



Grant All-Detail Report Targeted Watershed 2015

Grant Title - 2015 - Targeted Watershed (Chisago SWCD)

Grant ID - P15-3373

Organization - Chisago SWCD

Original Awarded Amount	\$887,632.00	Grant Execution Date	3/9/2015
Required Match Amount	\$221,908.00	Original Grant End Date	3/31/2019
Required Match %	25%	Grant Day To Day Contact	Craig Mell
Current Awarded Amount	\$887,632.00	Current End Date	3/31/2019

Budget Summary

	Budgeted	Spent	Balance Remaining*
Total Grant Amount	\$887,632.00	\$887,632.00	\$0.00
Total Match Amount	\$315,905.77	\$306,907.90	\$8,997.87
Total Other Funds	\$14,049.65	\$14,049.65	\$0.00
Total	\$1,217,587.42	\$1,208,589.55	\$8,997.87

**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	2015 - Targeted Watershed (Chisago SWCD)	\$37,028.23	\$37,028.23	10/16/2019	N
Agricultural Practices	Agricultural Practices	Current State Grant	2015 - Targeted Watershed (Chisago SWCD)	\$185,107.92	\$185,107.92	10/17/2019	N
Agricultural Practices	Agricultural Practices	Federal Funds		\$110,152.49	\$101,154.62	7/16/2019	Y

Activity Name	Activity Category	Source Type	Source Description	Budgeted	Spent	Last Transaction Date	Matching Fund
Agricultural Practices	Agricultural Practices	Local Fund	Chisago SWCD	\$5,000.00	\$5,000.00	12/12/2018	Y
Agricultural Practices	Agricultural Practices	Local Fund	LID	\$20,714.00	\$20,714.00	12/12/2018	Y
Livestock Waste Management	Livestock Waste Management	Current State Grant	2015 - Targeted Watershed (Chisago SWCD)	\$2,000.00	\$2,000.00	7/21/2016	N
Livestock Waste Management	Livestock Waste Management	Federal Funds		\$2,363.25	\$2,363.25	7/21/2016	Y
Non-Structural Management Practices	Non-Structural Management Practices	Current State Grant	2015 - Targeted Watershed (Chisago SWCD)	\$5,091.56	\$5,091.56	12/12/2018	N
Non-Structural Management Practices	Non-Structural Management Practices	Federal Funds		\$1,251.60	\$1,251.60	5/10/2016	Y
Non-Structural Management Practices	Non-Structural Management Practices	Local Fund	LID	\$1,900.00	\$1,900.00	12/12/2018	Y
Project Development	Project Development	Current State Grant	2015 - Targeted Watershed (Chisago SWCD)	\$45,000.00	\$45,000.00	4/6/2017	N
Quintin Letourneau TW AG 15-18	Agricultural Practices	Current State Grant	2015 - Targeted Watershed (Chisago SWCD)	\$0.00			N
Quintin Letourneau TW AG 15-18	Agricultural Practices	Other Funds	2018 - State Cost-Share Fund (Chisago SWCD)	\$8,844.00	\$8,844.00	9/11/2018	N
Regulations/Ordinances/Enforcement	Regulations/Ordinances/Enforcement	Current State Grant	2015 - Targeted Watershed (Chisago SWCD)	\$0.00			N
Regulations/Ordinances/Enforcement	Regulations/Ordinances/Enforcement	Local Fund		\$0.00			Y
Soil Erosion - 2017 Cost Share/Incentive Urban BMPs	Urban Stormwater Management Practices	Current State Grant	2015 - Targeted Watershed (Chisago SWCD)	\$0.00			N

Activity Name	Activity Category	Source Type	Source Description	Budgeted	Spent	Last Transaction Date	Matching Fund
Soil Erosion - 2017 Cost Share/Incentive Urban BMPs	Urban Stormwater Management Practices	Other Funds	2017 - SWCD Local Capacity Services (Chisago SWCD)	\$5,205.65	\$5,205.65	11/13/2018	N
Technical/Engineering	Technical/Engineering Assistance	Current State Grant	2015 - Targeted Watershed (Chisago SWCD)	\$368,379.00	\$368,379.00	10/16/2019	N
Technical/Engineering	Technical/Engineering Assistance	Local Fund		\$0.00			Y
Urban Stormwater Management Practices	Urban Stormwater Management Practices	Current State Grant	2015 - Targeted Watershed (Chisago SWCD)	\$236,635.29	\$236,635.29	7/15/2019	N
Urban Stormwater Management Practices	Urban Stormwater Management Practices	Local Fund	2015 - Targeted Watershed (Chisago SWCD)	\$81,620.43	\$81,620.43	1/9/2018	Y
Urban Stormwater Management Practices	Urban Stormwater Management Practices	Local Fund	LID	\$92,904.00	\$92,904.00	7/15/2019	Y
Wetland Restoration/Creation	Wetland Restoration/Creation	Current State Grant	2015 - Targeted Watershed (Chisago SWCD)	\$8,390.00	\$8,390.00	8/30/2016	N

Activity Details Summary

Activity Details	Total Action Count	Total Activity Mapped	Proposed Size / Unit	Actual Size / Unit
590 - Nutrient Management	1	1	8 COUNT	COUNT
638 - Water and Sediment Control Basin	1	1	500 LINEAR FEET	500 LINEAR FEET
468 - Lined Waterway or Outlet	1	1	180 LINEAR FEET	180 LINEAR FEET

Activity Details	Total Action Count	Total Activity Mapped	Proposed Size / Unit	Actual Size / Unit
412 - Grassed Waterway and Swales	1	1	556 LINEAR FEET	505 LINEAR FEET
600 - Terrace	1	1	288 LINEAR FEET	288 LINEAR FEET
638 - Water and Sediment Control Basin	2	2	881 LINEAR FEET	911 LINEAR FEET
804M - Permeable Surfaces	1	1	0.19 AC	0.19 AC
412 - Grassed Waterway and Swales	1	1	64 LINEAR FEET	64 LINEAR FEET
712M - Bioretention Basin	4	4	0.07 AC	0.07 AC
638 - Water and Sediment Control Basin	2	2	463 LINEAR FEET	535 LINEAR FEET
638 - Water and Sediment Control Basin	2	2	477 LINEAR FEET	454 LINEAR FEET
468 - Lined Waterway or Outlet	1	1	100 LINEAR FEET	90 LINEAR FEET
638 - Water and Sediment Control Basin	4	4	770 LINEAR FEET	770 LINEAR FEET
412 - Grassed Waterway and Swales	1	1	890 LINEAR FEET	890 LINEAR FEET
712M - Bioretention Basin	2	2	0.02 AC	0.02 AC
472 - Access Control	1	1	1350 LINEAR FEET	1350 LINEAR FEET
468 - Lined Waterway or Outlet	1	1	0.04 AC	0.03 AC
412 - Grassed Waterway and Swales	1	1	400 LINEAR FEET	340 LINEAR FEET
638 - Water and Sediment Control Basin	1	1	300 LINEAR FEET	270 LINEAR FEET
712M - Bioretention Basin	2	2	0.5 AC	0.05 AC
712M - Bioretention Basin	1	1	0.04 AC	0.04 AC
638 - Water and Sediment Control Basin	1	1	160 LINEAR FEET	173 LINEAR FEET
412 - Grassed Waterway and Swales	1	1	300 LINEAR FEET	300 LINEAR FEET
329B - Conservation Tillage	1	1	8 AC	8 AC
638 - Water and Sediment Control Basin	2	2	2 COUNT	2 COUNT
638 - Water and Sediment Control Basin	1	1	324 LINEAR FEET	324 LINEAR FEET

Activity Details	Total Action Count	Total Activity Mapped	Proposed Size / Unit	Actual Size / Unit
638 - Water and Sediment Control Basin	1	1	225 LINEAR FEET	251 LINEAR FEET
638 - Water and Sediment Control Basin	1	1	578 LINEAR FEET	578 LINEAR FEET
638 - Water and Sediment Control Basin	1	1	200 LINEAR FEET	195 LINEAR FEET
638 - Water and Sediment Control Basin	1	1	91 LINEAR FEET	95 LINEAR FEET
587 - Structure for Water Control	1	1	333 COUNT	333 COUNT
468 - Lined Waterway or Outlet	1	1	650 LINEAR FEET	650 LINEAR FEET
362 - Diversion	1	1	195 LINEAR FEET	195 LINEAR FEET
468 - Lined Waterway or Outlet	1	1	225 LINEAR FEET	225 LINEAR FEET
412 - Grassed Waterway and Swales	1	1	345 LINEAR FEET	380 LINEAR FEET
587 - Structure for Water Control	2	2	1 COUNT	1 COUNT
155M - Storm Water Retention Basins	2	2	0.01 AC	0.01 AC
638 - Water and Sediment Control Basin	1	1	307 LINEAR FEET	307 LINEAR FEET
638 - Water and Sediment Control Basin	1	1	299 LINEAR FEET	305 LINEAR FEET
638 - Water and Sediment Control Basin	1	1	122 LINEAR FEET	122 LINEAR FEET
638 - Water and Sediment Control Basin	1	1	101 LINEAR FEET	104 LINEAR FEET
638 - Water and Sediment Control Basin	1	1	240 LINEAR FEET	267 LINEAR FEET
412 - Grassed Waterway and Swales	1	1	251 LINEAR FEET	254 LINEAR FEET
558 - Roof Runoff Management	1	1	1 COUNT	1 COUNT
155M - Storm Water Retention Basins	1	1	1 COUNT	1 COUNT
590 - Nutrient Management	1	1	158400 LINEAR FEET	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)	770.99	TONS/YR
SOIL (EST. SAVINGS)	554.06	TONS/YR
NITROGEN	90.00	LBS/YR
VOLUME REDUCED (ACRE-FEET/YEAR)	5.66	ACRE-FEET/YR
PHOSPHORUS (EST. REDUCTION)	806.11	LBS/YR
PHOSPHORUS FEEDLOT (EST. REDUCTION)	5.00	LBS/YR

Grant Activity

Grant Activity - Administration

Description

Objective 1: Administration

Task 1: Execute Grant Agreement and Work Plan

Task 2: Fiscal Accounting and Record Keeping – Processing contracts, issuing reimbursement funds, maintaining project folders.

Task 3: Grant Reporting – Entering into elink.

Task 4: BWSR Work Plan Meetings – Semi-annual meetings with BWSR staff to assess progress of grant

Person(s) Responsible: Chisago SWCD Staff, Chisago SWCD Board, and BWSR Staff

Start Date

18-Mar-15

End Date

22-Oct-19

Has Rates and Hours?

Actual Results

Yes

As of May 19, 2015

Contracts developed and approved by SWCD Board for County Road 20, Matt Erickson, Tony Peters, Pat Eichten, and Lakehouse Restaurant. Urban kickoff meeting held on 4/14/15.

As of December 4, 2015

Developed contracts for Government Center employee parking lot and Center City-Nelson Court gully projects. Board approved payment for Chisago County Public Works, Matt Erickson, Tony Peters, Pat Eichten, Lakehouse Restaurant, Chisago County for Government Center parking lot, and Center City for Nelson Court gully. Held rural kickoff meeting on 6/17/15 with four people attending and all interested in projects.

As of January 19, 2016

SWCD board approved certification of Mobeck Avenue project and Busch Avenue project. Reimbursement was issued for both projects on December 10, 2015. All eLINK reporting is up to date.

As of November 8, 2016

eLINK reporting is up to date. Reimbursement was issued for Chisago Lakes High School, Olinda Trail gully stabilization, and Scott Lund gully stabilization.

As of January 2017

Contracts and payment vouchers have been finalized for Brian Olson, Kent Reed, Craig Peltier, Justin Wilson, and Bruce Olson. Elink reporting is up to date.

As of January 4, 2018

Contract and payment vouchers are finalized for John Lelwica, Nelson Bloom, David Thompson, Pat Eichten (2 projects), and Max Gustafson. Elink reporting is up to date. We will utilize funds from technical/engineering category to cover the overage in administration and will submit for a work plan amendment if the amount reaches over 10%.

As of January 8, 2019

Contracts and payment vouchers were completed for Byron Dalheimer, Lee Nelson, Quintin Letourneau, and Donna Peterson (Carl Lindberg Trust), as well as City of Center City Pioneer Lake Outlet, Center City Lakefront Rain Garden, and Newell Alley in Lindstrom. Elink reporting is up to date.

See eLink attachment October 22, 2019

Description

Task 1: Agricultural Practices

- 2015 BMP Implementation – Install the following shovel ready projects: Peters WASCOD (Green Lake), Erickson WASCOD, Critical Area Seeding, Permanent Vegetation (Green Lake), Eichten 2 WASCODs, Grassed Waterway (Linn Lake), Chisago County County Road 20 Rock Lined Waterway (North Center Lake), and Chisago County County Road 24 Rock Lined Waterway (Bloomquist Creek/Sunrise River).
- 2016-2018 BMP Implementation – Our goal is to utilize our completed rural stormwater assessments to identify and install approximately 20 agricultural BMPs for a combined total phosphorus reduction of 500 pounds per year (including 2015 projects). Potential BMPs include water and sediment control basins, filter strips, waterways, cover crops, rotational grazing, permanent vegetation plantings, use-exclusion, gully stabilization projects, etc.

Category	AGRICULTURAL PRACTICES		
Start Date	14-Apr-15	End Date	22-Oct-19
Has Rates and Hours?	No		
Actual Results	<p>As of May 19, 2015</p> <p>Funds have been encumbered for Matt Erickson, CR20/Doherty, Tony Peters, and Pat Eichten projects. Project construction expected as soon as possible depending on weather.</p> <p>As of January 19, 2016</p> <p>Construction complete on Matt Erickson, County Road 20/Doherty, Tony Peters, and Pat Eichten projects.</p> <p>As of November 8, 2016</p> <p>Construction has been completed for Kent Reed, Craig Peltier, and Brian Olson. The Lelwica project, which includes Water and sediment control basin, grassed waterways, and diversions, has a completed design and a contractor has been hired. Due to wet weather, construction has been delayed. The SWCD board approved a contract amendment to extend the contract 1 year in case construction is not able to go this fall.</p> <p>As of January 9, 2017</p> <p>The Lelwica project has been completed except for minor grading and adjustments in spring due to the cold weather during construction.</p> <p>As of July 19, 2017</p> <p>Projects (Nelson Bloom, Pat Eichten Home place, Pat Eichten Mohler, and David Thompson) are completed, certified, and payment has been approved by the SWCD Board.</p> <p>As of January 4, 2018</p> <p>The Max Gustafson fencing project was completed in September and has been certified.</p> <p>As of January 8, 2019</p> <p>Byron Dahlheimer, Lee Nelson, Quintin Letourneau, and Donna Peterson projects were completed and certified. Virginia Mitchell's project is design but not yet installed.</p> <p>See eLink attachment October 22, 2019</p>		

Activity Action - AG 15-1 Matt Erickson			
Practice	638 - Water and Sediment Control Basin	Count of Activities	1
Description			
Proposed Size / Units	160.00 LINEAR FEET	Lifespan	10 Years
Actual Size/Units	173.00 LINEAR FEET	Installed Date	24-Sep-15
Mapped Activities	1 Point(s)		

Final Indicator for AG 15-1 Matt Erickson			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	17.3
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	Green Lake		
Final Indicator for AG 15-1 Matt Erickson			
Indicator Name	SEDIMENT (TSS)	Value	17.3
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	Green Lake		

Activity Action - AG 15-2 CR 20/Doherty			
Practice	468 - Lined Waterway or Outlet	Count of Activities	1
Description			
Proposed Size / Units	100.00 LINEAR FEET	Lifespan	10 Years
Actual Size/Units	90.00 LINEAR FEET	Installed Date	7-Jul-15
Mapped Activities	1 Line(s)		

Final Indicator for AG 15-2 CR 20/Doherty			
Indicator Name	SEDIMENT (TSS)	Value	0.2
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	North Center Lake		
Final Indicator for AG 15-2 CR 20/Doherty			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	0.2
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	North Center Lake		

Activity Action - AG 15-3 Tony Peters			
Practice	638 - Water and Sediment Control Basin	Count of Activities	1
Description			
Proposed Size / Units	240.00 LINEAR FEET	Lifespan	10 Years
Actual Size/Units	267.00 LINEAR FEET	Installed Date	24-Sep-15
Mapped Activities	1 Point(s)		

Final Indicator for AG 15-3 Tony Peters			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	51.9
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	Green Lake		
Final Indicator for AG 15-3 Tony Peters			
Indicator Name	SEDIMENT (TSS)	Value	51.9
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	Green Lake		

Activity Action - AG 15-4 Pat Eichten WASCOB			
Practice	638 - Water and Sediment Control Basin	Count of Activities	1
Description			
Proposed Size / Units	300.00 LINEAR FEET	Lifespan	10 Years
Actual Size/Units	270.00 LINEAR FEET	Installed Date	2-Jun-15
Mapped Activities	1 Point(s)		

Final Indicator for AG 15-4 Pat Eichten WASCOB			
Indicator Name	SEDIMENT (TSS)	Value	12
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	South Center Lake		
Final Indicator for AG 15-4 Pat Eichten WASCOB			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	12
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	South Center Lake		

Activity Action - AG 15-5 Pat Eichten GWW			
Practice	412 - Grassed Waterway and Swales	Count of Activities	1
Description			
Proposed Size / Units	400.00 LINEAR FEET	Lifespan	10 Years
Actual Size/Units	340.00 LINEAR FEET	Installed Date	3-Jun-15
Mapped Activities	1 Polygon(s)		

Final Indicator for AG 15-5 Pat Eichten GWW

Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	14
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	South Center Lake		

Final Indicator for AG 15-5 Pat Eichten GWW

Indicator Name	SEDIMENT (TSS)	Value	14
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	South Center Lake		

Activity Action - AG 15-6 Brian Olson			
Practice	362 - Diversion	Count of Activities	1
Description	A diversion was installed to direct water into a grassed waterway, which was installed in an area where active erosion was occurring in an agricultural field.		
Proposed Size / Units	195.00 LINEAR FEET	Lifespan	10 Years
Actual Size/Units	195.00 LINEAR FEET	Installed Date	31-May-16
Mapped Activities	1 Line(s)		

Final Indicator for AG 15-6 Brian Olson

Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	3
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	North Center Lake		

Final Indicator for AG 15-6 Brian Olson

Indicator Name	SEDIMENT (TSS)	Value	3
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)

Waterbody	North Center Lake
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Activity Action - AG 15-7 Kent Reed			
Practice	638 - Water and Sediment Control Basin	Count of Activities	2
Description	Two water and sediment control basins and a diversion were installed in an agricultural field with perennial erosion problems. A tile drains both WASCObS and outlets into an existing ditch.		
Proposed Size / Units	2.00 COUNT	Lifespan	10 Years
Actual Size/Units	2.00 COUNT	Installed Date	31-May-16
Mapped Activities	2 Point(s)		

Final Indicator for AG 15-7 Kent Reed			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	31
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	North Center Lake		

Final Indicator for AG 15-7 Kent Reed			
Indicator Name	SEDIMENT (TSS)	Value	31
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	North Center Lake		

Activity Action - AG 15-8 Craig Peltier			
Practice	638 - Water and Sediment Control Basin	Count of Activities	1
Description	A water and sediment control basin with an underground outlet was installed in an agricultural field where perennial gully erosion was occurring.		
Proposed Size / Units	200.00 LINEAR FEET	Lifespan	10 Years
Actual Size/Units	195.00 LINEAR FEET	Installed Date	17-May-16
Mapped Activities	1 Point(s)		

Final Indicator for AG 15-8 Craig Peltier			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	4
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	North Center Lake		

Final Indicator for AG 15-8 Craig Peltier			
Indicator Name	SEDIMENT (TSS)	Value	4
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	North Center Lake		

Activity Action - AG 15-9 John Lelwica			
Practice	638 - Water and Sediment Control Basin	Count of Activities	4
Description	Project was installed in December of 2017. Final grading and correction of any settling will be done in the spring after soils thaw because the project was constructed during cold weather.		
Proposed Size / Units	770.00 LINEAR FEET	Lifespan	10 Years
Actual Size/Units	770.00 LINEAR FEET	Installed Date	16-Feb-17
Mapped Activities	4 Point(s)		

Final Indicator for AG 15-9 John Lelwica			
Indicator Name	SEDIMENT (TSS)	Value	38
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	Kroon Lake		

Final Indicator for AG 15-9 John Lelwica			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	38
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	Kroon Lake		

Activity Action - AG 15-10 Nelson Bloom			
Practice	638 - Water and Sediment Control Basin	Count of Activities	2
Description	2 farmable WASCObS. SWCD Board encumbered funds 4/11/17		
Proposed Size / Units	463.00 LINEAR FEET	Lifespan	10 Years
Actual Size/Units	535.00 LINEAR FEET	Installed Date	19-Jun-17
Mapped Activities	2 Point(s)		

Final Indicator for AG 15-10 Nelson Bloom			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	47.17

Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	Peterson Lake		
Final Indicator for AG 15-10 Nelson Bloom			
Indicator Name	SOIL (EST. SAVINGS)	Value	47.17
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	Peterson Lake		
Final Indicator for AG 15-10 Nelson Bloom			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	47.17
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	Peterson lake		

Activity Action - AG 15-11 David Thompson			
Practice	638 - Water and Sediment Control Basin	Count of Activities	1
Description	SWCD Board encumbered funds 4/11/17		
Proposed Size / Units	91.00 LINEAR FEET	Lifespan	10 Years
Actual Size/Units	95.00 LINEAR FEET	Installed Date	12-May-17
Mapped Activities	1 Point(s)		

Final Indicator for AG 15-11 David Thompson			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	51.09
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	Spider Lake		
Final Indicator for AG 15-11 David Thompson			
Indicator Name	SEDIMENT (TSS)	Value	51.09
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	Spider Lake		
Final Indicator for AG 15-11 David Thompson			
Indicator Name	SOIL (EST. SAVINGS)	Value	160.4
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	Spider Lake		

Activity Action - AG 15-11 David Thompson Waterway			
Practice	468 - Lined Waterway or Outlet	Count of Activities	1
Description	SWCD Board encumbered 4/11/17		
Proposed Size / Units	0.04 AC	Lifespan	10 Years
Actual Size/Units	0.03 AC	Installed Date	12-May-17
Mapped Activities	1 Line(s)		

Final Indicator for AG 15-11 David Thompson Waterway			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	10.42
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	Spider Lake		
Final Indicator for AG 15-11 David Thompson Waterway			
Indicator Name	SEDIMENT (TSS)	Value	10.42
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	Spider Lake		
Final Indicator for AG 15-11 David Thompson Waterway			
Indicator Name	SOIL (EST. SAVINGS)	Value	32.73
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	Spider Lake		

Activity Action - AG 15-12 Eichten Home Site			
Practice	638 - Water and Sediment Control Basin	Count of Activities	1
Description	SWCD Board encumbered funds 4/11/17		
Proposed Size / Units	324.00 LINEAR FEET	Lifespan	10 Years
Actual Size/Units	324.00 LINEAR FEET	Installed Date	19-Jun-17
Mapped Activities	1 Point(s)		

Final Indicator for AG 15-12 Eichten Home Site			
Indicator Name	SOIL (EST. SAVINGS)	Value	16.28
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	Linn Lake		

Final Indicator for AG 15-12 Eichten Home Site			
Indicator Name	SEDIMENT (TSS)	Value	3.94
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	Linn Lake		
Final Indicator for AG 15-12 Eichten Home Site			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	3.94
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	Linn Lake		

Activity Action - AG 15-13 Eichten Mohler Site			
Practice	412 - Grassed Waterway and Swales	Count of Activities	1
Description	SWCD Board encumbered funds 4/11/17		
Proposed Size / Units	64.00 LINEAR FEET	Lifespan	10 Years
Actual Size/Units	64.00 LINEAR FEET	Installed Date	19-Jun-17
Mapped Activities	1 Polygon(s)		

Final Indicator for AG 15-13 Eichten Mohler Site			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	15.13
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	Linn Lake		
Final Indicator for AG 15-13 Eichten Mohler Site			
Indicator Name	SEDIMENT (TSS)	Value	15.13
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	Linn Lake		
Final Indicator for AG 15-13 Eichten Mohler Site			
Indicator Name	SOIL (EST. SAVINGS)	Value	15.13
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	Linn Lake		

Activity Action - AG 15-14 Max Gustafson			
Practice	472 - Access Control	Count of Activities	1
Description	Fencing to keep cattle out of South Center Lake. SWCD Board encumbered funds 4/11/2017		
Proposed Size / Units	1,350.00 LINEAR FEET	Lifespan	10 Years
Actual Size/Units	1,350.00 LINEAR FEET	Installed Date	12-Sep-17
Mapped Activities	1 Polygon(s)		

Final Indicator for AG 15-14 Max Gustafson			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	27
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	MINNFARM
Waterbody	Peterson Lake		

Activity Action - AG 15-15 Byron Dahlheimer			
Practice	638 - Water and Sediment Control Basin	Count of Activities	2
Description	2 WASCOBs		
Proposed Size / Units	881.00 LINEAR FEET	Lifespan	10 Years
Actual Size/Units	911.00 LINEAR FEET	Installed Date	6-Jun-18
Mapped Activities	2 Point(s)		

Final Indicator for AG 15-15 Byron Dahlheimer			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	10.96
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	BWSR CALC (SHEET AND RILL)
Waterbody	North Center Lake		

Final Indicator for AG 15-15 Byron Dahlheimer			
Indicator Name	SEDIMENT (TSS)	Value	10.8
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (SHEET AND RILL)
Waterbody	North Center Lake		

Final Indicator for AG 15-15 Byron Dahlheimer			
Indicator Name	SOIL (EST. SAVINGS)	Value	10.8
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (SHEET AND RILL)
Waterbody	North Center Lake		

Activity Action - AG 15-16 Virginia Mitchell			
Practice	412 - Grassed Waterway and Swales	Count of Activities	1
Description	Diversion and grassed waterway		
Proposed Size / Units	890.00 LINEAR FEET	Lifespan	10 Years
Actual Size/Units	890.00 LINEAR FEET	Installed Date	5-Jun-19
Mapped Activities	1 Polygon(s)		

Final Indicator for AG 15-16 Virginia Mitchell

Indicator Name	SOIL (EST. SAVINGS)	Value	0.48
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	RUSLE2 (UPDATED)
Waterbody	Chisago Lakes Chain of Lakes Watershed		

Final Indicator for AG 15-16 Virginia Mitchell

Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	14.03
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	Chisago Lakes Chain of Lakes Watershed		

Final Indicator for AG 15-16 Virginia Mitchell

Indicator Name	SEDIMENT (TSS)	Value	16.5
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	Chisago Lakes Chain of Lakes Watershed		

Final Indicator for AG 15-16 Virginia Mitchell

Indicator Name	SOIL (EST. SAVINGS)	Value	16.5
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	Chisago Lakes Chain of Lakes Watershed		

Activity Action - AG 15-17 Lee Nelson WASCOB

Practice	638 - Water and Sediment Control Basin	Count of Activities	2
Description	2 WASCOBs		
Proposed Size / Units	477.00 LINEAR FEET	Lifespan	10 Years
Actual Size/Units	454.00 LINEAR FEET	Installed Date	5-Jun-18
Mapped Activities	2 Point(s)		

Final Indicator for AG 15-17 Lee Nelson WASCOB			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	15.75
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	BWSR CALC (SHEET AND RILL)
Waterbody	South Lindstrom Lake		
Final Indicator for AG 15-17 Lee Nelson WASCOB			
Indicator Name	SEDIMENT (TSS)	Value	10.93
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (SHEET AND RILL)
Waterbody	South Lindstrom Lake		
Final Indicator for AG 15-17 Lee Nelson WASCOB			
Indicator Name	SOIL (EST. SAVINGS)	Value	20.84
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (SHEET AND RILL)
Waterbody	South Lindstrom Lake		

Activity Action - AG 15-17 Lee Nelson GWW			
Practice	412 - Grassed Waterway and Swales	Count of Activities	1
Description	Grassed waterway		
Proposed Size / Units	556.00 LINEAR FEET	Lifespan	10 Years
Actual Size/Units	505.00 LINEAR FEET	Installed Date	7-Jun-18
Mapped Activities	1 Polygon(s)		

Final Indicator for AG 15-17 Lee Nelson GWW			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	34.47
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	BWSR CALC (FILTER STRIP)
Waterbody	South Lindstrom Lake		
Final Indicator for AG 15-17 Lee Nelson GWW			
Indicator Name	SEDIMENT (TSS)	Value	25.7
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (FILTER STRIP)
Waterbody	South Lindstrom Lake		
Final Indicator for AG 15-17 Lee Nelson GWW			
Indicator Name	SOIL (EST. SAVINGS)	Value	0.45
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (FILTER STRIP)
Waterbody	South Lindstrom Lake		

Activity Action - AG 15-18 Quintin Letourneau			
Practice	638 - Water and Sediment Control Basin	Count of Activities	1
Description	WASCOB		
Proposed Size / Units	225.00 LINEAR FEET	Lifespan	10 Years
Actual Size/Units	251.00 LINEAR FEET	Installed Date	23-Nov-18
Mapped Activities	1 Point(s)		

Final Indicator for AG 15-18 Quintin Letourneau			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	4.32
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	BWSR CALC (SHEET AND RILL)
Waterbody	Mattson Lake		
Final Indicator for AG 15-18 Quintin Letourneau			
Indicator Name	SEDIMENT (TSS)	Value	3.19
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (SHEET AND RILL)
Waterbody	Mattson Lake		
Final Indicator for AG 15-18 Quintin Letourneau			
Indicator Name	SOIL (EST. SAVINGS)	Value	6.44
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (SHEET AND RILL)
Waterbody	Mattson Lake		

Activity Action - AG 15-18 Quintin Letourneau GWW			
Practice	412 - Grassed Waterway and Swales	Count of Activities	1
Description	Grassed waterway		
Proposed Size / Units	251.00 LINEAR FEET	Lifespan	10 Years
Actual Size/Units	254.00 LINEAR FEET	Installed Date	23-Nov-18
Mapped Activities	1 Polygon(s)		

Final Indicator for AG 15-18 Quintin Letourneau GWW			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	24.2
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	BWSR CALC (SHEET AND RILL)
Waterbody	Mattson Lake		
Final Indicator for AG 15-18 Quintin Letourneau GWW			
Indicator Name	SEDIMENT (TSS)	Value	14.25
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (SHEET AND RILL)

Waterbody	Mattson Lake		
Final Indicator for AG 15-18 Quintin Letourneau GWW			
Indicator Name	SOIL (EST. SAVINGS)	Value	28.8
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (SHEET AND RILL)
Waterbody	Mattson Lake		

Activity Action - AG 15-19 Donna Peterson (Carl Lindberg Trust)			
Practice	638 - Water and Sediment Control Basin	Count of Activities	1
Description	WASCOB		
Proposed Size / Units	578.00 LINEAR FEET	Lifespan	10 Years
Actual Size/Units	578.00 LINEAR FEET	Installed Date	4-Dec-18
Mapped Activities	1 Point(s)		

Final Indicator for AG 15-19 Donna Peterson (Carl Lindberg Trust)			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	42.71
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	BWSR CALC (SHEET AND RILL)
Waterbody	Green Lake		

Final Indicator for AG 15-19 Donna Peterson (Carl Lindberg Trust)			
Indicator Name	SEDIMENT (TSS)	Value	26.22
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (SHEET AND RILL)
Waterbody	Green Lake		

Final Indicator for AG 15-19 Donna Peterson (Carl Lindberg Trust)			
Indicator Name	SOIL (EST. SAVINGS)	Value	63.14
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (SHEET AND RILL)
Waterbody	Green Lake		

Activity Action - AG 15-20 Eichten (Mom's) WASCOB			
Practice	638 - Water and Sediment Control Basin	Count of Activities	1
Description	Berm, no more than 4FT tall, grassed		
Proposed Size / Units	307.00 LINEAR FEET	Lifespan	10 Years
Actual Size/Units	307.00 LINEAR FEET	Installed Date	13-Aug-19
Mapped Activities	1 Point(s)		

Final Indicator for AG 15-20 Eichten (Mom's) WASCOB			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	9.86
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	Chisago Lakes Chain of Lakes Watershed		
Final Indicator for AG 15-20 Eichten (Mom's) WASCOB			
Indicator Name	SEDIMENT (TSS)	Value	8.58
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	Chisago Lakes Chain of Lakes Watershed		
Final Indicator for AG 15-20 Eichten (Mom's) WASCOB			
Indicator Name	SOIL (EST. SAVINGS)	Value	24.50
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	Chisago Lakes Chain of Lakes Watershed		

Activity Action - AG 15-21 Eichten (Jensen)			
Practice	600 - Terrace	Count of Activities	1
Description			
Proposed Size / Units	288.00 LINEAR FEET	Lifespan	10 Years
Actual Size/Units	288.00 LINEAR FEET	Installed Date	13-Aug-19
Mapped Activities	1 Polygon(s)		

Final Indicator for AG 15-21 Eichten (Jensen)			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	1.41
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	Chisago Lakes Chain of Lakes Watershed		
Final Indicator for AG 15-21 Eichten (Jensen)			
Indicator Name	SEDIMENT (TSS)	Value	1.23
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	Chisago Lakes Chain of Lakes Watershed		
Final Indicator for AG 15-21 Eichten (Jensen)			
Indicator Name	SOIL (EST. SAVINGS)	Value	7.00
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)

Waterbody	Chisago Lakes Chain of Lakes Watershed
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Activity Action - AG 15-22 Dale Fredell WASC OB			
Practice	638 - Water and Sediment Control Basin	Count of Activities	1
Description	less than 4FT tall, grassed		
Proposed Size / Units	101.00 LINEAR FEET	Lifespan	10 Years
Actual Size/Units	104.00 LINEAR FEET	Installed Date	2-Jul-19
Mapped Activities	1 Point(s)		

Final Indicator for AG 15-22 Dale Fredell WASC OB			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	2.21
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	Kroon Lake		

Final Indicator for AG 15-22 Dale Fredell WASC OB			
Indicator Name	SOIL (EST. SAVINGS)	Value	1.93
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	Kroon Lake		

Final Indicator for AG 15-22 Dale Fredell WASC OB			
Indicator Name	SEDIMENT (TSS)	Value	1.93
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	Kroon Lake		

Activity Action - AG 15-22 Dale Fredell WASC OB-Farmed			
Practice	638 - Water and Sediment Control Basin	Count of Activities	1
Description	Between 4-6FT tall - Farmed		
Proposed Size / Units	299.00 LINEAR FEET	Lifespan	10 Years
Actual Size/Units	305.00 LINEAR FEET	Installed Date	2-Jul-19
Mapped Activities	1 Point(s)		

Final Indicator for AG 15-22 Dale Fredell WASCOB-Farmed			
Indicator Name	SOIL (EST. SAVINGS)	Value	4.4
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	RUSLE2 (UPDATED)
Waterbody	Kroon Lake		
Final Indicator for AG 15-22 Dale Fredell WASCOB-Farmed			
Indicator Name	SEDIMENT (TSS)	Value	6.7
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	RUSLE2 (UPDATED)
Waterbody	Kroon Lake		
Final Indicator for AG 15-22 Dale Fredell WASCOB-Farmed			
Indicator Name	SEDIMENT (TSS)	Value	17.5
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	Kroon Lake		
Final Indicator for AG 15-22 Dale Fredell WASCOB-Farmed			
Indicator Name	SOIL (EST. SAVINGS)	Value	17.50
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	Kroon Lake		
Final Indicator for AG 15-22 Dale Fredell WASCOB-Farmed			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	20.13
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	Kroon Lake		

Activity Action - AG 15-23 Mattson GWW			
Practice	412 - Grassed Waterway and Swales	Count of Activities	1
Description			
Proposed Size / Units	345.00 LINEAR FEET	Lifespan	10 Years
Actual Size/Units	380.00 LINEAR FEET	Installed Date	17-Oct-19
Mapped Activities	1 Polygon(s)		

Final Indicator for AG 15-23 Mattson GWW			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	16.91
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	Chisago Lakes Chain of Lakes Watershed		

Final Indicator for AG 15-23 Mattson GWW			
Indicator Name	SEDIMENT (TSS)	Value	14.70
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	Chisago Lakes Chain of Lakes Watershed		
Final Indicator for AG 15-23 Mattson GWW			
Indicator Name	SOIL (EST. SAVINGS)	Value	42.00
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	Chisago Lakes Chain of Lakes Watershed		

Grant Activity - Livestock Waste Management			
Description	Task 2: Livestock Waste Management Practices – Our goal is to utilize our completed rural stormwater retrofit assessments to identify and install approximately 3 livestock waste management BMPs, such as use exclusion, nutrient management planning, filter strips, agricultural waste storage facility, clean water diversion, manure transfer, roof runoff structure, etc. for a combined total phosphorus reduction of 20 pounds per year.		
Category	LIVESTOCK WASTE MANAGEMENT		
Start Date	11-Aug-15	End Date	13-Jan-17
Has Rates and Hours?	No		
Actual Results	<p>As of January 19, 2016 Funds encumbered for roof runoff and clean water diversion in feedlot for Justin Wilson.</p> <p>As of November 8, 2016 Project was completed June 29, 2016. The SWCD Board approved the practice certification and cost share payment.</p> <p>As of January 9, 2017 WORK PLAN AMENDMENT Approved by Brad Wozney 1/6/2017 \$18,000 balance from grant transferred to Urban Stormwater Management. One project has been completed with these funds and we currently have nothing else scheduled. If we do have something that comes up after we transfer funds we could utilize our Agricultural Practice funds to complete the project.</p>		

Activity Action - Justin Wilson			
Practice	558 - Roof Runoff Management	Count of Activities	1
Description	Gutters for clean water diversion out of feedlot.		
Proposed Size / Units	1.00 COUNT	Lifespan	10 Years
Actual Size/Units	1.00 COUNT	Installed Date	29-Jun-16
Mapped Activities	1 Point(s)		

Final Indicator for Justin Wilson			
Indicator Name	PHOSPHORUS FEEDLOT (EST. REDUCTION)	Value	5
Indicator Subcategory/Units	MinnFARM LBS/YR	Calculation Tool	MINNFARM
Waterbody	South Lindstrom Lake		

Grant Activity - Non-Structural Management Practices

<p>Description</p>	<p>Task 3: Non-Structural Management Practices – Provide incentive payments for rural BMPs including cover crops, nutrient management, no-till farming, permanent vegetation plantings. Payment rates not to exceed current USDA payment rates. Provide incentive payments to the cities of Lindstrom, Center City, and Chisago City for targeted urban street sweeping. Payment rate \$200-400 per curb mile. Our goal is to reduce phosphorus by a combined 100 pounds per year.</p>		
<p>Category</p>	<p>NON-STRUCTURAL MANAGEMENT PRACTICES</p>		
<p>Start Date</p>	<p>9-Jun-15</p>	<p>End Date</p>	<p>22-Oct-19</p>
<p>Has Rates and Hours?</p>	<p>No</p>		
<p>Actual Results</p>	<p>January 19, 2016 SWCD staff have contacted city administrators of various cities within the county about a street sweeping incentive payment. No city has agreed to anything. SWCD staff have contacted ag producers to discuss incentive payments for no-till or cover cropping. There has been some interest, but at this point no one has agreed to a contract.</p> <p>April 7, 2016 "BWSR has determined for your FY15 CWF Targeted Watershed Demo grant that the “permanent hay” practice as prescribed by the NRCS practice standard which can include non-native species is an eligible practice with caveats (see original email).</p> <p>April 11, 2016 "BWSR has determined that the use of this FlexStorm product with the proposed (appropriate) level of inspection and maintenance is an eligible practice for the FY15 Targeted Watershed grant. We advise that ultimately these types of products be part of a treatment train of practices to maximize their pollutant reduction effectiveness and reduce frequency of required maintenance. If possible please track required maintenance frequency and pounds of sediment so that we can assess the viability of the product and its applicability for other urban settings.</p> <p>November 8, 2016 Max Gustafson's hay planting was completed in early 2016 and the SWCD Board approved reimbursement. The Center City Council has approved installing 8 to 10 inlet protection units in the city. The City of Lindstrom Council approved enhanced street sweeping. They are currently doing increased fall sweeping.</p> <p>January 9, 2017 City of Lindstrom has been reimbursed for enhanced street sweeping of 11 miles.</p> <p>WORK PLAN AMENDMENT Approved by Brad Wozney 1/6/2017 Transfer \$8,273.24 to Urban Stormwater Management. We currently have one completed project and two incentive contracts that have two years left of payment. We do not anticipate any additional contracts.</p> <p>Continued in attachments.</p>		

Activity Action - Max Gustafson Hay Planting			
Practice	329B - Conservation Tillage	Count of Activities	1
Description	Forage and biomass planting (512). Soil loss before 10.0 ton/ac; after 0.54 ton/ac.		
Proposed Size / Units	8.00 AC	Lifespan	10 Years
Actual Size/Units	8.00 AC	Installed Date	27-Apr-16
Mapped Activities	1 Polygon(s)		

Final Indicator for Max Gustafson Hay Planting			
Indicator Name	SOIL (EST. SAVINGS)	Value	9.45
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	RUSLE2 (UPDATED)
Waterbody	South Center Lake		

Activity Action - Lindstrom Enhanced Street Sweeping			
Practice	590 - Nutrient Management	Count of Activities	1
Description	Approximately 10 additional curb miles of sweeping per year over three years in the City of Lindstrom.		
Proposed Size / Units	158,400.00 LINEAR FEET	Lifespan	5 Years
Actual Size/Units	LINEAR FEET	Installed Date	
Mapped Activities	1 Polygon(s)		

Final Indicator for Lindstrom Enhanced Street Sweeping			
Indicator Name	SEDIMENT (TSS)	Value	1.5
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	Other
Waterbody	South Lindstrom Lake		

Final Indicator for Lindstrom Enhanced Street Sweeping			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	90
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	Other
Waterbody	South Lindstrom Lake		

Final Indicator for Lindstrom Enhanced Street Sweeping			
Indicator Name	NITROGEN	Value	90
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	Other
Waterbody	South Lindstrom Lake		

Activity Action - Center City Inlet Protection			
Practice	590 - Nutrient Management	Count of Activities	1
Description	Flexstorm inlet protection bags to capture sediment before it enters the catch basin. Incentive payment for 3 years.		
Proposed Size / Units	8.00 COUNT	Lifespan	5 Years
Actual Size/Units	COUNT	Installed Date	
Mapped Activities	1 Polygon(s)		

Final Indicator for Center City Inlet Protection			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	5
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	Other
Waterbody	South Center Lake		
Final Indicator for Center City Inlet Protection			
Indicator Name	SEDIMENT (TSS)	Value	5
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	Other
Waterbody	South Center Lake		

Description

Task 1: Project Kickoff Meetings (20%)

- Urban-Host kickoff meeting for urban residents and City Councils/staff.
- Rural-Host kickoff meeting for rural residents and Township officials.

Task 2: Marketing – Develop watershed-wide marketing materials (press releases, brochures, displays, presentations, and website pages). Target impaired lakes first. (40%)

- Urban: Initiate regular educational presentation series to educate residents about water quality issues. Distribute brochures at Chisago Lakes area events in coordination with the CL LID.
- Rural/Ag: Publish newspaper articles about rural BMPs and programs available through the SWCD/NRCS.

Task 3: Direct Landowner Contact – Send mailings, contact landowners, meet with landowners, discuss potential projects/ideas with landowners and partners. (40%)

- Urban: Use urban Stormwater Retrofit Assessments (SRAs) for Lindstrom, Center City, and Chisago City to identify priority projects to begin landowner contact. Target projects in catchments that drain to impaired lakes. Host neighborhood-specific meetings to describe potential projects and meet landowners in project area. Approach City officials to develop a targeted street-sweeping incentive program for specific neighborhoods within each city.
- Rural/Ag: Use rural SRAs for North Center, South Center, Chisago, and North Lindstrom/South Lindstrom/Green lakes to identify priority projects to begin landowner contact. Target projects in catchments that drain to impaired lakes. Send targeted mailings to landowners in prime locations for project implementation. Use list of fields that should be converted to Permanent Vegetation (from rural SRAs) to approach landowners with an incentive payment to implement BMPs such as permanent vegetation, no-till farming, etc. on specific fields.
- Person(s) Responsible: Craig Mell, Sue Humble, Casey Thiel, Mary Jo Youngbauer, Farm Bill Technician (to-be-hired), Deb Hermel, Jason Rehn

Category	PROJECT DEVELOPMENT		
Start Date	21-Mar-15	End Date	22-Oct-19
Has Rates and Hours?	Yes		
Actual Results	<p>As of May 19, 2015</p> <p>Taught rain garden class at Master Gardeners Expo on 3/21/15. Sent out mailing for urban kickoff meeting, as well as targeted neighborhoods for projects. Met with over 20 individual landowners.</p> <p>As of January 19, 2016</p> <p>Mailed 40 letters to top 50 priority rural projects in the North Center Lake and South Center Lake watersheds. Mailed letters for urban priority projects at Calendar Isle in Lindstrom, Catchment L-42 in Lindstrom, Nelson Lane in Center City, and Peninsula Avenue in Lindstrom. Mailed 125 letters to farmers in the watershed about benefits of soil health and the Targeted Watershed/MRBI program. Met with landowners Craig Peltier, Kent Reed, John Lehwica, David and Nelson Bloom, Brian and Bruce Olson, Max Gustafson, and with landowners within the Mobeck Avenue and Busch Avenue neighborhoods, along the Nelson Court gully and shoreline, from Bayview Ponds, and landowners on Center Avenue, to develop projects in all of these areas.</p> <p>As of November 8, 2016</p> <p>Met with landowners Nelson Bloom, David Thompson, Pat Eichten, and Lee Nelson about potential agricultural projects for 2017.</p> <p>As of January 9, 2017</p> <p>Staff has met with landowners and visited sites for future projects including Maple Street gully, Parmly gully, Nelson Lane South in Center City.</p>		

Grant Activity - Quintin Letourneau TW AG 15-18			
Description	Funds will be used to help implement agricultural BMPs.		
Category	AGRICULTURAL PRACTICES		
Start Date	11-Sep-18	End Date	12-Dec-18
Has Rates and Hours?	No		
Actual Results	A water and sediment control basin and a grassed waterway were installed at Quintin Letourneau's farm. The project also used Targeted Watershed funds in the amount of \$1,656 and LID matching funds in the amount of \$3,500.		

Grant Activity - Regulations/Ordinances/Enforcement

<p>Description</p>	<p>Task 4: Regulations/Ordinances/Enforcement – Work with cities of Lindstrom, Center City, and Chisago City to adopt the MIDS ordinance package. Offer the cities a reduced rate to hire the Chisago SWCD to provide construction inspection to ensure enforcement of the MIDS ordinances.</p>		
<p>Category</p>	<p>REGULATIONS/ORDINANCES/ENFORCEMENT</p>		
<p>Start Date</p>	<p>19-Jan-16</p>	<p>End Date</p>	<p>13-Jan-17</p>
<p>Has Rates and Hours?</p>	<p>Yes</p>		
<p>Actual Results</p>	<p>As of January 19, 2016 This part of the grant has not been started yet. Work is expected in this area in the upcoming year(s).</p> <p>February 19, 2016 WORK PLAN AMENDMENT Approved via email by Brad Wozney 2/10/2016</p> <p>The City of Lindstrom has adopted the MIDS package without involvement from the SWCD; Center City is near adoption and does not need any additional assistance from the SWCD; Chisago City still has work to do before the package is adopted. Work with Chisago City to guide them through adopting the package will continue as needed.</p> <p>The SWCD will use the funds allocated to this activity to promote an education campaign in Lindstrom and Center City (upon adoption of MIDS) for responsible yard-waste clean up. Casey Thiel, Water Resource Specialist will be the primary staff member for this project. Activities will include press releases, pamphlets, targeted mailings to high priority neighborhoods, utility bill inserts, web page and social media information, and coordination with local groups to promote storm drain stenciling. Casey will work with the Chisago Lakes LID and city staff to tailor educational material to their specific needs. The City of Lindstrom has expressed interest in creating and adopting an ordinance that follows water quality BMPs for yard waste in addition to the educational outreach described above.</p> <p>As of January 9, 2017 WORK PLAN AMENDMENT Approved by Brad Wozney 1/6/2017</p> <p>All funding, including grant and match money, has been moved to Urban Stormwater Management. The Chisago Lakes Lake Improvement District has taken the financial lead in finalizing the MIDS program throughout the watershed. So far the City of Lindstrom has adopted the MIDS program and Chisago City and Center City are working to adopt them in the near future.</p>		

Grant Activity - Soil Erosion - 2017 Cost Share/Incentive Urban BMPs

Description

Chisago County Local Water Management Plan, page 58, number 1 states, "Implement projects that will help meet the goals of the Lake St. Croix TMDL watershed implementation plan. Actively market local/state/federal conservation programs which provide incentives to landowners to stabilize erosion concerns.

Chisago County Local Water Management Plan, page 63, number 24 states, "Implement agricultural best management practices for soil health that increase crop productivity and profitability while improving the environment. Best management practices include: cover crops, reduced tillage practices, conservation crop rotation, nutrient and pest management, and rotational grazing.

The Chisago SWCD will use these cost share funds to install BMPs, promote soil health programs, and native grass/pollinator plantings in areas of the County where we currently do not have other state/local cost share programs

Category

URBAN STORMWATER MANAGEMENT PRACTICES

Start Date

11-Sep-18

End Date

13-Nov-18

Has Rates and Hours?

No

Actual Results

Nothing to report at this time.

Work plan amendment:

The budget was reduced in the cost share categories and the technical in order to increase the budget in the administrative category and to purchase a new vehicle (equipment category).

As of January 8, 2019

Funds in the amount of \$5,205.65 were used towards the Center City Lakefront Rain Garden project. This project also had \$1,342.35 of FY15 Targeted Watershed program funds and \$3,000 of Chisago Lakes LID match funds. The pollution reduction values and practice mapping for this project are completed under the Targeted Watershed grant.

Description

Objective 3: Technical/Engineering

Task 1: Project Survey and Design – Assessment of BMP needs, whole farm planning, urban catchment planning, survey of structural BMPs, development of project designs, and assistance to landowners for other funding opportunities. The NRCS Field Office Technical Guide and the Minnesota Stormwater Manual will be utilized as the design standards for all projects.

- Urban Design: Survey and design completed by Casey Thiel and Mary Jo Youngbauer. Design review and sign off completed by Casey Thiel, Mary Jo Youngbauer, or James Landini (Washington Conservation District). For City projects, the City Engineer may be used to review and sign off on designs.

- Rural Design: Survey work completed by Mike Mayer, PE (MM Engineering, Inc.), new farm bill technician (to-be-hired), NRCS staff members Jason Rehn, Deb Hermel, or Marvin Kunkel. In some cases, other SWCD staff members (Craig Mell, Casey Thiel, Mary Jo Youngbauer) may help with survey work. Design work completed by Mike Mayer, PE (MM Engineering, Inc.), new farm bill technician (to-be-hired), and NRCS staff members Jason Rehn or Marvin Kunkel.

Task 2: Project Construction Inspection and Certification – Authorized staff will complete construction inspection and certify project as completed per designs.

- Person(s) Responsible:

Craig Mell, District Administrator – see TAA documentation in eLINK

Casey Thiel, Water Resource Specialist – see TAA documentation in eLINK

Mary Jo Youngbauer, Water Resource Technician – see TAA documentation in eLINK

New SWCD Employee (to be hired in 2015, credentials unknown at this time)

NRCS Staff, including Technical staff and Professional Engineers

NPEAP In-House Engineer (James Landini, PE, Washington Conservation District)

Michael Mayer, Professional Engineer

Category	TECHNICAL/ENGINEERING ASSISTANCE		
Start Date	23-Mar-15	End Date	22-Oct-19
Has Rates and Hours?	Yes		
Actual Results	<p>May 19, 2015 Plans reviewed for Erickson, CR 20, Peters, and Eichten projects. Draft design started for Mobeck Avenue neighborhood rain gardens in Center City.</p> <p>January 19, 2016 Designs completed for Mobeck Avenue, Busch Avenue, Nelson Court Gully, and Swenson's Lake House Restaurant. Construction inspection and check out completed for construction projects (Mobeck Avenue, Busch Avenue, Nelson Court gully, Chisago County Government Center employee parking lot, Swenson's Lake House restaurant, Matt Erickson, Tony Peters, Pat Eichten, and County Road 20 gully stabilization projects. Draft designs completed for Bayview Ponds, Center Avenue rain gardens, Olson vegetated swale, and Nelson Court shoreline project.</p> <p>As of November 8, 2016 Plans, installation, and certification completed for Kent Reed, Brian Olson, Craig Peltier, Max Gustafson, Olinda Trail gully, Scott Lund Whispering Bay, and the Chisago Lakes High School. Design is complete for John Lelwica.</p> <p>As of January 9, 2017 Construction checkout completed for Lelwica. Design work started for David Thompson, Pat Eichten, Lee Nelson, and Nelson Bloom for 2017 installation.</p> <p>As of January 4, 2018 Designs are in progress for Lee Nelson, Carl Lindberg, Byron Dahlheimer, Virginia Mitchell, Jacqueline Sperl, Pat Eichten, and Letourneau. These will be 2018 projects. Project certification completed for Maple Street gully, Novotny gully, Nelson Lane South, Nelson Bloom, David Thompson, Pat Eichten (2 projects), and Max Gustafson.</p> <p>January 8, 2019. Project certification completed for Lee Nelson, Byron Dahlheimer, Quintin Letourneau, and Donna Peterson projects. Project for Virginia Mitchell is designed and waiting to be installed in 2019.</p> <p>March April 2019. 4 Ag projects are designed, have gone out for bids, and are waiting for board approval before install. Pat Eichten (Mom's), Pat Eichten (Jensen), Craig Mattson, and Dale Fredell will all be installed this season.</p> <p>See eLink attachment October 22, 2019</p>		

Grant Activity - Urban Stormwater Management Practices

Description	Task 5: Urban Stormwater Management Practices – Our goal is to utilize our completed urban stormwater retrofit assessments to identify and install approximately 40 urban BMPs (including rain gardens, vegetated swales, rock-lined channel, iron-enhanced sand filter, dry pond, pond retrofits, gully stabilization, etc.) to reduce total phosphorus by 50 pounds per year.		
Category	URBAN STORMWATER MANAGEMENT PRACTICES		
Start Date	15-May-15	End Date	22-Oct-19
Has Rates and Hours?	No		
Actual Results	<p>As of May 19, 2015 Funds encumbered and design completed for Swenson's Lakehouse rain garden project. Construction expected in June.</p> <p>As of December 4, 2015 Construction complete on Swenson's Lakehouse rain garden, Chisago County Government Center employee parking lot pervious asphalt, and Nelson Court gully stabilization projects. Funds encumbered and construction began on Mobeck Avenue and Busch Avenue.</p> <p>As of January 19, 2015 Major construction activities were finished on Mobeck Avenue and Busch Avenue projects. Minor activities such as edging, mulching, and planting the rain gardens will be completed in the spring of 2016. Partial payments were issued for the portion of the work that has been completed so far on both projects.</p> <p>As of November 8, 2016 Mobeck and Busch Avenue projects were wrapped up in the spring. Final payment was issued. Chisago Lakes High School pond retrofit, Olinda Trail gully stabilization, and Whispering Bay Resort gully stabilizations were completed. The SWCD Board has approved certification and cost share payment on these projects.</p> <p>As of January 13, 2017 WORK PLAN AMENDMENT Approved by Brad Wozney 1/6/2017 Transfer of \$52,883.24 into this category from Livestock Waste Management (\$18,000), Non-Structural Management (\$8,273.24), Regulations/Ordinances/Enforcement (\$5,000), Wetland Restoration/Creation (\$21,610).</p> <p>As of January 4, 2018 Construction, certification, and reimbursement is complete for Nelson Lane South, Maple Street Gully, Novotny Gully, and Pioneer Lake outlet projects. The Chisago Lakes LID has increased their matching funds for a total match in the urban category of \$94,000. The City of Center City provided unexpected additional matching funds in the amount of \$14,535.83 for the Pioneer Lake Outlet project.</p> <p>As of January 8, 2019 Construction, certification, and reimbursement complete for Center City lakefront rain garden. Designs are underway for Chisago Lakes High School and Newell Alley in Lindstrom.</p>		

Activity Action - TW SRA 15-1 Swenson's Lakehouse			
Practice	712M - Bioretention Basin	Count of Activities	1
Description	Rain garden		
Proposed Size / Units	0.04 AC	Lifespan	10 Years
Actual Size/Units	0.04 AC	Installed Date	16-Jul-15
Mapped Activities	1 Point(s)		

Final Indicator for TW SRA 15-1 Swenson's Lakehouse

Indicator Name	SEDIMENT (TSS)	Value	0.08
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	MIDS
Waterbody	North Center Lake		

Final Indicator for TW SRA 15-1 Swenson's Lakehouse

Indicator Name	VOLUME REDUCED (ACRE-FEET/YEAR)	Value	0.41
Indicator Subcategory/Units	STORMWATER MANAGEMENT ACRE-FEET/YR	Calculation Tool	MIDS
Waterbody	North Center Lake		

Final Indicator for TW SRA 15-1 Swenson's Lakehouse

Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	0.65
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	MIDS
Waterbody	North Center Lake		

Activity Action - TW SRA 15-3 Nelson Court Gully			
Practice	412 - Grassed Waterway and Swales	Count of Activities	1
Description			
Proposed Size / Units	300.00 LINEAR FEET	Lifespan	10 Years
Actual Size/Units	300.00 LINEAR FEET	Installed Date	20-Aug-15
Mapped Activities	1 Polygon(s)		

Final Indicator for TW SRA 15-3 Nelson Court Gully

Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	14.3
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	Pioneer Lake		

Final Indicator for TW SRA 15-3 Nelson Court Gully

Indicator Name	SEDIMENT (TSS)	Value	14.3
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)

Waterbody	Pioneer Lake
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Activity Action - TW SRA 15-2 Chisago County Government Center employee parking lot pervious asphalt

Practice	804M - Permeable Surfaces	Count of Activities	1
Description	Permeable asphalt 216' x 38'		
Proposed Size / Units	0.19 AC	Lifespan	10 Years
Actual Size/Units	0.19 AC	Installed Date	5-Oct-15
Mapped Activities	1 Polygon(s)		

Final Indicator for TW SRA 15-2 Chisago County Government Center employee parking lot pervious asphalt

Indicator Name	SEDIMENT (TSS)	Value	258
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	MIDS
Waterbody	North Center Lake		

Final Indicator for TW SRA 15-2 Chisago County Government Center employee parking lot pervious asphalt

Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	0.86
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	MIDS
Waterbody	North Center Lake		

Activity Action - TW SRA 15-5 Mobeck Avenue (S Center Lake)

Practice	712M - Bioretention Basin	Count of Activities	2
Description	2 rain gardens in an old neighborhood without storm sewer		
Proposed Size / Units	0.50 AC	Lifespan	10 Years
Actual Size/Units	0.05 AC	Installed Date	18-May-16
Mapped Activities	2 Point(s)		

Final Indicator for TW SRA 15-5 Mobeck Avenue (S Center Lake)

Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	0.55
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	MIDS
Waterbody	South Center Lake		

Final Indicator for TW SRA 15-5 Mobeck Avenue (S Center Lake)

Indicator Name	VOLUME REDUCED (ACRE-FEET/YEAR)	Value	0.44
Indicator Subcategory/Units	STORMWATER MANAGEMENT ACRE-FEET/YR	Calculation Tool	MIDS
Waterbody	South Center Lake		

Final Indicator for TW SRA 15-5 Mobeck Avenue (S Center Lake)

Indicator Name	SEDIMENT (TSS)	Value	0.06
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	MIDS
Waterbody	South Center Lake		

Activity Action - TW SRA 15-4 Busch Avenue			
Practice	712M - Bioretention Basin	Count of Activities	4
Description	4 rain gardens		
Proposed Size / Units	0.07 AC	Lifespan	10 Years
Actual Size/Units	0.07 AC	Installed Date	18-May-16
Mapped Activities	4 Point(s)		

Final Indicator for TW SRA 15-4 Busch Avenue			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	1.05
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	MIDS
Waterbody	South Center Lake		
Final Indicator for TW SRA 15-4 Busch Avenue			
Indicator Name	SEDIMENT (TSS)	Value	0.12
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	MIDS
Waterbody	South Center Lake		
Final Indicator for TW SRA 15-4 Busch Avenue			
Indicator Name	VOLUME REDUCED (ACRE-FEET/YEAR)	Value	0.7
Indicator Subcategory/Units	STORMWATER MANAGEMENT ACRE-FEET/YR	Calculation Tool	MIDS
Waterbody	South Center Lake		

Activity Action - TW SRA 15-5 Mobeck Avenue (N Center Lake)			
Practice	712M - Bioretention Basin	Count of Activities	1
Description	1 rain garden		
Proposed Size / Units	0.02 AC	Lifespan	10 Years
Actual Size/Units	0.02 AC	Installed Date	18-May-16
Mapped Activities	1 Point(s)		

Final Indicator for TW SRA 15-5 Mobeck Avenue (N Center Lake)			
Indicator Name	VOLUME REDUCED (ACRE-FEET/YEAR)	Value	0.29
Indicator Subcategory/Units	STORMWATER MANAGEMENT ACRE-FEET/YR	Calculation Tool	MIDS
Waterbody	North Center Lake		
Final Indicator for TW SRA 15-5 Mobeck Avenue (N Center Lake)			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	0.24
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	MIDS
Waterbody	North Center Lake		

Final Indicator for TW SRA 15-5 Mobeck Avenue (N Center Lake)			
Indicator Name	SEDIMENT (TSS)	Value	0.02
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	MIDS
Waterbody	North Center Lake		

Activity Action - TW SRA 15-6 CLHS Pond Retrofit			
Practice	155M - Storm Water Retention Basins	Count of Activities	1
Description	The existing storm water catch basin was retrofitted so that water from Olinda Trail enters the existing stormwater pond on the property of the Chisago Lakes High School. The outlet of the pond was modified to reduce the orifice size to achieve greater pollution reduction.		
Proposed Size / Units	1.00 COUNT	Lifespan	10 Years
Actual Size/Units	1.00 COUNT	Installed Date	26-Aug-16
Mapped Activities	1 Point(s)		

Final Indicator for TW SRA 15-6 CLHS Pond Retrofit			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	2.4
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	WINSLAMM
Waterbody	South Center Lake		

Activity Action - TW SRA 15-7 Olinda Trail Gully Stabilization			
Practice	638 - Water and Sediment Control Basin	Count of Activities	1
Description	Gully stabilization project using check dams, erosion control fabric, and a rocked outlet.		
Proposed Size / Units	500.00 LINEAR FEET	Lifespan	10 Years
Actual Size/Units	500.00 LINEAR FEET	Installed Date	5-Oct-16
Mapped Activities	1 Point(s)		

Final Indicator for TW SRA 15-7 Olinda Trail Gully Stabilization			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	25.6
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	South Center Lake		

Final Indicator for TW SRA 15-7 Olinda Trail Gully Stabilization			
Indicator Name	VOLUME REDUCED (ACRE-FEET/YEAR)	Value	2.2
Indicator Subcategory/Units	STORMWATER MANAGEMENT ACRE-FEET/YR	Calculation Tool	P8 Urban Catchment Model

Waterbody	South Center Lake		
Final Indicator for TW SRA 15-7 Olinda Trail Gully Stabilization			
Indicator Name	SEDIMENT (TSS)	Value	25.6
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	South Center Lake		

Activity Action - TW SRA 15-8 Whispering Bay Gully Stabilization			
Practice	638 - Water and Sediment Control Basin	Count of Activities	1
Description	Rock lined channel to stabilize gully		
Proposed Size / Units	122.00 LINEAR FEET	Lifespan	10 Years
Actual Size/Units	122.00 LINEAR FEET	Installed Date	21-Oct-16
Mapped Activities	1 Point(s)		

Final Indicator for TW SRA 15-8 Whispering Bay Gully Stabilization			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	16.6
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	South Center Lake		

Final Indicator for TW SRA 15-8 Whispering Bay Gully Stabilization			
Indicator Name	SOIL (EST. SAVINGS)	Value	16.6
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	South Center Lake		

Final Indicator for TW SRA 15-8 Whispering Bay Gully Stabilization			
Indicator Name	SEDIMENT (TSS)	Value	16.6
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	South Center Lake		

Activity Action - TW SRA 15-9 City of Center City Nelson Lane South			
Practice	468 - Lined Waterway or Outlet	Count of Activities	1
Description	rock lined channel and vegetated swale		
Proposed Size / Units	180.00 LINEAR FEET	Lifespan	10 Years
Actual Size/Units	180.00 LINEAR FEET	Installed Date	21-Apr-17
Mapped Activities	1 Line(s)		

Activity Action - TW SRA 15-9 City of Center City Nelson Lane South Swale			
Practice	712M - Bioretention Basin	Count of Activities	1
Description	vegetated swale		
Proposed Size / Units	0.02 AC	Lifespan	10 Years
Actual Size/Units	0.02 AC	Installed Date	21-Apr-17
Mapped Activities	1 Point(s)		

Final Indicator for TW SRA 15-9 City of Center City Nelson Lane South Swale			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	9.82
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	Pioneer Lake		
Final Indicator for TW SRA 15-9 City of Center City Nelson Lane South Swale			
Indicator Name	SEDIMENT (TSS)	Value	9.82
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	Pioneer Lake		
Final Indicator for TW SRA 15-9 City of Center City Nelson Lane South Swale			
Indicator Name	SOIL (EST. SAVINGS)	Value	9.82
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	Pioneer Lake		

Activity Action - TW SRA 15-10 Lindstrom Maple Street Gully			
Practice	468 - Lined Waterway or Outlet	Count of Activities	1
Description	Gully re-shaping and stabilization project with rock checks, brush wattles, and permanent turf reinforcement mat.		
Proposed Size / Units	650.00 LINEAR FEET	Lifespan	10 Years
Actual Size/Units	650.00 LINEAR FEET	Installed Date	19-Oct-17
Mapped Activities	1 Line(s)		

Final Indicator for TW SRA 15-10 Lindstrom Maple Street Gully			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	19.51
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	North Lindstrom Lake		
Final Indicator for TW SRA 15-10 Lindstrom Maple Street Gully			
Indicator Name	SEDIMENT (TSS)	Value	19.51
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	North Lindstrom Lake		

Activity Action - TW SRA 15-11 Novotny Gully			
Practice	468 - Lined Waterway or Outlet	Count of Activities	1
Description	Gully stabilization project using rock and erosion control fabric.		
Proposed Size / Units	225.00 LINEAR FEET	Lifespan	10 Years
Actual Size/Units	225.00 LINEAR FEET	Installed Date	23-Oct-17
Mapped Activities	1 Line(s)		

Final Indicator for TW SRA 15-11 Novotny Gully			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	8.16
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	North Center Lake		
Final Indicator for TW SRA 15-11 Novotny Gully			
Indicator Name	SEDIMENT (TSS)	Value	8.16
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	North Center Lake		

Activity Action - TW SRA 15-12 Center City Pioneer Lake Outlet			
Practice	587 - Structure for Water Control	Count of Activities	1
Description	The existing culvert that serves as the outlet of Pioneer Lake into North Center Lake was deteriorated and erosion was occurring. The culvert was replaced and a water treatment system was installed that will remove sediment, debris, organic matter, and both dissolved and particulate phosphorus.		
Proposed Size / Units	1.00 COUNT	Lifespan	25 Years
Actual Size/Units	1.00 COUNT	Installed Date	8-Dec-17
Mapped Activities	1 Point(s)		

Final Indicator for TW SRA 15-12 Center City Pioneer Lake Outlet			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	38
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	Literature Value
Waterbody	North Center Lake		

Activity Action - TW SRA 15-13 Chisago Lakes High School			
Practice	587 - Structure for Water Control	Count of Activities	1
Description	Underground stormtech chambers		
Proposed Size / Units	333.00 COUNT	Lifespan	10 Years
Actual Size/Units	333.00 COUNT	Installed Date	30-Jan-19
Mapped Activities	1 Point(s)		

Final Indicator for TW SRA 15-13 Chisago Lakes High School			
Indicator Name	VOLUME REDUCED (ACRE-FEET/YEAR)	Value	1.33
Indicator Subcategory/Units	STORMWATER MANAGEMENT ACRE-FEET/YR	Calculation Tool	Other
Waterbody	South Center Lake		

Activity Action - TW SRA 15-14 Center City Lakefront Rain Garden			
Practice	155M - Storm Water Retention Basins	Count of Activities	1
Description	Rain Garden 700 sq ft.		
Proposed Size / Units	0.01 AC	Lifespan	10 Years
Actual Size/Units	0.01 AC	Installed Date	26-Oct-18
Mapped Activities	1 Point(s)		

Final Indicator for TW SRA 15-14 Center City Lakefront Rain Garden			
Indicator Name	SEDIMENT (TSS)	Value	0.25

Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	P8 Urban Catchment Model
Waterbody	North Center Lake		
Final Indicator for TW SRA 15-14 Center City Lakefront Rain Garden			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	0.8
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	P8 Urban Catchment Model
Waterbody	North Center Lake		

Activity Action - TW SRA 15-15 City of Lindstrom Newell-Hanson			
Practice	155M - Storm Water Retention Basins	Count of Activities	1
Description	Rain Garden 650 sq ft		
Proposed Size / Units	0.01 AC	Lifespan	10 Years
Actual Size/Units	0.01 AC	Installed Date	12-Jul-19
Mapped Activities	1 Point(s)		

Final Indicator for TW SRA 15-15 City of Lindstrom Newell-Hanson			
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Indicator Name	SEDIMENT (TSS)	Value	.06
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	MIDS
Waterbody	South Lindstrom Lake		

Final Indicator for TW SRA 15-15 City of Lindstrom Newell-Hanson			
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Indicator Name	VOLUME REDUCED (ACRE-FEET/YEAR)	Value	0.2869
Indicator Subcategory/Units	STORMWATER MANAGEMENT ACRE-FEET/YR	Calculation Tool	MIDS
Waterbody	South Lindstrom Lake		

Final Indicator for TW SRA 15-15 City of Lindstrom Newell-Hanson			
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Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	.591
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	MIDS
Waterbody	South Lindstrom Lake		

Grant Activity - Wetland Restoration/Creation

Description	Task 6: Wetland Restoration/Creation – Utilize our completed rural Stormwater retrofit assessments to identify and install 3 partially drained, Type 1 or Type 2 wetland restorations for a combined total phosphorus reduction of 20 pounds per year.		
Category	WETLAND RESTORATION/CREATION		
Start Date	17-Jun-15	End Date	13-Jan-17
Has Rates and Hours?	No		
Actual Results	<p>As of January 19, 2016</p> <p>A plan design has been completed for a wetland enhancement/restoration project for Bruce Olson. This is a small wetland that will be modified to hold more water, which will help filter stormwater runoff that currently runs straight through the wetland and causes a gully on the bluff above North Center Lake.</p> <p>As of November 8, 2016</p> <p>Bruce Olson's wetland restoration was completed on August 12, 2016. The SWCD Board approved certification of the project and cost share payment.</p> <p>As of January 13, 2017</p> <p>WORK PLAN AMENDMENT</p> <p>Approved by Brad Wozney 1/6/2017</p> <p>Transfer balance of \$21,610 to Urban Stormwater Management. We have completed one project and currently do not anticipate any additional projects.</p>		

Activity Action - TW WET 15-1 Bruce Olson			
Practice	587 - Structure for Water Control	Count of Activities	1
Description	A control structure was installed to regulate the amount of water leaving the existing wetland at a time. Before the project, the water left the wetland via a swale which then went beneath a cabin and over the bluff to the lake. There was a gully on the bluff.		
Proposed Size / Units	1.00 COUNT	Lifespan	10 Years
Actual Size/Units	1.00 COUNT	Installed Date	3-Aug-16
Mapped Activities	1 Point(s)		

Final Indicator for TW WET 15-1 Bruce Olson			
Indicator Name	SEDIMENT (TSS)	Value	1.7

Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	North Center Lake		
Final Indicator for TW WET 15-1 Bruce Olson			
Indicator Name	SOIL (EST. SAVINGS)	Value	1.7
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	North Center Lake		
Final Indicator for TW WET 15-1 Bruce Olson			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	1.7
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	North Center Lake		

Grant Attachments

Document Name	Document Type	Description
2015 Targeted Watershed	Grant Agreement	2015 Targeted Watershed - Chisago SWCD
2015 Targeted Watershed executed	Grant Agreement	2015 Targeted Watershed - Chisago SWCD
Actual Results Continued	Grant	2015 - Targeted Watershed (Chisago SWCD)
Agreement with LID	Grant	2015 - Targeted Watershed (Chisago SWCD)
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 12/10/2019
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 12/10/2019
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 10/22/2019
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 07/02/2019
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 07/27/2016
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 07/16/2018
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 07/03/2018
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 07/02/2018
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 01/04/2018
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 03/20/2017
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 03/20/2017
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 03/10/2017
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 03/02/2017
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 01/13/2017

Document Name	Document Type	Description
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 01/09/2017
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 01/10/2019
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 01/19/2016
Amendment	Grant	2015 - Targeted Watershed (Chisago SWCD)
Cost Share Contract	Grant	2015 - Targeted Watershed (Chisago SWCD)
Email Chain Discussing Work Plan Amendment	Grant	2015 - Targeted Watershed (Chisago SWCD)
Financial Report	Progress	Progress Dated - 10/22/2019
Financial Report 50%	Grant	2015 - Targeted Watershed (Chisago SWCD)
Financial Report December 2016	Grant	2015 - Targeted Watershed (Chisago SWCD)
Gantt Chart	Grant	2015 - Targeted Watershed (Chisago SWCD)
Goal Statement	Grant	2015 - Targeted Watershed (Chisago SWCD)
October 22, 2019	Grant	2015 - Targeted Watershed (Chisago SWCD)
Original Application	Grant	2015 - Targeted Watershed (Chisago SWCD)
Reconciliation Checklist	Journal	Journal Dated - 01/24/2017
Work Plan	Workflow Generated	Workflow Generated - Work Plan - 01/06/2017
Work Plan	Workflow Generated	Workflow Generated - Work Plan - 10/15/2019
Work Plan	Workflow Generated	Workflow Generated - Work Plan - 01/14/2015
Work Plan Amendment Email Chain	Grant	2015 - Targeted Watershed (Chisago SWCD)