

KNOW YOUR NRD

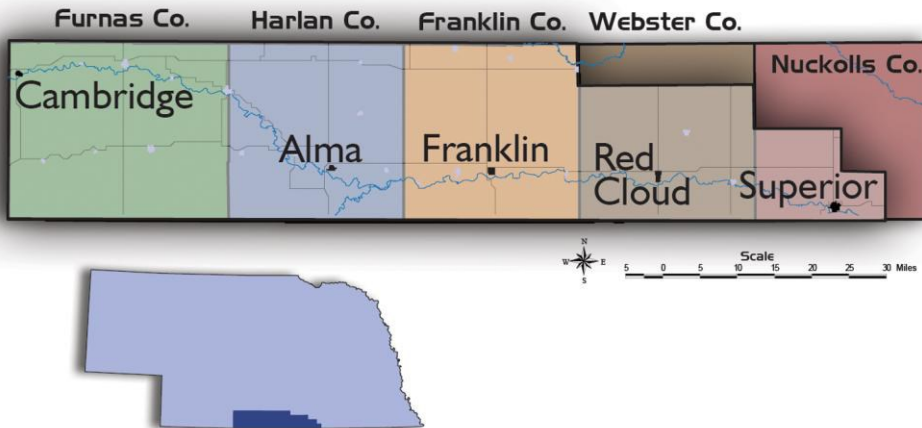


LOWER REPUBLICAN
Natural Resources District
Alma, NE

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

2016

LOWER REPUBLICAN NRD



NRD QUICK FACTS:

Wells Measured Annually to Monitor Water Levels

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 Level Monitoring

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



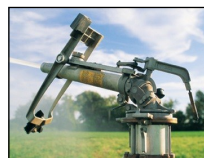
When it was discovered that the Superior-Hardy area had high nitrate levels in their water supply, they became the first area in the state declared a Special Protection Area. The LRNRD tests monitoring wells in this area four times a year and nitrogen and irrigation management and training workshops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

Protecting Property

Cost Share Programs

The LRNRD was the recipient of a Regional Conservation Partnership Program (RCPP) grant through the U.S.D.A. The RCPP will help to improve irrigation water management, create wildlife habitat and reduce soil erosion on cropland.

The Lower Republican Project will target three main areas which include conversion from gravity to sub-surface drip, high-end soil moisture sensors and permanent retirement of end guns. These practices will help to reduce consumptive use and improve the way we manage our available water supply.



Protecting the Future

Water Management

The LRNRD regulates water use for the preservation and conservation of water and for compact compliance. 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.

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



Major Projects & Programs

Safe Drinking Water For Rural Residents

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 190 rural water customers and the Village of Guide Rock.



Educational Outreach

The LRNRD has been very proactive in educating our youth on the importance of soil and water conservation. We sponsor a Water Jamboree every spring where we have 500 fifth and sixth graders from South Central Nebraska and North Central Kansas. They get to experience first-hand the importance water plays in their daily lives.

The district also sponsors Land and Range Judging contests every fall for high school students in the surrounding area. These contests focus on various aspects of soil types, land slope and soil management, as well as identifying range grasses and range sites and their characteristics. The competition is fun but also very intense.

Finally, the LRNRD offers two \$1,000 scholarships every year to high school seniors who major in a Natural Resources or Agricultural related field. The scholarship program has been very successful and is a prime example of how the LRNRD is promoting the education of our youth for future generations.



N-CORPE Augmentation Project

The Lower Republican NRD along with the Upper Republican, Middle Republican and Twin Platte NRDs created the Nebraska Cooperative Republican Platte Enhancement (N-CORPE). N-CORPE 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. 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 and www.lrnrd.org