

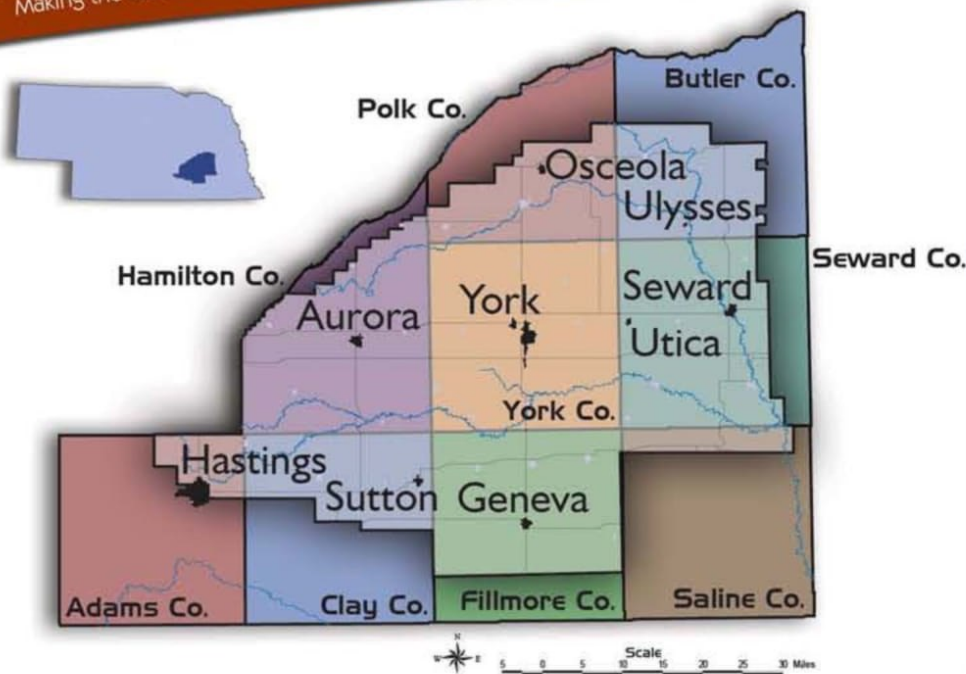
KNOW YOUR NRD



UPPER BIG BLUE
Natural Resources District
York, NE

Nebraska's Natural Resources Districts
Making the Good Life Better Since 1972

2019



UPPER BIG BLUE NRD

Water Quality & Quantity Facts

Groundwater irrigated acres

1.2 M acres; 2018 irrigation water use averaged 3.6 acre inches

Free water tests (1997-2019)

Nitrate tests: 4,246

Bacteria Tests: 1,156

Irrigation Flowmeters district-wide

11,554

Wellhead Protection Areas

27 communities

The Upper Big Blue NRD water management area is larger than the state of Delaware!

Protecting Lives

Raise a glass!



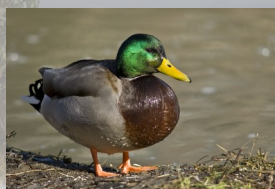
The Domestic Well Testing Program keeps rural residents of the Upper Big Blue NRD apprised of the quality of their drinking water regarding nitrate levels.

This is important as elevated nitrates in drinking water have been linked to serious health concerns. The NRD is regularly monitoring nitrates in domestic wells and working with ag partners to implement best management practices to keep nitrates from leaching into groundwater.

Protecting Property

Ready for action.

As Nebraskans can attest, you can't predict when natural disasters will strike—but you can be prepared. The Upper Big Blue NRD has built dams to channel storm water away from homes and farmland, protecting people and property. These dams are multi-purpose. In addition to preventing floods, they are also for recreation, wildlife habitats, water quality protection, and soil erosion prevention.



Protecting the Future

Water for all.

The Upper Big Blue NRD keeps a close eye on groundwater quantity to ensure our long-term water supply for future generations. Irrigation reporting and allocation triggers have been proactively put in place to guard against future drought. Over 500 observation wells are measured in the spring of each year, allowing the water table to rebound from the previous irrigation season.

*Morning at Pioneer Trails
Recreation Area near Aurora*

GROWing Together

The Upper Big Blue NRD, in cooperation with the City of York, is demonstrating the use of crop rotations and cover crops on part of the city's wellfield to improve soil health and maintain profitability. Now in its second year, the goal of Project GROW (Growing Rotational Crops on Wellfields) is to protect York's water quality.

This year a cash crop was planted and will be followed by a cover crop after harvest. The cover crop's function is to protect the soil and tie up any nitrate-nitrogen that might be left by the cash crop. Any residual nitrate-nitrogen will



be stored in the above ground biomass of the cover crop and will be available for next year's cash crop. Soil tests taken earlier this spring at the GROW fields showed very little nitrate-nitrogen left in the soil from last year. Project GROW also features a fruit orchard, community garden, and pollinator habitat.

Groundwater Quality

The residents of the district depend on groundwater for their livelihood and life itself. Irrigation dominates agricultural crop production and drives the economic vitality of the region. Groundwater is the sole source of water to sustain human needs. The district manages groundwater quality in hundreds of private wells and offers free nitrate and bacteria testing for all rural residence. Several areas of our district show elevated nitrates in the water due to historic excess nitrogen fertilizer application. District regulatory programs and educational efforts are ongoing to encourage and educate farmers and the general public on the proper use of management of nitrogen fertilizer and irrigation. The goal of these programs is to maintain and improve the quality of the groundwater for future generations.

Flood Control and Soil Erosion Prevention

One of the main responsibilities of the NRD is flood control, as a variety of rivers and creeks flow through the district. With 47 flood control dams district wide, the Upper Big Blue Natural Resources District works with producers, cities and county officials to improve stormwater management and runoff. These practices prevent or reduce soil erosion water contamination, and the overuse of both surface water and groundwater.



Nebraska's NRDs

- Protect lives through flood protection
- Are 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 \$25 of property tax per year; A small investment for peace of mind knowing that your NRD is "Water Conscious."

"Conservation is the Nature of Our Business"

Concerned about your natural resources?...So are we!
Find out more about Nebraska's NRDs at www.nrdnet.org