

WSF 2024 Status Report # 10020

PROJECT: Lower Loup NRD Buffalo County Area Groundwater Model
– WSF Application #10020 (awarded October 19, 2022)

DATE: MARCH 27, 2023
(FIRST ANNUAL REPORT DUE ON
OR BEFORE APRIL 1, 2023)

See Application 10020, Part 7 For Project Tasks Summary and Timeline

PROJECT PROGRESS UP TO APRIL 2024:

LRE Water is currently working on development of the BC Area Groundwater Model, along with their partner The Flatwater Group, and are approximately 65% complete with the model and the project overall is approximately 50% complete. The project remains on schedule to be completed by the end of 2024. Up to this point, the team has collected data, created a geologic model framework using well logs and test holes, created a 3D Model that incorporated surface soils, AEM, and the geologic framework using Leapfrog Works. A five-layer model grid was created in Leapfrog and incorporated into Vistas. LLNRD staff has assisted by completing ground truthing of select stream reaches identified for investigation by the modeling team. Two full group Milestone Meetings have been completed on 11-17-23 and 2-29-24. Currently, the watershed model (WEL and RCH packages) is being finalized and the model calibration is underway.

ANTICIPATED ACTIVITIES FROM NOW UNTIL NEXT ANNUAL REPORT DUE APRIL 1, 2025:

The project will be complete by the next annual report. The calibration will be complete and LRE Water will run the model using several water management scenarios provided by LLNRD. The report will be drafted, reviewed by LLNRD staff, and finalized. One presentation is anticipated for LLNRD staff and Board of Directors at the conclusion of successful model scenario runs by the end of December 2024 or early in 2025.

ANTICIPATED CASH FLOW FOR REMAINDER OF THE PROJECT:

The LLNRD paid \$3,993 to LRE Water (Inc) for WSF Grant Assistance Services including modeling figures from AGF AEM data.

The first reimbursement request is being submitted in March 2024 for the 1st half of the project. Reimbursement total was for \$109,562.68 and includes both 40% sponsor share (\$43,825.07) and 60% WSF share (\$65,737.61).

\$165,437.32 – The LLNRD (\$66,174.93) and WSF (\$99,262.39) have remaining funding obligations towards this project under grant #10020.

LIKELIHOOD THAT BENEFITS PROJECTED IN APPLICATION 10020 WILL BE REALIZED:

Based on the previous project results and LLNRD's experience with working through the WSF, the project is on target for achieving all benefits described in the original application.