

Need A Replacement Well?



The Lower Niobrara NRD has updated its Rules and Regulations, including the criteria required to construct a replacement irrigation water well. The process requires the proposed well to meet a series of guidelines before an application can be approved.

Application for a Permit

- An application for a permit to construct a replacement water well must be submitted with a non-refundable fee of \$50.00. This application process may take up to one year to complete.
- Each application must be accompanied with documentation that a test hole(s) was drilled and contains the following:
 - Geologic/lithologic log of materials encountered with depth.
 - Geographic coordinates of the test hole location.

Test hole Requirements

- Test hole must be drilled within **330 feet** of the proposed well location.
- Geologic/lithologic log must clearly detail the depth, color, thickness and size of material of the various geologic formations encountered and the measured depth to groundwater from the ground surface.

Equipment Needed

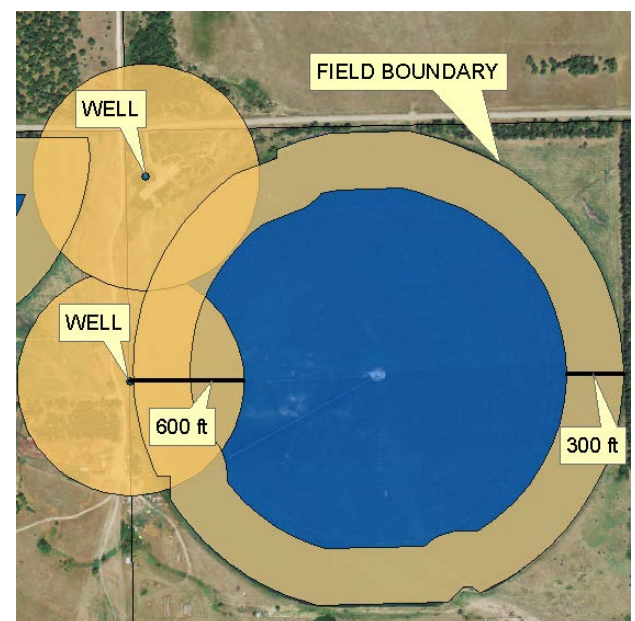
- An irrigation flowmeter is required to be installed (if not already installed) on the irrigation system.

Replacement Well Spacing

- Replacement well shall be constructed no more than 50 feet from the original well if the original well is less than 600 feet from a registered well. If the original well is more than 600 feet from a registered well and the replacement well is going to be more than 50 feet from the original well it will be subject to the following guidelines:

Well Spacing

- Proposed well must be at least **600 feet** from any other registered irrigation, domestic, livestock, commercial, or industrial well under separate ownership or any not-yet constructed wells with a valid well permit. Proposed well must also be at least **3,000 feet** from public water supply well(s).
- Proposed well must be located **300 feet within** the boundary of the field it would be providing water for.
- Area highlighted in **BLUE** is the acceptable area for the proposed well. Well spacing maps will be available by request from the Lower Niobrara NRD office.



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Well Ranking

- Each proposed well must meet the standards set forth by the District's Well Permit Ranking System. A **minimum of 250 points** is needed for an application to be approved. This process is used to determine the impact the proposed well would have on existing groundwater wells. The main criteria considered in the ranking system with associated maximum points values are as follows:
 - Thickness of primary aquifer formation (100 points)
 - Calculated transmissivity of the primary aquifer formation (100 points)
 - Irrigation well density (100 points)
 - Public water supply well density (50 points)
 - Domestic and livestock well density (50 points)
 - Method of applying groundwater to the land (50 points)
- These criteria are gauged by the geologic/lithologic information provided from the test hole and the District's most up to date Geographic Information System (GIS) data.

Variance

- Any person applying to construct a well that would not meet any portion of these guidelines may apply for a variance.