

## WSF 2023 Annual Report # 5312

**PROJECT:** ENWRA Groundwater Recharge Mapping and Focus Area Assessments #5312 (awarded December 2021)

**DATE:** MARCH 30, 2023  
(FIRST ANNUAL REPORT DUE ON OR BEFORE APRIL 1, 2023)

### [See Application 5312 For Project Scope Summary and Timeline](#)

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

Award agreements between the Lower Platte South Natural Resources District (LPSNRD), on behalf of the Eastern Nebraska Water Resources assessment (ENWRA), with the United States Geological Survey (USGS) and University of Nebraska-Lincoln Conservation and Survey (UNL CSD) were executed for the above-referenced Project in early 2022. The USGS and UNL CSD Project team began with project working meetings in April 2022 for the initial Phase I regional mapping activities. UNL CSD worked on the dataset gathering with NRDs and the water level approach. USGS worked to prepare regional AEM data with groundwater quality and other datasets and setting up the USGS's supercomputing systems to run map scenarios using the appropriate data inputs. USGS also prepared various evaluations for the team to consider in the Phase 1 and preparation for Phase 2 efforts. The team evaluated Phase 1 regional mapping results with USGS presenting the initial regional recharge map findings to the ENWRA NRDs (Lewis and Clark, Lower Elkhorn, Lower Platte North, Lower Platte South, Nemaha, and Papio-Missouri River, plus one neighboring NRD) in early 2023. Phase 2 Focus Area task planning and evaluations with USGS and UNL CSD were also discussed with the NRDs in early 2023 to review and consider potential concerns relative to the regional understandings and the local focus area assessment plans. Generally, the Phase 1 evaluations pointed to how the AEM data in conjunction with available groundwater data informs the high moderate low recharge value designations and what additional results are to be improved, through the Phase 2 Focus Area work considerations, for Phase 3 mapping and recommendations.

#### ANTICIPATED ACTIVITIES FROM NOW UNTIL NEXT ANNUAL REPORT DUE APRIL 1, 2024:

The USGS and UNL CSD team will begin the more detailed local Phase 2 Focus Area work for the Dorchester-Sterling Paleochannel, Fremont-Arlington-Leshara, Burt County, and Knox County areas, each spanning across district boundaries. Several interactions between the project team members and the NRDs are anticipated during this time in addition to coordination with NRDs for additional separate projects using some insights from the Phase 2 work so that Phase 3 can be more beneficial. The initial results of the Phase 2 work, which will continue throughout the remainder of 2023 and into early 2024, will be summarized in the next April 1, 2024 WSF Annual status report.

#### ANTICIPATED CASH FLOW FOR REMAINDER OF THE PROJECT:

The first reimbursement for the project, claim 1 (\$27,210.11), was received by ENWRA in August 2022. The second reimbursement claim, Claim 2, is anticipated to be about \$73,199.89 (60% of eligible USGS and UNL CSD costs) likely submitted on or near the 2023 fiscal year end in June 30, 2023.

The remaining claims for the remaining \$43,590 of the \$144,000 award (60% of \$240,000 original project total not including \$74,000 in USGS cooperative dollars) will be spread over the next two fiscal years (2024 and 2025). December 31, 2024 is the estimated project end date.

#### LIKELIHOOD THAT BENEFITS PROJECTED IN APPLICATION 5312 WILL BE REALIZED:

Based on previous project results provided by USGS and UNL CSD, the project is on target for achieving the benefits as described in the application.