



Grant All-Detail Report Projects and Practices 2015

Grant Title - 2015 - Dry Creek Watershed Gully Stabilization Project

Grant ID - C15-8972

Organization - Chisago SWCD

Original Awarded Amount	\$150,000.00	Grant Execution Date	4/7/2015
Required Match Amount	\$37,500.00	Original Grant End Date	12/31/2018
Required Match %	25%	Grant Day To Day Contact	Craig Mell
Current Awarded Amount	\$150,000.00	Current End Date	12/31/2018

Budget Summary

	Budgeted	Spent	Balance Remaining*
Total Grant Amount	\$150,000.00	\$150,000.00	\$0.00
Total Match Amount	\$56,037.96	\$65,382.60	\$-9,344.64
Total Other Funds	\$0.00	\$0.00	\$0.00
Total	\$206,037.96	\$215,382.60	\$-9,344.64

*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	Dry Creek Watershed Gully Stabilization Project	\$2,500.00	\$2,500.00	11/20/2018	N
Peterson/Reed Ave Gully	Agricultural Practices	Current State Grant	2015 - Dry Creek Watershed Gully Stabilization Project	\$104,000.00	\$109,109.16	11/20/2018	N
Peterson/Reed Ave Gully	Agricultural Practices	Federal Funds		\$18,537.96	\$18,537.96	6/7/2017	Y

Activity Name	Activity Category	Source Type	Source Description	Budgeted	Spent	Last Transaction Date	Matching Fund
Peterson/Reed Ave Gully	Agricultural Practices	Local Fund	Chisago County	\$26,000.00	\$43,744.64	11/20/2018	Y
Project Development	Project Development	Current State Grant	Dry Creek Watershed Gully Stabilization Project	\$1,500.00	\$1,500.00	3/3/2016	N
Sundeen Gully	Agricultural Practices	Current State Grant	2015 - Dry Creek Watershed Gully Stabilization Project	\$12,000.00	\$7,150.00	6/16/2015	N
Sundeen Gully	Agricultural Practices	Local Fund	Amador Township	\$4,000.00	\$3,100.00	6/16/2015	Y
Technical/Engineering	Technical/Engineering Assistance	Current State Grant	Dry Creek Watershed Gully Stabilization Project	\$30,000.00	\$29,740.84	11/20/2018	N
Technical/Engineering	Technical/Engineering Assistance	Local Fund	Chisago County	\$7,500.00			Y

Activity Details Summary

Activity Details	Total Action Count	Total Activity Mapped	Proposed Size / Unit	Actual Size / Unit
412 - Grassed Waterway and Swales	1	1	700 LINEAR FEET	700 LINEAR FEET
638 - Water and Sediment Control Basin	4	4	1384 LINEAR FEET	1412 LINEAR FEET
468 - Lined Waterway or Outlet	1	1	116 LINEAR FEET	148 LINEAR FEET
468 - Lined Waterway or Outlet	1	1	500 LINEAR FEET	510 LINEAR FEET
393 - Filter Strip	2	2	1000 LINEAR FEET	1015 LINEAR FEET
362 - Diversion	2	2	955 LINEAR FEET	1015 LINEAR FEET

Proposed Activity Indicators

Activity Name	Indicator Name	Value & Units	Waterbody	Calculation Tool	Comments
Construction	PHOSPHORUS (EST.	22 LBS/YR	St. Croix River	BWSR CALC (GULLY	

Activity Name	Indicator Name	Value & Units	Waterbody	Calculation Tool	Comments
	REDUCTION)			STABILIZATION)	
Construction	SEDIMENT (TSS)	25 TONS/YR	St. Croix River	BWSR CALC (GULLY STABILIZATION)	

Final Indicators Summary

Indicator Name	Total Value	Unit
SEDIMENT (TSS)	90.31	TONS/YR
SOIL (EST. SAVINGS)	85.03	TONS/YR
PHOSPHORUS (EST. REDUCTION)	98.20	LBS/YR

Grant Activity

Grant Activity - Administration			
Description	Elink reporting, grant execution, and similar administrative activities		
Category	ADMINISTRATION/COORDINATION		
Start Date	13-Apr-15	End Date	20-Nov-18
Has Rates and Hours?	Yes		
Actual Results	<p>As of May 19, 2015 Contract for Sundeen project completed. Elink reporting is up to date.</p> <p>As of January 19, 2016 The Sundeen project was completed and certified. Repayment was issued. Elink reporting is up to date.</p> <p>As of January 9, 2017 SWCD staff has been in communication with Chisago County Public Works as they develop their plans for the road reconstruction portion of the project (not funded under this grant). Elink reporting is up to date.</p> <p>As of June 13, 2017 The SWCD Board approved the cost share request on April 11, 2017, and approved reimbursement on June 13, 2017. Elink reporting is up to date.</p> <p>As of January 4, 2018 Reimbursement payment was issued for work done on the field above Reed Avenue. Elink reporting is up to date.</p> <p>As of November 20, 2018 Final reimbursement for the Reed Avenue project was issued. All funds are spent in this category.</p>		

Grant Activity - Peterson/Reed Ave Gully

<p>Description</p>	<p>Three gullies have formed off the edge of an agricultural field and drain into the road ditch along Reed Avenue. The large volume of runoff is causing erosion within the road ditches and depositing large amounts of sediment in the Wild River State Park. A series of water and sediment control basins will be installed on the edge of the agricultural field to meter out the volume and velocity of the runoff. A private contractor will be hired to install these practices. Engineering and sign off on construction will be done by MM Engineering or NRCS staff. The goal for the WASCObS is to slow the water down so that it no longer causes erosion within the gully channels. The pollution reduction goal for the WASCObS is 10 lbs of phosphorus and 13 tons of sediment per year. The project lifespan for agricultural BMPs is 10 years.</p> <p>In the road ditch along Reed Avenue, severe erosion is occurring due to stormwater runoff from the gullies as well as the road itself. Large sediment loads are being deposited on the road and in the neighboring Wild River State Park. Chisago County Public Works will secure all right-of-entry and required easements for work outside of their road right-of-way and for maintenance activities for the 25 year life span of the project. Chisago County Public Works will contract the work in the road ditch to be done at the same time as the road improvement project. Engineering staff for the Chisago County Public Works will sign off on the project. As part of the road project, Chisago County is installing curb and gutter to direct the runoff from the road into a stable water quality treatment basin. This portion of the project will have a 25 year lifespan. The goal is to stabilize the road ditch and stop erosion from occurring in the ditch itself. The pollution reduction goal is to reduce 6 lbs of phosphorus and 6 tons of sediment per year. A formal agreement will be developed with Chisago County Public Works before engineering begins.</p>		
<p>Category</p>	<p>AGRICULTURAL PRACTICES</p>		
<p>Start Date</p>	<p>11-Apr-17</p>	<p>End Date</p>	<p>25-Oct-18</p>
<p>Has Rates and Hours?</p>	<p>No</p>		
<p>Actual Results</p>	<p>As of January 19, 2016 No construction activities have taken place on this project at this time. Project development was completed in 2015 and early work on a design has begun. Further survey and design will be conducted in 2016 with anticipated construction in 2017.</p> <p>As of January 9, 2017 No construction has taken place. Surveying and design have been completed. Finalized designs will be ready for construction in 2017, in coordination with the Chisago County Public Works road reconstruction project.</p> <p>As of June 13, 2017 This project includes a series of water and sediment control basins, diversions, and vegetated filter strips. Construction was</p>		

completed and reviewed/approved by Marv Kunkel, NRCS Civil Engineering Technician. The certification of project completion was approved by the SWCD Board on June 13, 2017. The Chisago County Public Works has not started construction on their adjacent road project at this time (not funded through this grant).

As of January 4, 2018

The WASCOS, diversions, and waterways were installed and certified by Marv Kunkel, NRCS Civil Engineering Technician. Reimbursement has been issued. The second part of this project along Reed Avenue is scheduled for installation in 2018.

As of November 20, 2018

The second part of this activity was completed in the fall of 2018 in conjunction with the Chisago County Public Works road construction project on County Road 81/Reed Avenue. The Chisago SWCD paid for the water quality portions of the project that the County would NOT have done if they were just paving the road, up to the amount remaining for this project (\$65,000). An additional \$15,415.64 of water quality work was funded by the County as match, along with the County's installation of the concrete curb and gutter to guide the runoff into the water treatment areas (\$28,329). See attachment for additional Actual Results...

Activity Action - Peterson/Reed Avenue			
Practice	638 - Water and Sediment Control Basin	Count of Activities	4
Description	Water and sediment control basin, berm between 4 and 6 ft tall, grassed.		
Proposed Size / Units	1,384.00 LINEAR FEET	Lifespan	10 Years
Actual Size/Units	1,412.00 LINEAR FEET	Installed Date	12-May-17
Mapped Activities	4 Point(s)		

Final Indicator for Peterson/Reed Avenue			
Indicator Name	SEDIMENT (TSS)	Value	3.42
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (SHEET AND RILL)
Waterbody	Dry Creek		

Final Indicator for Peterson/Reed Avenue			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	3.76
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	BWSR CALC (SHEET AND RILL)
Waterbody	Dry Creek		

Final Indicator for Peterson/Reed Avenue			
Indicator Name	SOIL (EST. SAVINGS)	Value	16.50
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (SHEET AND RILL)

Waterbody	Dry Creek		
Final Indicator for Peterson/Reed Avenue			
Indicator Name	SEDIMENT (TSS)	Value	5.15
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (SHEET AND RILL)
Waterbody	Dry Creek		
Final Indicator for Peterson/Reed Avenue			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	8.13
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	BWSR CALC (SHEET AND RILL)
Waterbody	Dry Creek		
Final Indicator for Peterson/Reed Avenue			
Indicator Name	SOIL (EST. SAVINGS)	Value	24.8
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (SHEET AND RILL)
Waterbody	Dry Creek		

Activity Action - Peterson/Reed Avenue			
Practice	468 - Lined Waterway or Outlet	Count of Activities	1
Description	Lined waterway or outlet-rock lined < or equal to 6"		
Proposed Size / Units	116.00 LINEAR FEET	Lifespan	25 Years
Actual Size/Units	148.00 LINEAR FEET	Installed Date	12-May-17
Mapped Activities	1 Line(s)		

Final Indicator for Peterson/Reed Avenue			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	6
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	Dry Creek		
Final Indicator for Peterson/Reed Avenue			
Indicator Name	SEDIMENT (TSS)	Value	6
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	Dry Creek		

Activity Action - Peterson/Reed Avenue			
Practice	362 - Diversion	Count of Activities	2
Description	Earthen diversion		
Proposed Size / Units	955.00 LINEAR FEET	Lifespan	10 Years
Actual Size/Units	1,015.00 LINEAR FEET	Installed Date	12-May-17
Mapped Activities	2 Line(s)		

Activity Action - Peterson/Reed Avenue			
Practice	393 - Filter Strip	Count of Activities	2
Description	Filter strips across slope		
Proposed Size / Units	1,000.00 LINEAR FEET	Lifespan	10 Years
Actual Size/Units	1,015.00 LINEAR FEET	Installed Date	12-May-17
Mapped Activities	2 Polygon(s)		

Final Indicator for Peterson/Reed Avenue			
Indicator Name	SEDIMENT (TSS)	Value	12.15
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (FILTER STRIP)
Waterbody	Dry Creek		
Final Indicator for Peterson/Reed Avenue			
Indicator Name	SOIL (EST. SAVINGS)	Value	5.86
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (FILTER STRIP)
Waterbody	Dry Creek		
Final Indicator for Peterson/Reed Avenue			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	16.74
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	BWSR CALC (FILTER STRIP)
Waterbody	Dry Creek		
Final Indicator for Peterson/Reed Avenue			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	37.39
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	BWSR CALC (FILTER STRIP)
Waterbody	Dry Creek		
Final Indicator for Peterson/Reed Avenue			
Indicator Name	SEDIMENT (TSS)	Value	37.41
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (FILTER STRIP)
Waterbody	Dry Creek		

Final Indicator for Peterson/Reed Avenue			
Indicator Name	SOIL (EST. SAVINGS)	Value	12.79
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (FILTER STRIP)
Waterbody	Dry Creek		

Activity Action - Peterson/Reed Avenue Smart Ditch			
Practice	468 - Lined Waterway or Outlet	Count of Activities	1
Description	12" trapezoidal Smart Ditch ending in a large rock bowl that continues through 3 rock checks before entering another large rock bowl, before entering a culvert under the road.		
Proposed Size / Units	500.00 LINEAR FEET	Lifespan	25 Years
Actual Size/Units	510.00 LINEAR FEET	Installed Date	28-Sep-18
Mapped Activities	1 Line(s)		

Final Indicator for Peterson/Reed Avenue Smart Ditch			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	5.78
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	Dry Creek		

Final Indicator for Peterson/Reed Avenue Smart Ditch			
Indicator Name	SEDIMENT (TSS)	Value	5.78
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	Dry Creek		

Final Indicator for Peterson/Reed Avenue Smart Ditch			
Indicator Name	SOIL (EST. SAVINGS)	Value	25.08
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	Dry Creek		

Grant Activity - Project Development			
Description	These funds will be used to finish the remaining project development tasks, such as meeting with the landowners. Most of the project development has already been completed.		
Category	PROJECT DEVELOPMENT		
Start Date	13-Apr-15	End Date	09-Jan-17
Has Rates and Hours?	Yes		
Actual Results	<p>As of May 19, 2015 Meeting held with Amador Township to discuss the gully project.</p> <p>As of January 19, 2016 Project development was completed for the Sundeen/Amador Township project early in June. Contact has been made with the landowner of the Reed Avenue gully project. The landowner is interested in the project and is cooperating.</p> <p>As of January 9, 2017 Project development activities have been completed for the Reed Avenue project. All funding has been spent.</p>		

Grant Activity - Sundeen Gully			
Description	A gully has formed adjacent Quinlan Avenue as a result of agricultural runoff. A grassed waterway, three earthen diversions, and a 25 foot field border will be installed. The goal of the project is to meter out the runoff from the agricultural field so that it no longer causes erosion within the existing gully channel. The pollution reduction goals are 6 lbs of phosphorus and 6 tons of sediment per year. Engineering and construction check out will be completed by MM Engineering. A private contractor will be hired to install the practices.		
Category	AGRICULTURAL PRACTICES		
Start Date	1-May-15	End Date	24-Jul-15
Has Rates and Hours?	No		
Actual Results	A grassed waterway was installed in the road ditch area adjacent to the field edge where a large gully had formed. This project was complete. Remaining funds will be used for the Reed Avenue project as needed.		

Activity Action - Sundeen Gully			
Practice	412 - Grassed Waterway and Swales	Count of Activities	1
Description			
Proposed Size / Units	700.00 LINEAR FEET	Lifespan	10 Years
Actual Size/Units	700.00 LINEAR FEET	Installed Date	24-Jul-15
Mapped Activities	1 Polygon(s)		

Final Indicator for Sundeen Gully			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	20.4
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	St. Croix River		
Final Indicator for Sundeen Gully			
Indicator Name	SEDIMENT (TSS)	Value	20.4
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	St. Croix River		

Grant Activity - Technical/Engineering

Description	These funds will be used for surveying, plan development, and engineering to completed the designs for the gully stabilization projects. Engineering is completed on one of the projects. On the second project, engineering for the road portion of the project will be completed by the Chisago County Public Works engineer Joe Triplett, P.E. or Kyle Ludwig, P.E., and the engineering for the rest of the gully stabilization will be done by Michael Mayer, P.E. NRCS design standards will be followed.		
Category	TECHNICAL/ENGINEERING ASSISTANCE		
Start Date	6-Apr-15	End Date	20-Nov-18
Has Rates and Hours?	Yes		
Actual Results	<p>As of May 19, 2015 Design reviewed and approved for Sundeen project.</p> <p>As of January 19, 2016 Construction inspection and certification was completed for the Sundeen gully in July of 2015. Work has started on an early concept design for the Reed Avenue gully project.</p> <p>As of January 9, 2017 Surveying was completed for the Reed Avenue project. A draft design is complete and under review for final changes. Construction is expected to take place in 2017.</p> <p>As of June 13, 2017 Final certification and as builts are complete for the Reed Avenue project. The County has surveyed their part of the project but has not completed plans yet.</p> <p>As of January 4, 2018 The County is working to develop plans for the road reconstruction portion of the project and expects to install the practices in the summer of 2018.</p> <p>As of November 20, 2018 All of the County's match was recorded in the Construction activity. Project was certified by Kyle Ludwig, Assistant County Engineer (License #46021).</p>		

Grant Attachments

Document Name	Document Type	Description
03/31/2015 email work plan questions	Journal	Journal Dated - 04/01/2015
2015 Competitive Grant	Grant Agreement	2015 Competitive Grant - Chisago SWCD
2015 Competitive Grant executed	Grant Agreement	2015 Competitive Grant - Chisago SWCD
Agreement with County	Grant	2015 - Dry Creek Watershed Gully Stabilization Project
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 11/30/2018
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 01/19/2016
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 05/02/2016
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 01/09/2017
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 04/05/2017
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 11/20/2018
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 06/13/2017
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 05/08/2018
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 01/04/2018
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 11/30/2018
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 11/30/2018
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 07/03/2017
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 11/30/2018
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 12/04/2018
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 06/27/2017
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 06/20/2017
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 07/03/2017
AmadorTwp_Documents	Grant	2015 - Dry Creek Watershed Gully Stabilization Project
Application	Workflow Generated	Workflow Generated - Application - 09/22/2014
Dry Creek Watershed Gully Stabilization	Grant	2015 - Dry Creek Watershed Gully Stabilization Project
EXAMPLE Cost Share Contract	Grant	2015 - Dry Creek Watershed Gully Stabilization Project
Final Financial Report plus SmartDitch documents	Grant	2015 - Dry Creek Watershed Gully Stabilization Project
Financial Report 50%	Grant	2015 - Dry Creek Watershed Gully Stabilization Project
Peterson_Documents	Grant	2015 - Dry Creek Watershed Gully Stabilization Project
Sundeen_Documents	Grant	2015 - Dry Creek Watershed Gully Stabilization Project

Document Name	Document Type	Description
Work Plan	Workflow Generated	Workflow Generated - Work Plan - 01/28/2015
Work Plan	Workflow Generated	Workflow Generated - Work Plan - 03/27/2015
Work Plan	Workflow Generated	Workflow Generated - Work Plan - 04/01/2015
grantmap_12547_2014-09-15_02-35-31-PM.jpg	Grant	2015 - Dry Creek Watershed Gully Stabilization Project