

# KNOW YOUR NRD

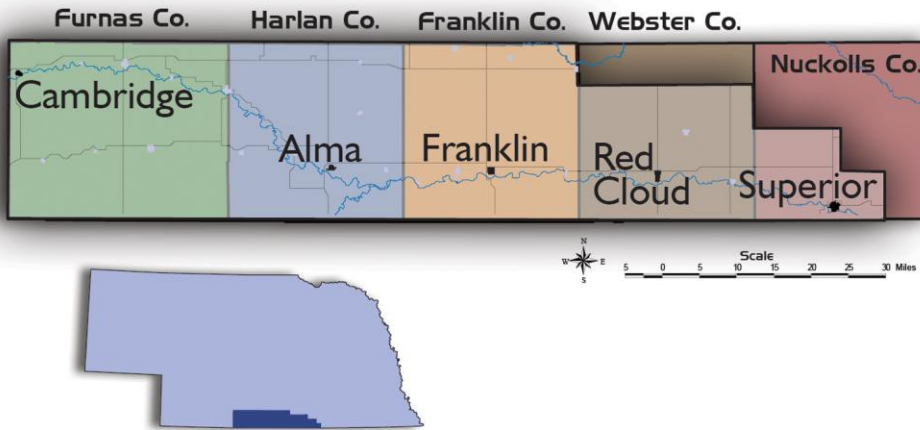


**LOWER REPUBLICAN**  
Natural Resources District  
Alma, NE

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

2019

## LOWER REPUBLICAN NRD



### NRD QUICK FACTS:

Wells Measured Annually to Monitor Water Levels

Over 20,000 Trees Planted Annually

All 3,600 Active Irrigation Wells are Metered and Regulated

No New Irrigated Land Development Since 2004

325,012 Irrigated Acres

### Protecting Lives

#### Water Management

The LRNRD has had sustained ground water levels since 2005. The LRNRD allocates water use for compact compliance and the preservation and conservation of water. Our District has a moratorium on new wells and new irrigated acres and a certification of all irrigated acres. All irrigation wells in our district are metered and regulated.



### Protecting Property

#### Cost-Share Programs



The LRNRD offers cost-share assistance to private landowners through many programs including:

- Well Decommissioning,
- Nebraska Soil and Water Conservation Program (NSWCP),
- Regional Conservation Partnership Program (RCPP),
- LRNRD's Tree Program.

These programs are designed to promote better management and conservation of the State's natural resources by landowners. For more information or to apply, contact your local NRCS office.

### Protecting the Future

#### Flood Protection

The LRNRD is responsible for maintaining the integrity of a watershed project completed for the Village of Stamford to protect from occasional flooding.



#### Water Monitoring and Observation

The LRNRD provides Ground-water Quality and Quantity evaluations, monitoring and services to support our water resources. All chemigation injection sites are inspected, annually permitted, and must be administered by a licensed chemigator.

## Major Projects & Programs

### Safe Drinking Water Across the District

To protect rural resident's water supply in our District, the Rural Water Project was started in October of 2005. A stretch of 117 miles of pipeline was constructed from just west of Franklin to east of Guide Rock. Four miles south of Franklin, a 100-foot water tower was erected with a 100,000-gallon tank. Service is currently provided to 183 rural water customers and the Village of Guide Rock.

The LRNRD monitors selected wells across the district to protect farm families from high nitrate levels which may affect personal health.

When it was discovered that the Superior-Hardy area had high nitrate levels in their water supply, they became the first area in the state declared a Special Protection Area. The LRNRD tests monitoring wells in this area four times a year and nitrogen and irrigation management and training workshops are held for area operators.



### Education

The LRNRD promotes conservation education.

- **Water Jamboree** 5th & 6th grade classes see how water impacts their lives.
- **Land and Range Judging Contests** for high school students identify soil types or range grasses and different types of soil or range management.
- **Classroom Activities**
- **Range Camp** scholarships for two district high school students
- **Adventure Camp about the Environment (ACE)** scholarships for two district 6th–8th graders
- **\$1,000 College Scholarships** 3 district high school seniors or college students majoring in Natural Resources or Agricultural fields.
- **South Central Water Conference** opportunity for ag producers and experts to discuss important water issues they are facing.



### NCORPE Augmentation Project

The LRNRD along with the Upper Republican, Middle Republican and Twin Platte NRDs created the Nebraska Cooperative Republican Platte Enhancement (NCORPE). NCORPE purchased 19,500 acres in Lincoln County that straddle the Platte and Republican River Basins. Ceasing irrigation of these acres allows water to be stored in the Ogallala Aquifer then piped from 30 groundwater wells into the Republican and Platte Rivers when needed to meet river flow obligations. This helps to prevent the shutdown of nearly 80,000 irrigated acres in the LRNRD. A significant portion of that water will not be needed on an annual basis and will be “banked” for use in years when needed for compliance with the Republican River Compact. Over the mid and long-term the amount of water pumped under the project to help keep Nebraska in compliance with the compact and prevent massive irrigation shutdowns may be less than what was pumped by the hedge fund that operated the property as an irrigated farm.



## What the LRNRD does for Nebraska:

- **Manages our natural resources**
- **Works to keep us in compliance**
- **Educates the future of Nebraska**

**TOTAL LAND AREA:** 2,484 sq. miles or 1,589,760 acres

**ELEVATION:** 1,574 to 2,060 feet above sea level

**PRECIPITATION:** Average annual precipitation ranges from about 22 inches in the west to 26 inches in the east. Approximately 75% of the precipitation is received from April to September. Drought conditions are not uncommon.

**CLIMATE:** The climate is one of limited precipitation, fluctuating precipitation and humidity, frequent wind shifts and frequent sharp changes in temperatures.

**SOIL TYPES:** The soils of the LRNRD vary from sand to silt to clay

**LAND USE:** Land use ranges from ranching to farming and are very nearly equally divided in the number of acres used for each. Less than 2% of the District is in urban areas, trees, water, roads, and farmsteads. Just over 20% of the District is irrigated.

**CROPS:** Corn, wheat, soybeans, alfalfa, and sorghum are the major crops grown under dry land and irrigated conditions. Corn is the primary crop.

**LIVESTOCK:** Beef cattle are the most common livestock with commercial hog production next.

Find out more about Nebraska's NRDs at [www.nrdnet.org](http://www.nrdnet.org) and [www.lrnrd.org](http://www.lrnrd.org)