

WSF 2023 Status Report # 10064

PROJECT: LLNRD/LPNNRD – Nitrates Legacy Assessment Project –
WSF Application #10064 (awarded August 23, 2023)

DATE: MARCH 27, 2024
(FIRST ANNUAL REPORT DUE ON
OR BEFORE APRIL 1, 2024)

See Application 10064, Part 7 For Project Tasks Summary and Timeline

PROJECT PROGRESS UP TO APRIL 2024:

In late summer 2023, the Lower Loup NRD and Lower Platte NRD have worked with the USGS to select monitoring and domestic wells for water-quality and age tracer sampling. Starting in October 2023, 12 monitoring wells were sampled in Platte and Nance Counties within the Lower Loup NRD and 12 domestic wells were sampled in Platte, Colfax, and Dodge Counties in the Lower Platte North NRD. Samples from selected wells were sent to labs for nutrients, major ion, trace elements, stable isotopes, and selected age tracer analyses. At the time this update was written (March 15, 2024), there was only a complete data set for the stable isotope samples.

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

The USGS anticipates that all lab analyses will be available and data interpretation can begin in earnest in late spring 2024. Quality assurance samples will be examined to ensure the quality and representativeness of the project data set. Age tracer analyses will be completed this upcoming year and include Lumped parameter modeling to estimate groundwater age distributions for all samples. Regular project updates to LLNRD and LPNNRD Boards and staff will continue this upcoming year. Initial project findings will be shared with the LLNRD and LPNNRD Boards and staff. Report writing will begin late winter/early spring of 2025.

ANTICIPATED CASH FLOW FOR REMAINDER OF THE PROJECT:

\$408,200 – The USGS (\$137,000), LLNRD (\$54,000), LPNNRD (\$54,000) and WSF (\$163,200) all have funding obligations towards this project under grant #10064.

LIKELIHOOD THAT BENEFITS PROJECTED IN APPLICATION 10020 WILL BE REALIZED:

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