PROJECT: Lower Platte South Natural Resources District Three-Dimensional Hydrogeologic Framework #5311 (awarded December 2021) DATE: MARCH 25, 2024 (THIRD ANNUAL REPORT DUE ON OR BEFORE APRIL 1, 2024)

See Application 5311 for Project Scope Summary and Timeline; See 2022 and 2023 Annual Reports for Activities Prior to March 2024

PROJECT PROGRESS APRIL 2023 TO MARCH 2024:

In 2022, LPSNRD contracted with LRE Water to supply services for the project. In mid-2022, LRE began work on the project and has accomplished the following main items through March 2024:

- Obtained and reviewed available geologic logs from wells, test holes, etc.
- Built geologic database
- Prepared cross section transects
- Performed spatial analyses of hydrogeologic datasets
- Completed data processing for Leapfrog visualization model
- Reinverted additional 2009 data
- Accomplished data conversions and data standardization of products produced so that data can be uploaded to the Nebraska GeoCloud
- Completed development of 3-Dimensional Framework
- Published map book illustrating various geologic and hydrogeologic data and concepts
- Trained LPSNRD and other NRD staff in utilization of Leapfrog visualization model
- Maintained ongoing communication with LPSNRD staff and Board regarding project progress

As of mid-March 2024, LRE has submitted 20 invoices for a total of \$355,653.34 and LPSNRD has paid all of these. LPSNRD requested and received its first reimbursement May 2023 and will be submitting its second and likely final reimbursement request in the next few weeks.

ANTICIPATED ACTIVITIES FROM NOW UNTIL END OF PROJECT ORIGINALLY SCHEDULED DECEMBER 31, 2023:

The project is slightly behind schedule as of this report as it was anticipated to be complete at the end of 2023. However, as noted above, all of the major objectives for the project have been completed; LRE is working on recommendations for future work and is anticipated to be submitting its final invoice in the next few weeks. Once that is done, LPSNRD will request its final reimbursement from WSF.

ANTICIPATED CASH FLOW FOR REMAINDER OF THE PROJECT:

As noted above, to date LPSNRD has paid LRE \$355,653.34 and the initial reimbursement request of \$122,058.92 was received in May 2023. The remainder of the work as outlined above has been completed and a final reimbursement request is anticipated in the next few weeks once LPSNRD receives the final invoice from LRE.

LIKELIHOOD THAT BENEFITS PROJECTED IN APPLICATION 5311 WILL BE REALIZED:

Based on LPSNRD's general schedule for the project as well as items accomplished by LRE to date, the project is on target for achieving the benefits as described in the application and as noted above. The 3-D Framework is already being utilized by NRD staff in a variety of efforts, the map book is being distributed to Board members and interested parties for their use, and the recommendations from LRE for future work will provide guidance for additional activities beyond this project. The results of this project will be extremely valuable to LPSNRD and its constituents for many years to come.