MinnesotaCorn
RESEARCH & PROMOTION COUNCIL

**INNOVATION GRANT PROGRESS REPORT**

PROJECT TITLE: Sustainable Answer Acre, Mower County, MN
REPORTING PERIOD: June 30, 2023
FARMER INNOVATOR:
COLLABORATING ORGANIZATION/PERSON: Mower SWCD; Steve Lawler
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1.) PROJECT ACTIVITIES COMPLETED DURING THE REPORTING PERIOD. (*Describe project progress specific to goals, objectives, and deliverables identified in your project proposal.*)

*Sampling:*

*The watertable fully recovered by May of 2023, though only temporary. A total of two complete sets of water nitrate samples were collected and analyzed. The results will be presented in the final report. A total of three sets of bromide sampling were collected and results will be available by July of 2023. Soil samples for aggregate stability were not taken due to extreme soil dryness.*

*As of May of 2023, the RealmFive weather station purchased by Northern Country Coop has been repaired and became operational, providing real time precipitation wind, humidity, soil moisture and temp.*

*Agronomics:*

*On May 5th, 2023 corn was planted. Soil health plots were previously strip tilled by Scott Lightly, who also planted both the soil health and conventional plots. The winter rye cover was broadcasted at a rate of 85-90#/acre. There was poor germination/emergence with very little growth this spring.*

2.) IDENTIFY ANY SIGNIFICANT FINDINGS AND RESULTS OF THE PROJECT TO DATE. (*There may be none to report at some stages of the project)*

Water Nitrate data sets to date indicate significant differences in water nitrate levels between the three management systems of prairie, soil health and conventional, with prairie and soil health consistently lower. Differences between BMP's have yet to be determined.

Groundwater nitrate data and soil health parameters will be reported in the annual report.

3.) CHALLENGES ENCOUNTERED. (*Describe any challenges that you encountered related to project progress specific to goals, objectives, and deliverables identified in the project proposal.*)

A total of 5 inches of rain fell during the 10 days following corn planting. No appreciable rain fell until June 25th. As a result, all nitrogen product topdressed since planting did not incorporate into the soil for 3-5 weeks. Crop has also been exhibiting moisture stress since the end of the second week of June. Soil probes indicate moisture levels at the 7.9 inch depth were below wilting point until June 25-26th when approximately 0.75 inch of precipitation fell.

Due to dry soil conditions, soil health parameters will not be sampled until fall.

Monitoring well water levels are rapidly dropping. Sampling will begin again in the fall.

4.) EDUCATION AND OUTREACH ACTIVITES. *(Describe any opportunities to engage with farmers, influencers or the media about your project.)*

A summer field day is planned for July 11, 2023 (see flier), with invitations to farmer producers and all of our collaborators.

Riverland fall Soil and Agronomy labs will be hosted at Sustainable Answer Acre.

5.) HOW CAN WE HELP? *(Please let us know how we can improve the experience or assist in your project if possible.)*