



2018

### Owners' Responsibility

The District offers free analysis for nitrates and bacteria in groundwater. Rural domestic wells are not held to Public Water System regulations; therefore it is the well owners' responsibility to ensure safe drinking water. These wells should be tested at least once a year for both nitrates and bacteria.

### Drinking Water Standards

The safe drinking water standard is ten parts per million for nitrates in public water supplies. Pregnant women, nursing mothers, and babies less than 6 months old are at the highest risk for nitrate poisoning. A condition called methemoglobinemia, commonly known as "blue baby syndrome", limits the blood's ability to carry oxygen. This can result in brain damage and even death if not treated promptly. While most wells are free of harmful bacteria it can be introduced into a well during construction or repairs or may enter a well through a crack in the casing or surface seal. It is well documented that certain bacteria pose a serious health risk to humans and livestock. For more information regarding health risks of high nitrates and bacterial contamination please consult with a physician.



### Testing

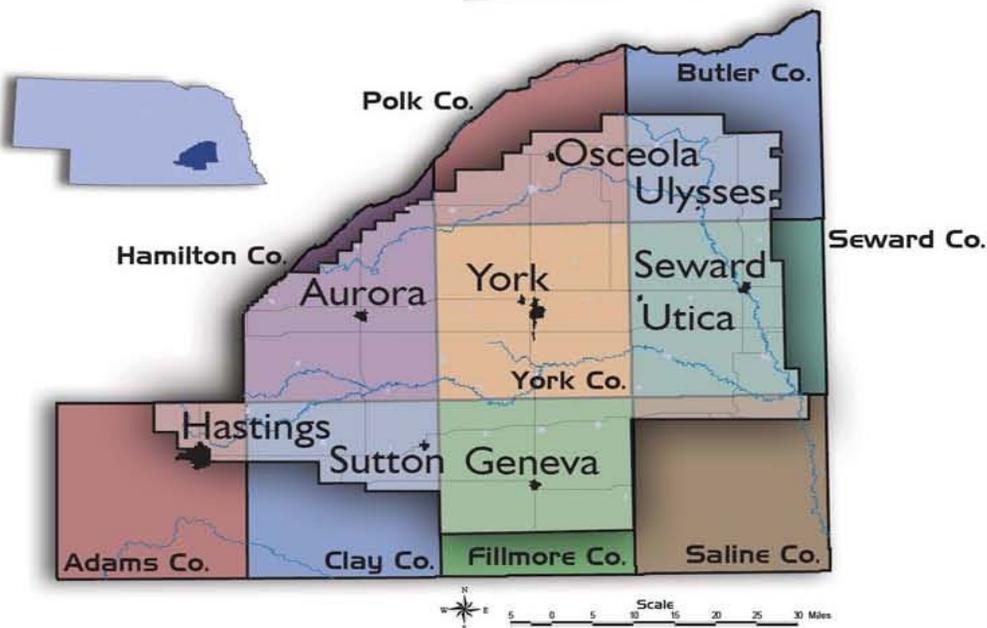
#### *Nitrates*

- You may use your own container, although the NRD will provide a clean sample bottle if requested.
- The container must be washed and rinsed before the sample is collected
- Collect the sample from a hydrant or faucet that is connected to the waterline closest to the well.
- Do not let the sample pass through a water treatment device (distiller, R/O, softener) unless you wish to test that device's effectiveness. If you are doing this, we recommend you also provide an untreated sample for comparison.
- Let the water run for at least 10 minutes before collecting the sample.
- Rinse the sample container with water 3 times before collecting the sample.
- Fill the sample container approximately 1/2 inch from the top.
- Rinse the lid and place it securely on the container.
- If you cannot deliver the sample immediately, it must be refrigerated. Deliver the sample to the NRD office within 24 hours.
- Keep the sample cool during transport.

#### *Bacteria*

- You must use a sterile bottle provided by the NRD. This bottle is sealed and needs to remain sealed until you are ready to collect the sample.
- Collect the sample from a hydrant or faucet that is connected to the waterline closest to the well.
- Let the water run for at least 10 minutes before collecting the sample.
- Shut off the water.
- Using a match or cigarette lighter, expose the end of the hydrant to the flame for 3-6 seconds. Do not expose the plastic parts to a flame, it will damage the faucet.
- DO NOT touch the inside of the bottle or lid.
- Carefully fill the sample container to the fill line on the bottle. Do not rinse.
- Secure the cap on the container.
- If you cannot deliver the sample immediately, it must be refrigerated. Deliver the sample to the NRD office within 24 hours.

# Know Your NRD: District FACTS



## UPPER BIG BLUE NRD

### Nebraska's NRDs

- Protects lives through flood protection
- Leaders in ground-water management
- Use taxpayer dollars efficiently

Formed in 1972, Nebraska's Natural Resources Districts are local government entities with broad responsibilities to protect our natural resources.

NRDs help Nebraskans respond to natural resource challenges with local control and local solutions. Major Nebraska river basins form the boundaries of the 23 NRDs, each of which is governed by locally elected boards of directors. The Upper Big Blue NRD is governed by a 17-member board of directors. These directors are elected by registered voters within the District. The board sets policy for the District and works closely with the staff through a committee system to carry out the District's goals.

Statewide, NRDs are largely funded by property taxes and make efficient use of those tax dollars; typically a Natural Resources District uses only 1% to 2% of all property taxes collected in a county.

For example, in the Upper Big Blue NRD on a \$100,000 home this would equate to about \$30 of property tax per year; A small investment for peace of mind knowing that your NRD is "Water Conscious."

Protecting Lives  
Protecting Property  
Protecting the Future

Concerned about your natural resources?...So are we!  
Find out more about Nebraska's NRDs at [www.nrdnet.org](http://www.nrdnet.org)

### Your NRD Water Lab

We are not a certified lab. If you are required by State or Federal government, a lender, realtor, or health care provider to have your water tested we can provide contact information for certified labs in your area. Upon request results can be emailed, faxed, or a phone call can be placed to a specified number; otherwise, results will be mailed out to the primary address indicated.

**Nitrates:** Analyzed the same day as delivery. Samples are accepted between 8:00 a.m. and 4:00 p.m. Monday through Friday.

**Bacteria:** Processed and placed in the incubator immediately, results available after 24 hours. Samples are accepted between 8:00 a.m. and 4:00 p.m. Monday through Thursday.



#### Who is monitoring the safety of our drinking water?

**Dan Leininger is...**

The Domestic Well Testing Program keeps rural residents of the Upper Big Blue NRD apprised of the quality of their drinking

water in regard to nitrate levels. Federal regulations state that nitrate-nitrogen concentrations in drinking water greater than 10 parts per million (ppm) are potentially hazardous to high-risk individuals such as infants and the elderly.

In towns, the city government or water supplier is required to annually inform residents of their water quality. Each year, the NRD tests nitrate levels in 250+ domestic wells.

#### Who ensures that my grandchildren will have enough water in the future?

**Marie Krausnick does...**

The purpose for our regulations is to manage groundwater in times of shortage. This will ensure that we can sustain our long-term water supply for future generations and to avoid conflicts between users. Over 500 observation wells are measured in the spring of each year, allowing the water table to rebound from the previous irrigation season.



Reporting and allocation triggers have been proactively put in place should the groundwater levels fall below a certain point.