PROJECT: LLNRD Cover Crop Water Use Study– WSF Application #5209 (awarded December 18, 2018) **DATE:** MARCH 28, 2022 (FOURTH ANNUAL REPORT DUE ON OR BEFORE APRIL 1, 2022)

See Application 5209 Section D #1 For Project Tasks Summary and Timeline PROJECT PROGRESS APRIL 2021 TO APRIL 2022:

- ✓ April/May 2021 Worked with the Producers and Sponsors to temporarily remove the monitoring equipment prior to planting. Equipment reinstalled once crops were planted.
- ✓ July/August 2021 Made multiple visits to the field sites to troubleshoot problems with communication between the nodes because of the height of the corn. Raised height of nodes and relay nodes to account for corn height. An additional rain gauge was added.
- ✓ July 22, 2021 Attended a board meeting of the Lower Loup and Central Platte Natural Resources Districts to update the boards and staff on project progress.
- ✓ September-November 2021 Worked with Producers and Sponsors to remove monitoring equipment prior to harvest. Equipment reinstalled once harvest was completed.
- ✓ Fall 2021 Soil samples were not collected for this cycle.
- ✓ Node 21 sent into Irrometer for repair/replacement since node was not communicating with base station, thus data was not getting uploaded correctly.

ANTICIPATED ACTIVITIES FROM NOW UNTIL NEXT ANNUAL REPORT DUE APRIL 1, 2023:

- ✓ March-May 2022 Continue coordination with Producers and Sponsors for temporary removal of equipment prior to planting. Equipment will be reinstalled after planting.
- ✓ May-October 2022 Continue to remotely monitor field equipment.
- ✓ June 2022 Prepare and submit Year 3 Data Summary Report.
- ✓ September/October 2022 Coordinate with Producers and Sponsors for final removal of field equipment prior to harvest.
- ✓ November 2022 Collect soil samples for nitrate analysis.
- ✓ June 2023 Complete data analysis, prepare final report, and submit to NRDs.

ANTICIPATED CASH FLOW FOR REMAINDER OF THE PROJECT:

The LLNRD and Water Sustainability Fund (WSF) have funding obligations towards this project (\$420,000 total project costs) under grant award #5209. To date, \$227,313.98 has been billed to LLNRD of which \$94,080.00 has been reimbursed with a request submitted in July 2021. A reimbursement request is currently being developed and will be submitted to the WSF for approval before the end of the NRD fiscal year.

LIKELIHOOD THAT BENEFITS PROJECTED IN APPLICATION 5209 WILL BE REALIZED:

The Project Tasks have been completed as scheduled. Based on previous experience with the WSF, by both the LLNRD and CPNRD, this project is on target for achieving all benefits described in the original application.