

# YOUR NRD BASIN

# REPUBLICAN RIVER

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

Fall 2008



## BASIN FACTS:

### NRDs:

*Upper Republican NRD, Imperial Middle Republican NRD, Curtis Lower Republican NRD, Alma Tri-Basin NRD, Holdrege*

1,261,808 Irrigated Acres

54,595 Constituents Across  
13 Counties

140 Million Bushels of Corn  
Produced In 2007

116 Miles of Invasive Plants  
Removed From River Channels

## Local Problems, Local Solutions

### Conserving Water

The Republican River Natural Resources Districts have consistently encouraged producers to use "best management practices" - techniques to conserve both natural resources and the environment.

With drought conditions lingering in the Midwest during recent years, water conservation has come to the forefront. The NRDs stress improving efficiency in irrigation systems, supporting technologies, strategies and educational opportunities that help producers make increasingly efficient use of groundwater for irrigation.

### Working Together

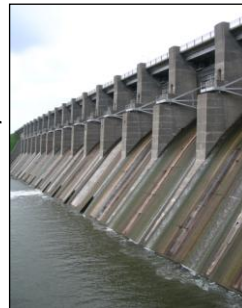
Since their inception in 1972, Nebraska's Natural Resources Districts have worked



together, and with other partners, to solve both local and statewide issues.

In 2008, the Upper, Middle and Lower Republican NRDs formed a coalition, providing them with a cost effective avenue to pursue studies and joint projects for water conservation and compliance with the Republican River Compact Settlement. Current projects include an evapotranspiration study and an augmentation pipeline study.

Relationships have also been developed between the NRDs and the Republican River Irrigation Districts through the Republican River Management Districts Association. This partnership facilitates communication between these organizations in order to truly implement integrated management.



### Protecting The River

The Republican River NRDs have teamed up with various other local agencies to create Twin Valley and Southwest Weed Management Areas. These organizations are taking on the invasive plants that have infiltrated Republican River channels.

While the invasive plant problems vary from one end of the basin to the other, one theme prevails: overgrowth in the stream channels and river banks, consuming water and impeding stream flow.

With funding from LB 701, the two weed management areas began river cleanout projects including spraying phragmites, removing fallen trees from stream channels, deep disking islands, and removing Russian olive and red cedar within 100 feet of stream channels.



## Protecting Your Water

Basin-wide, 655 wells are tested annually for nitrate levels - keeping you and your family safe from contaminated drinking water. Local NRD staff members are also involved in community education projects, ensuring that adults and children alike are aware of the dangers of high nitrates. On the eastern end of the basin, the Lower Republican NRD provides quality drinking water to 148 households through a Rural Water supply project.



## Protecting Nebraska's Landscape

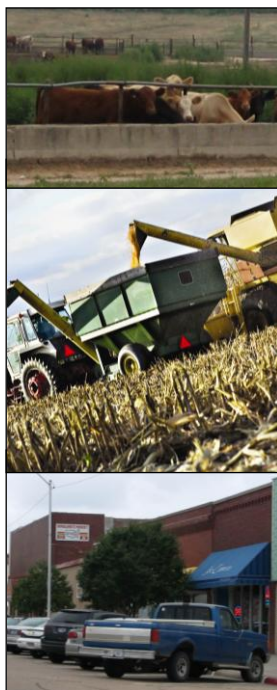
A variety of conservation programs are currently in place that decrease erosion, restore wildlife habitat and safeguard ground and surface water in the Republican River Basin. The NRDs cooperate with federal programs including the Conservation Reserve Enhancement Program (CREP), the Environmental Quality Incentives Program (EQIP), and the Conservation Reserve Program (CRP).

The NRDs also have active tree planting programs, providing cost share on buffer strips and wildlife habitat. These trees aid in soil moisture retention and erosion prevention. In 2008, over 75,000 trees and shrubs were planted in the Republican River Basin.

## Preserving The Local Economy

Each year, irrigated land in the Republican River Basin provides over \$9.8 million in tax revenue to support local government subdivisions. These funds go toward cities, counties and schools. Of equal importance, irrigation within the basin produces higher crop yields, boosting economic activity in local communities. A 2007 study done by the University of Nebraska showed that a state-proposed 40% reduction in quick response acres in the basin and a 15% reduction in upland pumping would lead to an \$81 million annual loss in business sales in the basin, without achieving compact compliance. This scenario would also impact the labor market, resulting in a potential \$46 million annual loss in worker earnings across the basin.

To preserve the local economy, the NRDs are working together to maintain compliance with the Republican River Compact while minimizing economic impacts. In 2007, the NRDs purchased surface water to augment streamflow, and are currently studying the feasibility of utilizing a pipeline to supplement streamflow in water-short years.



# IRRIGATION

- All irrigation wells currently metered and monitored
- No new irrigated land developed since 2004
- Encouraging efficient water use

The Republican River basin is unique in that it is a part of a three-state Compact. Enacted in 1943, this agreement allocates 49% of the virgin water supply to the state of Nebraska, 11% to Colorado, and 40% to Kansas.

The Kansas v. Nebraska Settlement of 2002 resulted in a moratorium on new irrigated land and pumping regulations, to ensure that water is conserved within the basin and that Nebraska stays within its annual water allocation.

In 2008, the three Republican River NRDs received a grant from the Nebraska Department of Natural Resources to explore the possibility of a streamflow augmentation pipeline. It is hoped that such a pipeline would allow Nebraska to stay in compliance during drought and water-short years.

## Nebraska's NRDs

Formed in 1972, Nebraska's Natural Resources Districts are local government entities with broad responsibilities to protect our natural resources. NRDs are unique to Nebraska, a state which has a long history of political innovation, providing local control of local resources.