Waterbody	St.Croix River		
Final Indicator for Critical Area Planting			
Indicator Name	PHOSPHORUS FEEDLOT (EST. REDUCTION)	Value	76
Indicator Subcategory/Units	MinnFARM LBS/YR	Calculation Tool	MINNFARM
Waterbody	St.Croix River		
Final Indicator for Critical Area Planting			
Indicator Name	NITROGEN	Value	265
Indicator Subcategory/Units	MinnFARM LBS/YR	Calculation Tool	MINNFARM
Waterbody	St.Croix River		
Final Indicator for Critical Area Planting			
Indicator Name	BOD 5	Value	1110
Indicator Subcategory/Units	MinnFARM LBS/YR	Calculation Tool	MINNFARM
Waterbody	St.Croix River		
Final Indicator for Critical Area Planting			
Indicator Name	FECAL COLIFORM	Value	1110000000000000
Indicator Subcategory/Units	MinnFARM CFU/YR	Calculation Tool	MINNFARM
Waterbody	St.Croix River		

Activity Action - Diversion - Earthen			
Practice	362 - Diversion	Count of Activities	1
Description	Earthen diversion		
Proposed Size / Units	502.00 LINEAR FEET	Lifespan	10 Years
Actual Size/Units	1,564.00 LINEAR FEET	Installed Date	26-Sep-19
Mapped Activities	5 Line(s)		

Activity Action - Diversion - Concrete			
Practice	362 - Diversion	Count of Activities	1
Description	Concrete Curb		
Proposed Size / Units	350.00 LINEAR FEET	Lifespan	10 Years
Actual Size/Units	348.00 LINEAR FEET	Installed Date	26-Sep-19
Mapped Activities	5 Line(s)		

Activity Action - Wastewater Pump			
Practice	533 - Pumping Plant	Count of Activities	1
Description			
Proposed Size / Units	1.00 COUNT	Lifespan	10 Years
Actual Size/Units	1.00 COUNT	Installed Date	26-Sep-19
Mapped Activities	1 Point(s)		

Activity Action - Heavy Use Protection			
Practice	561 - Heavy Use Area Protection	Count of Activities	1
Description	Concrete, reinforced, no wall		
Proposed Size / Units	0.05 AC	Lifespan	10 Years
Actual Size/Units	0.04 AC	Installed Date	26-Sep-19
Mapped Activities	2 Polygon(s)		

Activity Action - Vegetated Treatment Area			
Practice	635 - Vegetated Treatment Area	Count of Activities	1
Description			
Proposed Size / Units	0.50 AC	Lifespan	10 Years
Actual Size/Units	0.53 AC	Installed Date	26-Sep-19
Mapped Activities	1 Polygon(s)		

Grant Activity - Technical/Engineering

Description	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.		
	Engineering and project certification will be provided by PE Mike Mayer (MM Engineering/Scott SWCD) and NRCS engineer Marvin Kunkel. The primary local technical and engineering assistance support will be provided by Chisago SWCD District Technician Shane Hultman and USDA NRCS SCT Jason Rehn. For a complete list of JAA, contact the SWCD.		
Category	TECHNICAL/ENGINEERING ASSISTANCE		
Start Date	10-Apr-19	End Date	11-Oct-19
Has Rates and Hours?	Yes		
Actual Results	As of October 11, 2019 Shane Hultman (SWCD), Jason Rehn (NRCS), and Mike Mayer (MM Engineering) completed all survey, design, construction monitoring and as-built requirements to complete the Animal Waste Storage Facility project.		

Grant Attachments

Document Name	Document Type	Description
2019 Competitive Grant	Grant Agreement	2019 Competitive Grant - Chisago SWCD
2019 Competitive Grant EXECUTED	Grant Agreement	2019 Competitive Grant - Chisago SWCD
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 10/11/2019
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
Application	Workflow Generated	Workflow Generated - Application - 08/28/2018
Final Financial Report	Grant	2019 Mallery Jerseys Comprehensive Nutrient Management Plan Implementation
Mallery Jerseys CNMP Implementation	Grant	2019 Mallery Jerseys Comprehensive Nutrient Management Plan Implementation
Mallery CE	Grant	2019 Mallery Jerseys Comprehensive Nutrient Management Plan Implementation
Work Plan	Workflow Generated	Workflow Generated - Work Plan - 12/19/2018
Work Plan	Workflow Generated	Workflow Generated - Work Plan - 03/04/2019
Work Plan	Workflow Generated	Workflow Generated - Work Plan - 10/25/2019

Document Name	Document Type	Description
Work Plan	Workflow Generated	Workflow Generated - Work Plan - 04/04/2019
grantmap_21975_2018-08-24_01-28-58-PM.jpg	Grant	2019 Mallery Jerseys Comprehensive Nutrient Management Plan Implementation