

Grant All-Detail Report Projects and Practices 2019

Grant Title - Sherburne County Targeted Nitrate Reduction BMP Implementation **Grant ID** - C19-2871 **Organization -** Sherburne SWCD

| Original Awarded Amount | \$105,806.00 | Grant Execution Date | 3/4/2019 |
|------------------------------|--------------|--------------------------|-----------------|
| Required Match Amount | \$26,451.50 | Original Grant End Date | 12/31/2021 |
| Required Match % | 25% | Grant Day To Day Contact | Francine Larson |
| Current Awarded Amount | \$105,806.00 | Current End Date | 12/31/2022 |

Budget Summary

| | Budgeted | Spent | Balance Remaining* |
|--------------------|--------------|--------------|--------------------|
| Total Grant Amount | \$105,806.00 | \$105,806.00 | \$0.00 |
| Total Match Amount | \$26,500.00 | \$44,879.57 | \$-18,379.57 |
| Total Other Funds | \$0.00 | \$0.00 | \$0.00 |
| Total | \$132,306.00 | \$150,685.57 | \$-18,379.57 |

*Grant balance remaining is the difference between the Awarded Amount and the Spent Amount. Other values compare budgeted and spent amounts.

Budget Details

| | | | | | | Last | |
|-------------------------------|----------------|-------------|---------------------------|------------|-------------|-------------|----------|
| | Activity | | | | | Transaction | Matching |
| Activity Name | Category | Source Type | Source Description | Budgeted | Spent | Date | Fund |
| Administration | Administration | Current | Sherburne County Targeted | \$1,640.00 | \$1,640.00 | 11/12/2020 | N |
| | /Coordination | State Grant | Nitrate Reduction BMP | | | | |
| | | | Implementati | | | | |
| Irrigation Practice line item | Groundwater | Current | Sherburne County Targeted | \$0.00 | \$20,291.81 | 12/8/2022 | N |
| | | State Grant | Nitrate Reduction BMP | | | | |
| | | | Implementati | | | | |

| | | | | | | Last | |
|-----------------------------|---|------------------------|--|-------------|-------------|-------------|----------|
| | Activity | | | | | Transaction | Matching |
| Activity Name | Category | Source Type | Source Description | Budgeted | Spent | Date | Fund |
| Irrigation Water Management | Technical/Engi neering Assistance | Current State Grant | Sherburne County Targeted Nitrate Reduction BMP Implementati | \$4,420.00 | \$4,420.00 | 1/6/2022 | N |
| Outreach and Education | Education/Info rmation | Current State Grant | Sherburne County Targeted Nitrate Reduction BMP Implementati | \$10,000.00 | \$10,000.00 | 7/22/2021 | N |
| Practice Implementation | Agricultural Practices | Current State Grant | Sherburne County Targeted Nitrate Reduction BMP Implementati | \$56,000.00 | \$35,708.19 | 11/3/2022 | N |
| Practice Implementation | Agricultural Practices | Landowner Fund | Match | \$16,000.00 | \$34,093.83 | 12/8/2022 | Y |
| Program Development | Project Development | Current State Grant | Sherburne County Targeted Nitrate Reduction BMP Implementati | \$8,606.00 | \$8,606.00 | 1/6/2022 | N |
| Program Development | Project Development | Local Fund | Match | \$10,500.00 | \$10,785.74 | 10/1/2022 | Y |
| Technical Engineering | Technical/Engi neering Assistance | Current State Grant | Sherburne County Targeted Nitrate Reduction BMP Implementati | \$25,140.00 | \$25,140.00 | 8/20/2022 | N |

Activity Details Summary

| Activity Details | Total Action Count | Total Activity Mapped | Proposed Size / Unit | Actual Size / Unit |
|----------------------------------|--------------------|-----------------------|----------------------|--------------------|
| 340 - Cover Crop | 1 | 2 | 150 AC | 150 AC |
| 340 - Cover Crop | 1 | 2 | 75 AC | 25 AC |
| 328 - Conservation Crop Rotation | 1 | 7 | 252 AC | 252 AC |
| 340 - Cover Crop | 1 | 1 | 200 AC | 200 AC |
| 512 - Pasture & Hay Planting | 1 | 1 | 5 AC | 5 AC |
| 340 - Cover Crop | 1 | 1 | 98 AC | 98 AC |
| 327 - Conservation Cover | 1 | 2 | 6 AC | 6 AC |
| 340 - Cover Crop | 1 | 1 | 100 AC | 100 AC |

| Activity Details | Total Action Count | Total Activity Mapped | Proposed Size / Unit | Actual Size / Unit |
|-----------------------------------|--------------------|-----------------------|----------------------|--------------------|
| 449 - Irrigation Water Management | 3 | 2 | 2 COUNT | 2 COUNT |
| 449 - Irrigation Water Management | 2 | 2 | 1 COUNT | 1 COUNT |
| 340 - Cover Crop | 1 | 1 | 20 AC | 20 AC |
| 327 - Conservation Cover | 1 | 1 | 2.6 AC | 2.6 AC |
| 328 - Conservation Crop Rotation | 1 | 1 | 83 AC | 83 AC |
| 449 - Irrigation Water Management | 3 | 3 | 3 COUNT | 3 COUNT |
| 449 - Irrigation Water Management | 1 | 1 | 133 AC | 133 AC |
| 327 - Conservation Cover | 1 | 1 | 4.15 AC | 4.15 AC |
| 512 - Pasture & Hay Planting | 1 | 1 | 30 AC | 30 AC |

Proposed Activity Indicators

| Activity Name | Indicator Name | Value & Units | Waterbody | Calculation Tool | Comments |
|----------------|---------------------|---------------|----------------|---------------------------|----------------|
| Practice | NUTRIENTS (NITRATE) | 125 LBS/YR | Groundwater | Literature Value | NRCS Tech Note |
| Implementation | | | | | |
| Practice | SOIL (EST. SAVINGS) | 5 TONS/YR | Nearby Surface | WEPS (Wind | |
| Implementation | | | Water | Erosion Prediction | |
| | | | | System) | |

Final Indicators Summary

| Indicator Name | Total Value | Unit |
|---------------------|-------------|---------|
| NUTRIENTS (NITRATE) | 10.00 | LBS/YR |
| SOIL (EST. SAVINGS) | 2,387.25 | TONS/YR |

Grant Activity

| Grant Activity - Administration | | | |
|---------------------------------|--|--|--|
| Description | Grant administration including time tracking, | eLINK reporting and Board discussion and | contract approval. |
| Category | ADMINISTRATION/COORDINATION | | |
| Start Date | 6-Mar-19 | End Date | 31-Dec-20 |
| Has Rates and Hours? | Yes | | |
| Actual Results | Funds were used to administer the Nitrate pro discussion, and e-Link reporting. | ogram including, but not limited to, grant | tracking, time/expense tracking, Board |

| Grant Activity - Irrigation Practice line item | | | | |
|--|---|----------------------|--|--|
| Description | Work plan line item for Irrigation Water Mana | agement activity-449 | | |
| Category | GROUNDWATER | | | |
| Start Date | 19-Mar-19 | End Date | | |
| Has Rates and Hours? | No | | | |
| Actual Results | Funds were used towards Irrigation Water Ma | anagement practices | | |

| Activity Action - NR-FY19_06 - Peterson | | | | |
|---|---------------------------------------|---|-----------------------|--|
| Practice | 449 - Irrigation Water Management | Count of Activities | 3 | |
| Description | Operator installed smart rain buckets | s on 3 pivots to better track rain fall for irrigat | ion water management. | |
| Proposed Size / Units | 3.00 COUNT | Lifespan | 3 Years | |
| Actual Size/Units | 3.00 COUNT | Installed Date | 16-Mar-20 | |
| Mapped Activities | 3 Polygon(s) | Technical Assistance Provider | SWCD | |

| Activity Action - NR-FY19_04 - Peterson | | | | | |
|---|-------------------------------------|---|-----------------|--|--|
| Practice | 449 - Irrigation Water Management | Count of Activities | 1 | | |
| Description | Operator installed an ag sense aqua | trac pro to implement advanced irrigation wat | ter management. | | |
| Proposed Size / Units | 1.00 COUNT | Lifespan | 3 Years | | |
| Actual Size/Units | 1.00 COUNT | Installed Date | 1-Sep-19 | | |
| Mapped Activities | 1 Polygon(s) | Technical Assistance Provider | SWCD | | |

Activity Action - NR-FY19_09 - Triple J

| Practice | 449 - Irrigation Water Management | Count of Activities | 1 | | | |
|-----------------------|--|-------------------------------|-----------|--|--|--|
| Description | Aqua track with soil moisture sensors and rain buckets were installed for irrigation water management practice | | | | | |
| Proposed Size / Units | 2.00 COUNT | Lifespan | 1 Year | | | |
| Actual Size/Units | 2.00 COUNT | Installed Date | 25-May-22 | | | |
| Mapped Activities | 1 Polygon(s) | Technical Assistance Provider | SWCD | | | |

| Activity Action - NR-FY19_10 - Triple J | | | | | | | |
|---|---|---|------|--|--|--|--|
| Practice | 449 - Irrigation Water Management Count of Activities 2 | | | | | | |
| Description | Utilizing soil moisture sensors, the op | Utilizing soil moisture sensors, the operator will track soil moisture and complete irrigation water management | | | | | |
| Proposed Size / Units | 2.00 COUNT | 2.00 COUNT Lifespan | | | | | |
| Actual Size/Units | 2.00 COUNT | 25-May-22 | | | | | |
| Mapped Activities | 1 Polygon(s) | Technical Assistance Provider | SWCD | | | | |

| Activity Action - NR-FY19_12 - Triple J | | | | | | | |
|--|-------------------------------------|---|------|--|--|--|--|
| Practice 449 - Irrigation Water Management Count of Activities 1 | | | | | | | |
| Description | Re-nozzleing pivot based on uniform | Re-nozzleing pivot based on uniformity test performed by SWCD staff | | | | | |
| Proposed Size / Units | 133.00 AC | .00 AC Lifespan 10 Years | | | | | |
| Actual Size/Units | 133.00 AC | 133.00 AC Installed Date | | | | | |
| Mapped Activities | 1 Polygon(s) | Technical Assistance Provider | SWCD | | | | |

| Activity Action - NR-FY19_20 - Peterson | | | | | | | |
|---|---------------------------------------|---|----------|--|--|--|--|
| Practice | 449 - Irrigation Water Management | Count of Activities | 1 | | | | |
| Description | A VRI panel was installed, along with | A VRI panel was installed, along with an updated sprinkler package. VFD pump was installed. | | | | | |
| Proposed Size / Units | 1.00 COUNT | 1.00 COUNT Lifespan 10 Years | | | | | |
| Actual Size/Units | 1.00 COUNT | Installed Date | 1-Dec-22 | | | | |
| Mapped Activities | 1 Polygon(s) | Technical Assistance Provider | SWCD | | | | |

Grant Activity - Irrigation Water Management

| Description | Funds will be used to pay for annual subscription for 6 Agsense units along with maintenance of the equipment. This includes staff time for installing and maintaining equipment. | | | | | |
|--|---|--|--|--|--|--|
| | Funds will also be used to provide ET Information to county Irrigators to help them manage according to BMPs. Staff time for ET reporting. | | | | | |
| Category | TECHNICAL/ENGINEERING ASSISTANCE | | | | | |
| Start Date | 6-Mar-19 End Date 31-Dec-21 | | | | | |
| Has Rates and Hours? Actual Results | Yes Funds are used as intended | | | | | |

| Grant Activity - Outreach and Ed | ucation | | |
|----------------------------------|--|--|---|
| Description | Funds will be used towards expenses to host to and expenses. Funds will also be used towards installation of day. Demonstration plots will help build relationshim maintain contact with our farmers and also gat buy -in for nitrate reduction because we have. Sherburne County. We have had interest in BM future unless we work toward a common goal. We are reaching out to our landowners to gate focus this year on demonstrating different wate Management, and we also have at least one late the difference in leaching potential over the gammalti year demonstrations depending on the part of the provide the pro | at least one BMP demonstration plot per ps with area operators while we demonst in their interest after the three year grant landowners attend volunteer meetings to APS and we know that this will continue to ge interest in this coming year for practic ys of incorporating cover crops into a corr indowner interested in trying different for rowing season. We are hoping to have sor | r year to assist with the annual field trate BMPs. This outreach will help us period. We also know that we have discuss high nitrates and issues in o be a resource concern into the es to demonstrate. We are looking to h/soybean rotation, Irrigation Water rms of Nitrogen and monitoring to see |
| Category | EDUCATION/INFORMATION | | |
| Start Date | 6-Mar-19 | End Date | |
| Has Rates and Hours? | Yes | | |
| Actual Results | Funds are used as intended | | |

| Grant Activity - Practice | e Implementation | | | | | | |
|---------------------------|--|--|--|--|--|--|--|
| Description | private well owners. The proposed BMP numerous secondary benefits, and is a log widely accepted but not substantially add | The alternative to reduction of input is groundwater treatment which is neither cost effective or sustainable for cities and private well owners. The proposed BMP implementation goal addresses the cause of the resource concern, provides numerous secondary benefits, and is a long-term solution. The practices that we will be promoting under this proposal are widely accepted but not substantially adopted in Sherburne County. The Minnesota Department of Agriculture (MDA) is promoting these practices as part of the Nitrogen Fertilizer Plan. Our goal is to implement 30 projects over a 3-year span. | | | | | |
| | Rates are based on 2018 EQIP Financial A | ssistance Payment Rates | | | | | |
| | | 5100/ac | | | | | |
| | | 51200/each | | | | | |
| | IWM Basic 449 \$ | 510/ac | | | | | |
| | IWM Advanced 449 \$ | 515/ac | | | | | |
| | Cover Crops 3 species 340 \$ | \$45/ac \$55/ac \$75/ac \$25/ac | | | | | |
| | Cover Crops 4 species 340 \$ | | | | | | |
| | Cover Crops Interseeding 340 \$ | | | | | | |
| | Alternative Crop 328 \$ | | | | | | |
| | N Inhibitor \$ | 30/ac | | | | | |
| | Native or Pollinator Cover 643 \$ | 6600/ac | | | | | |
| | CRP Incentive \$ | 5100/ac | | | | | |
| | Max of \$3000 per practice | | | | | | |
| | Most practices would be one time payme in IWM would not exceed three years. | Most practices would be one time payments ie install advanced unit for IWM, planting an alternative crop, etc etc. Payment in IWM would not exceed three years. | | | | | |
| | The board adopted an updated Nonstruct | The board adopted an updated Nonstructural Land Management Policy. Policy has been uploaded into eLink. | | | | | |
| | 4/7/2022 - With BWSR Approval - Added Strip till to the list of practices at a payment rate of \$12/acres based NRCS EQIP Rates - Capped at \$15,000.00 | | | | | | |
| Category | AGRICULTURAL PRACTICES | | | | | | |
| Start Date | 6-Mar-19 | End Date | | | | | |
| | | | | | | | |

| Has Rates and Hours? | No |
|----------------------|--|
| Actual Results | Funds are used as intended |
| | 2020 - funds went toward 1 cost share contract and technical assistance which included cover crops. Time was also spent establishing Kernza demonstration plots, monitoring lysimters, technical assistance, and promoting the grant. |
| | 2021 - Funds went toward 2 cost share contracts which included cover crops and irrigation water management. Time was also spent monitoring Kernza demonstration plots, technical assistance, and promoting the grant. Technical assistance included ET reporting and Uniformity Tests. |

| | Activity Action - FY19-01 Anderson - Prairie | | | | | | | |
|--------------------------------------|--|-------------------------------------|--|---|--------|-------------|--|--|
| | Practice | | 327 - Conservation Cover | Count of Activities | | 1 | | |
| | Description | | Prairie planted on cropland in an effo | Prairie planted on cropland in an effort to reduce nitrates from leaching into groundwater. | | | | |
| | Proposed Size / Units | | 6.00 AC | Lifespan | | 10 Years | | |
| | Actual Size/Units | | 6.00 AC | Installed Date | | 15-May-19 | | |
| | Mapped Activ | ities | 2 Polygon(s) | Technical Assistance Provider | | SWCD | | |
| Final Indicator for | FY19-01 Anders | on - Prairie | | | | | | |
| Indicator Name | Indicator Name SOIL (EST | | . SAVINGS) | | Value | 18 | | |
| Indicator Subcategory/Units WIND ERG | | OSION (REDUCTION ESTIMATES) TONS/YR | | Calculation Tool | Litera | ature Value | | |
| Waterbody | dy Elk River | | | | | | | |

| | Activity Action - FY19-02 Diamond A - Nitrogen Fertilizer Management | | | | | | |
|---------------------|--|--------------|---------------------------------------|---|---------------------|-----------|---|
| | Practice | | 328 - Conservation Crop Rotation | Count of | Count of Activities | | 1 |
| | Description | | Operator used ESN/Urea blend inste | Operator used ESN/Urea blend instead of anhydrous | | | |
| | Proposed Size / Units | | 83.00 AC | Lifespan | | 1 Year | |
| | Actual Size/Units | | 83.00 AC | Installed Date | | 15-May-19 | |
| | Mapped Activ | ities | 1 Polygon(s) | Technical Assistance Provider | | SWCD | |
| Final Indicator for | FY19-02 Diamo | nd A - Nitro | gen Fertilizer Management | | | | |
| Indicator Name | Indicator Name NUTRIENT | | TS (NITRATE) | | Value | 10 | |
| Indicator Subcate | Indicator Subcategory/Units WATER POL | | OLLUTION (REDUCTION ESTIMATES) LBS/YR | | Calculation Tool | Othe | r |
| Waterbody | body Elk River | | | | | | |

| | Activity Action - FY19-03 A & L Peterson - Cover crop | | | | | | |
|---------------------|---|-------------|--|-------------------------------|------------------|----------|-------------|
| | Practice | | 340 - Cover Crop | Count of | Activities | | 1 |
| | Description | | Multi species cover crop was planted to control soil erosion and in soil organic matter. | | | | |
| | Proposed Size / Units | | 98.00 AC | Lifespan | | 1 Year | |
| | Actual Size/Units | | 98.00 AC | Installed Date | | 7-Sep-19 | |
| | Mapped Activ | ities | 1 Polygon(s) | Technical Assistance Provider | | SWCD | |
| Final Indicator for | FY19-03 A & L P | eterson - C | over crop | | | | |
| Indicator Name | ndicator Name SOIL (EST | | . SAVINGS) | | Value | 3 | |
| Indicator Subcate | ndicator Subcategory/Units WIND ERC | | OSION (REDUCTION ESTIMATES) TONS/YR | | Calculation Tool | Litera | ature Value |
| Waterbody | y Elk River | | | | | | |

| | Activity Action - FY19-05 A & L Peterson - Forage and Biomass | | | | | | | |
|--|---|-----------------------------------|--------------------------------------|--|---------------------|-------------|---|--|
| | Practice | | 512 - Pasture & Hay Planting | Count of | Count of Activities | | 1 | |
| | Description | | Field taken out of corn/soybean rota | Field taken out of corn/soybean rotation and planted to perennial cover. | | | | |
| | Proposed Size / Units | | 5.00 AC | Lifespan | | 5 Years | | |
| | Actual Size/Units | | 5.00 AC | Installed Date | | 15-May-20 | | |
| | Mapped Activ | ities | 1 Polygon(s) | Technical Assistance Provider | | SWCD | | |
| Final Indicator for | FY19-05 A & L P | eterson - F | orage and Biomass | | | | | |
| Indicator Name | ndicator Name SOIL (EST. | | . SAVINGS) | | Value | 15 | | |
| Indicator Subcategory/Units WIND EROSION (REDUCTION ES | | DSION (REDUCTION ESTIMATES) TONS, | /YR | Calculation Tool | Litera | ature Value | | |
| Waterbody | y Elk River | | | | | | | |

| | Activity Action | Activity Action - FY19-07 Steinbrecher - Forage and Biomass | | | | | |
|--------------------------------------|-----------------------|---|--|-------------------------------|------------------|-----------|-------------|
| | Practice | | 512 - Pasture & Hay Planting | Count of Activities | | 1 | |
| | Description | | Corn/soybean rotation taken out of production and replaced with perennial cover. | | | | |
| | Proposed Size / Units | | 30.00 AC | Lifespan | | 5 Years | |
| | Actual Size/Units | | 30.00 AC | Installed Date | | 29-May-20 | |
| | Mapped Activ | ities | 1 Polygon(s) | Technical Assistance Provider | | | SWCD |
| Final Indicator for | FY19-07 Steinb | echer - For | age and Biomass | | | | |
| Indicator Name | | SOIL (EST. | SAVINGS) | | Value | 90 | |
| Indicator Subcategory/Units WIND ERG | | WIND ERC | OSION (REDUCTION ESTIMATES) TONS/YR | | Calculation Tool | Liter | ature Value |
| Waterbody | | Elk River | | | | | |

| | Activity Action | Activity Action - FY19-11 Diamond A - Prairie | | | | | |
|---------------------|--|---|-------------------------------------|-----------|-------------------------------|-------|-------------|
| | Practice | | 327 - Conservation Cover | Count of | Count of Activities | | 1 |
| | Description | | Short dry grass prairie | | | | |
| | Proposed Size / Units Actual Size/Units | | 2.60 AC | Lifespan | Lifespan | | 10 Years |
| | | | 2.60 AC | Installed | Installed Date | | 22-Jun-21 |
| | Mapped Activ | ities | 1 Polygon(s) | Technica | Technical Assistance Provider | | SWCD |
| Final Indicator for | FY19-11 Diamo | nd A - Prair | ie | | | | |
| Indicator Name | | SOIL (EST. | . SAVINGS) | | Value | 7.8 | |
| Indicator Subcate | Indicator Subcategory/Units WIND ERG | | OSION (REDUCTION ESTIMATES) TONS/YR | | Calculation Tool | Liter | ature Value |
| Waterbody | | Long Lake | | | | | |

| | Activity Action | Activity Action - FY19-08 Maruska - Cover Crop | | | | | | |
|---------------------|-----------------------|--|---|-------------------------------|------------------|-----------|-------------|--|
| | Practice | | 340 - Cover Crop | Count of Activities | | 1 | | |
| | Description | | Multi species cover crop full season for forage | | | | | |
| | Proposed Size / Units | | 75.00 AC | Lifespan | | 1 Year | | |
| | Actual Size/Units | | 25.00 AC | Installed Date | | 15-Apr-21 | | |
| | Mapped Activ | ities | 2 Polygon(s) | Technical Assistance Provider | | SWCD | | |
| Final Indicator for | FY19-08 Marusł | ka - Cover C | rop | | | | | |
| Indicator Name | | SOIL (EST. | SAVINGS) | | Value | 75 | | |
| Indicator Subcate | gory/Units | WIND ERC | OSION (REDUCTION ESTIMATES) TONS/YR | | Calculation Tool | Litera | ature Value | |
| Waterbody | | Mississipp | | | | | | |

| | Activity Action | Activity Action - FY19-16 Peterson Bros Potato Farm - Cover Crop | | | | | | |
|---------------------|---------------------------|--|--|---|------------------|-----------|-------------|--|
| | Practice | | 340 - Cover Crop | Count of Activities | | 1 | | |
| | Description | | Multi species cover crop planted after | Iulti species cover crop planted after potatoes | | | | |
| | Proposed Size / Units | | 150.00 AC | Lifespan | | 1 Year | | |
| | Actual Size/Units | | 150.00 AC | Installed Date | | 15-Aug-22 | | |
| | Mapped Activ | ities | 2 Polygon(s) | Technical Assistance Provider | | | SWCD | |
| Final Indicator for | FY19-16 Peterso | on Bros Pot | ato Farm - Cover Crop | | | | | |
| Indicator Name | Indicator Name SOIL (EST. | | SAVINGS) | Value 4 | | 450 | | |
| Indicator Subcateg | gory/Units | WIND ERC | OSION (REDUCTION ESTIMATES) TONS/YR | | Calculation Tool | Litera | ature Value | |

Waterbody

| W | | r h | 0 | |
|---|---|-----|---|--|
| | 5 | | | |

Elk River

| | Activity Action | Activity Action - FY19-14 Davis - Prairie | | | | | | |
|---------------------|---|---|---|--|---------------------|-----------|-------------|--|
| | Practice | | 327 - Conservation Cover | Count of | Count of Activities | | 1 | |
| | Description Proposed Size / Units Actual Size/Units | | Upland native prairie planted into ol | pland native prairie planted into old crop field | | | | |
| | | | 4.15 AC | Lifespan | | 10 Years | | |
| | | | 4.15 AC | Installed Date | | 15-May-22 | | |
| | Mapped Activ | ities | 1 Polygon(s) | Technical Assistance Provider | | | SWCD | |
| Final Indicator for | FY19-14 Davis - | Prairie | | | | | | |
| Indicator Name | | SOIL (EST. | SAVINGS) | | Value | 12.4 | 5 | |
| Indicator Subcate | gory/Units | WIND ERG | DSION (REDUCTION ESTIMATES) TONS/YR Calculatio | | Calculation Tool | Liter | ature Value | |
| Waterbody | | Big Elk La | <e and="" constraints="" of="" set="" set<="" th="" the=""><th></th><th></th><th></th><th></th></e> | | | | | |

| | Activity Action - FY19-15 Vahling - Cover Crop | | | | | | |
|---------------------|--|--------------|---|-------------------------------|------------------|-----------|-------------|
| | Practice | | 340 - Cover Crop | Count of Activities | | 1 | |
| | Description | | Multi species cover crop planted on preventive plant ground | | | | |
| | Proposed Size / Units | | 20.00 AC | Lifespan | | 1 Year | |
| | Actual Size/Units | | 20.00 AC | Installed Date | | 15-Jun-22 | |
| | Mapped Activ | ities | 1 Polygon(s) | Technical Assistance Provider | | | SWCD |
| Final Indicator for | FY19-15 Vahling | g - Cover Cr | op | | | | |
| Indicator Name | | SOIL (EST. | SAVINGS) | | Value | 60 | |
| Indicator Subcateg | Indicator Subcategory/Units WIND ERG | | OSION (REDUCTION ESTIMATES) TONS/YR | | Calculation Tool | Litera | ature Value |
| Waterbody | | Elk River | | | | | |

| | Activity Action - FY19-17 | Activity Action - FY19-17 Goenner - Cover Crop | | | | | | | |
|---------------------|--|--|-------------------------------|-----|-----------|--|--|--|--|
| | Practice | 340 - Cover Crop | Count of Activities | | 1 | | | | |
| | Description | | | | | | | | |
| | Proposed Size / Units | 100.00 AC | Lifespan | | 1 Year | | | | |
| | Actual Size/Units | 100.00 AC | Installed Date | | 28-Sep-22 | | | | |
| | Mapped Activities | 1 Polygon(s) | Technical Assistance Provider | | SWCD | | | | |
| Final Indicator for | Final Indicator for FY19-17 Goenner - Cover Crop | | | | | | | | |
| Indicator Name | SOIL (EST. | SAVINGS) | Value | 300 | | | | | |

| Indicator Subcateg | gory/Units | WIND ERC | ROSION (REDUCTION ESTIMATES) TONS/YR | | Calculation Tool | Litera | ature Value | |
|---------------------|-----------------------|-------------|--|----------------|-----------------------|--------|------------------|--|
| Waterbody | | Elk River | | | | | | |
| | Activity Action | n - FY19-18 | Eilers - Cover Crop | | | | | |
| | Practice | | 340 - Cover Crop | Count of | of Activities | | 1 | |
| | Description | | Multi species cover crops planted aft | er potatoe | 25. | | - | |
| | Proposed Size / Units | | 200.00 AC | Lifespan | | | 1 Year | |
| | Actual Size/Ur | nits | 200.00 AC | Installed Date | | | 10-Oct-22 | |
| | Mapped Activ | ities | 1 Polygon(s) | Technica | I Assistance Provider | | SWCD | |
| Final Indicator for | FY19-18 Eilers - | Cover Crop | | | | | | |
| Indicator Name | | SOIL (EST. | SAVINGS) | | Value | 600 | 00 | |
| Indicator Subcateg | gory/Units | WIND ERC | OSION (REDUCTION ESTIMATES) TONS/YR Calculation Te | | Calculation Tool | Litera | Literature Value | |
| Waterbody | | Elk River | | | | | | |

| | Activity Action | Activity Action - FY19-13 A & L Peterson - Strip Till | | | | | |
|---------------------|--------------------------------------|---|--|-------------------------------|------------------|----------|-------------|
| | Practice | | 328 - Conservation Crop Rotation | Count of Activities | | 1 | |
| | Description | | Operator utilized strip tillage on acres in lieu of chisel plow. | | | | |
| | Proposed Size / Units | | 252.00 AC | Lifespan | | 1 Year | |
| | Actual Size/Units | | 252.00 AC | Installed Date | | 1-May-22 | |
| | Mapped Activ | ities | 7 Polygon(s) | Technical Assistance Provider | | | SWCD |
| Final Indicator for | FY19-13 A & L P | eterson - S | trip Till | | | | |
| Indicator Name | | SOIL (EST. | SAVINGS) | | Value | 756 | |
| Indicator Subcate | Indicator Subcategory/Units WIND ERG | | OSION (REDUCTION ESTIMATES) TONS/YR | | Calculation Tool | Litera | ature Value |
| Waterbody | | Elk River | | | | | |

| Grant Activity - Program Develop | oment | |
|----------------------------------|---|--|
| Description | Funds will be used toward targeting operations in the high p in hosting demonstration sites. Funds will also be used for contacting local Co-Ops and Deal BMPS. Funds will be used towards staff time spent promoting Nitra | |
| | Funds will be used to create advertisements for Best manage | ement practices for nitrate reduction. |
| Category | PROJECT DEVELOPMENT | |
| Start Date | 6-Mar-19 End Date | |
| Has Rates and Hours? | Yes | |
| Actual Results | Funds are used as intended | |

| Grant Activity - Technical Engineering | | | | | | | |
|--|---|----------|--|--|--|--|--|
| Description | Staff time will be spent working directly with landowners including: developing and planning BMP and AMTs for specific operation needs, conducting fields visits, and communication with landowners. Miranda Wagner has JAA for all practices included in the grant. Documentation available upon request. | | | | | | |
| Category | TECHNICAL/ENGINEERING ASSISTANCE | | | | | | |
| Start Date | 6-Mar-19 | End Date | | | | | |
| Has Rates and Hours? | Yes | Yes | | | | | |
| Actual Results | Funds are used as intended | | | | | | |

Grant Attachments

| Document Name | Document Type | Description |
|---------------|---------------|-------------|
|---------------|---------------|-------------|

| Document Name | Document Type | Description |
|---|------------------------------|--|
| 2019 Competitive Grant | Grant Agreement | 2019 Competitive Grant - Sherburne SWCD |
| 2019 Competitive Grant EXECUTED | Grant Agreement | 2019 Competitive Grant - Sherburne SWCD |
| 2019 Competitive Grant amendment EXECUTED | Grant Agreement Amendment | |
| 2019 Grant Extension Request | Grant Agreement Amendment | |
| 2019_NitrateReduction_FinalFinancial | Grant | Sherburne County Targeted Nitrate Reduction BMP Implementation |
| All Details Report | Workflow Generated | Workflow Generated - All Details Report - 09/04/2021 |
| All Details Report | Workflow Generated | Workflow Generated - All Details Report - 09/04/2021 |
| All Details Report | Workflow Generated | Workflow Generated - All Details Report - 08/24/2021 |
| All Details Report | Workflow Generated | Workflow Generated - All Details Report - 02/24/2021 |
| All Details Report | Workflow Generated | Workflow Generated - All Details Report - 01/18/2021 |
| All Details Report | Workflow Generated | Workflow Generated - All Details Report - 03/16/2020 |
| All Details Report | Workflow Generated | Workflow Generated - All Details Report - 01/16/2020 |
| All Details Report | Workflow Generated | Workflow Generated - All Details Report - 03/03/2020 |
| All Details Report | Workflow Generated | Workflow Generated - All Details Report - 12/28/2022 |
| All Details Report | Workflow Generated | Workflow Generated - All Details Report - 03/03/2022 |
| All Details Report | Workflow Generated | Workflow Generated - All Details Report - 01/20/2022 |
| Application | Workflow Generated | Workflow Generated - Application - 08/30/2018 |
| FY19 Nitrate Reduction Financial Report | Grant | Sherburne County Targeted Nitrate Reduction BMP Implementation |
| FY19 Nitrate Reduction Financial Report 12312021 | Grant | Sherburne County Targeted Nitrate Reduction BMP Implementation |
| NLMP_03142019 | Grant | Sherburne County Targeted Nitrate Reduction BMP Implementation |
| Sherburne County Nitrate Levels and Soil Vulnerability | Grant | Sherburne County Targeted Nitrate Reduction BMP Implementation |
| Sherburne County Nitrate Levels and Soil Vulnerability | Grant | Sherburne County Targeted Nitrate Reduction BMP Implementation |
| Work Plan | Workflow Generated | Workflow Generated - Work Plan - 07/15/2020 |
| Work Plan | Workflow Generated | Workflow Generated - Work Plan - 02/04/2019 |
| Work Plan | Workflow Generated | Workflow Generated - Work Plan - 04/07/2022 |
| Work Plan | Workflow Generated | Workflow Generated - Work Plan - 01/09/2019 |

| Document Name | Document Type | Description |
|---------------|--------------------|---|
| Work Plan | Workflow Generated | Workflow Generated - Work Plan - 04/16/2022 |
| Work Plan | Workflow Generated | Workflow Generated - Work Plan - 12/19/2018 |