

2025

# **Water Level Transducer Report**



#### **Water Level Transducer Network**

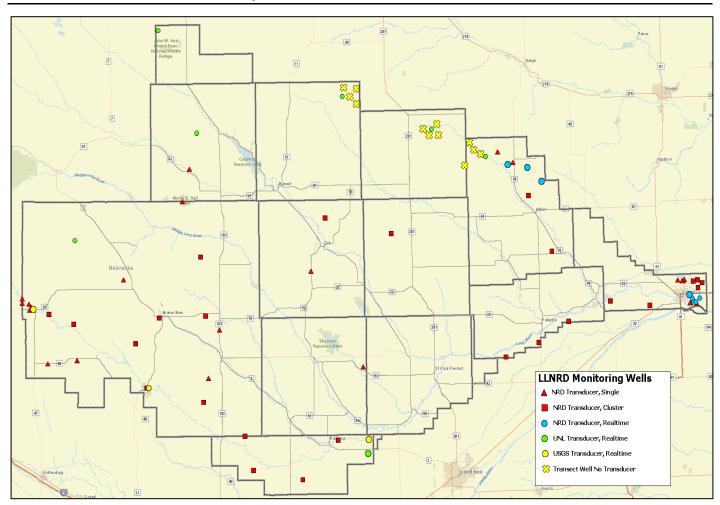
A water level transducer is an electronic device suspended in water that measures water depth based on changing pressure influenced by fluctuating water levels. The transducer continuously measures water levels and records measurements at predetermined times to an internal memory. The recorded data can be downloaded manually, or a telemetry device can transmit data via cellular connection to a database.

The LLNRD has been utilizing water level transducers for over 15 years. Uses for the transducer data include determining impact of irrigation, long-term groundwater monitoring, groundwater cone of depression, drawdown impacts from nearby irrigation wells and real-time remote water level monitoring. Future transducer sites include new monitoring wells in the Nance County Model Area, test hole locations are scheduled for May 2025.

The LLNRD water level monitoring network includes 93 level transducer sites throughout the District.

- 65 monitoring wells (without telemetry)
- 10 monitoring wells (NRD telemetry)
  - o 5 Columbus Recharge Project
  - o 5 Boone County Drawdown Area
- 8 monitoring wells (UNL telemetry)
- 4 monitoring wells (USGS telemetry)
- 5 irrigation wells (without telemetry)
- 1 Christopher Cove surface water (NRD telemetry)

### **Water Level Transducer Network Map**



## **Water Level Transducer Sites**



Monitoring Wells – Custer County



Irrigation Well - Boone County



Monitoring Wells – Loup County UNL Realtime Telemetry



Monitoring Wells – Buffalo County USGS Realtime Telemetry



Monitoring Well – Platte County NRD Realtime Telemetry



Monitoring Wells – Boone County NRD Realtime Telemetry

## **Water Level Transducer Data**

