

## WSF 2023 Status Report # 5209

**PROJECT:** LLNRD Cover Crop Water Use Study–  
WSF Application #5209 (awarded December 18, 2018)

**DATE:** MARCH 21, 2023  
(FIFTH ANNUAL REPORT DUE ON OR  
BEFORE APRIL 1, 2023)

### See Application 5209 Section D #1 For Project Tasks Summary and Timeline

#### PROJECT PROGRESS APRIL 2022 TO APRIL 2023:

- ✓ End of Mar 2022 – Worked with the Producers and Sponsors to temporarily remove the monitoring equipment prior to planting.
- ✓ May & June 2022 –
  - Worked with the Producers and Sponsors to reinstall the monitoring equipment after the crop was planted.
  - Rain did delay some installation this season, but all was installed in a timely fashion to continue collecting data.
  - Repairs were made to two non-reporting nodes.
- ✓ June & August 2022 –
  - Made multiple visits to the field sites to troubleshoot problems with communication between the nodes.
  - In addition to routine maintenance, cleaned solar panels, replaced battery on one base unit, and reset the SIMM card to restore modem connection and reestablish communication.
- ✓ October 2022 –
  - Worked with Producers and Sponsors for final removal of monitoring equipment prior to harvest. This was Year 3 of 3 for data collection in the study.
  - Since this was the final data collection season, equipment was not installed following harvest as in prior seasons. Equipment was returned to the Sponsors.
- ✓ Fall 2022 – Soil samples were collected and analyzed for soil moisture and nitrates.
- ✓ November 2022 – Lower Loup Natural Resources District staff presented information on the Cover Crop Study at the 2022 Gateway Farm Expo in Kearney, NE.
- ✓ March 2023 – EA staff presented information on the Cover Crop Study at the 2023 Annual Natural Resources Districts Water Programs Conference in Kearney, NE.

#### ANTICIPATED ACTIVITIES FROM NOW UNTIL FINAL REPORT DUE JUNE 30, 2023:

- ✓ April 2023 – Finalize data compilation and analysis.
- ✓ May 2023 – Draft Final Report for Sponsors to Review.
- ✓ June 2023 –
  - Complete Final Report and submit it to Sponsors.
  - Make presentation to Sponsors.
  - Develop and submit Closeout Report for the Water Sustainability Fund (WSF).

ANTICIPATED CASH FLOW FOR REMAINDER OF THE PROJECT:

**\$156,704.00** - The LLNRD and Water Sustainability Fund (WSF) have funding obligations towards this project (\$420,000 total project costs) under grant award #5209. The NRD has paid \$310,000 to a consultant and will be closing out the remaining \$110,000 contracted total.

LIKELIHOOD THAT BENEFITS PROJECTED IN APPLICATION 5209 WILL BE REALIZED:

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