

KNOW YOUR NRD



MIDDLE REPUBLICAN
Natural Resources District
Curtis, NE

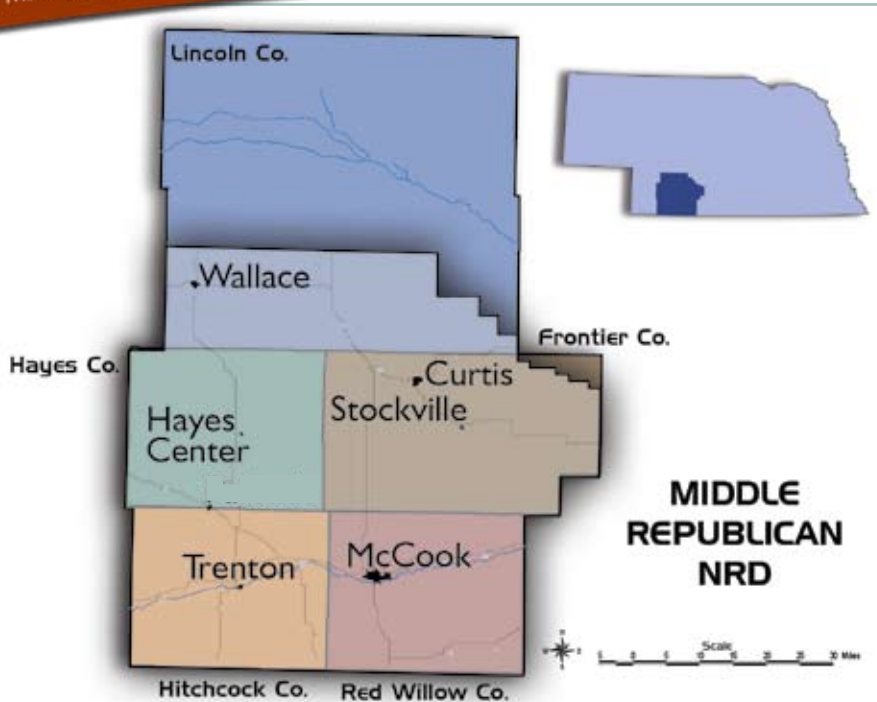
Nebraska's Natural Resources Districts
Making the Good Life Better Since 1972

Summer 2010

Middle Republican NRD QUICK FACTS:

Managing and conserving water while supporting the economy in Southwest Nebraska

- The land area of the MRNRD covers 3,843 square miles or 2,459,520 acres.
- 52% is rangeland while 46% is considered cropland.
- Observation wells show ground water levels increased in 2010.
- 45,867 trees were planted for wildlife and soil conservation in 2009.
- The District controls and maintains 33 flood control structures.



Protecting Lives

Protecting Property

Protecting the Future

Managing the Quality and Quantity of Ground Water

The Middle Republican NRD is working year round to protect and monitor the quality of our ground water so residents of the District can have a safe and secure water supply. Your NRD...

- ◆ Protects ground water as a drinking source for over 19,000 people living in the Middle Republican Natural Resources District.
- ◆ Protects surface and ground water quality by working with landowners to properly seal abandoned irrigation wells.
- ◆ Inspects 1/3 of all irrigation wells each year to insure safe operations of their chemigation systems.
- ◆ Protects drinking water supplies by collecting and testing water samples for Nitrates from strategically located wells.
- ◆ Measures ground water levels at 126 observation wells located throughout the District in early Spring and Fall of each year.
- ◆ Annually reads all metered wells at the end of the irrigation season to ensure irrigators are staying within their allotment of ground water use.

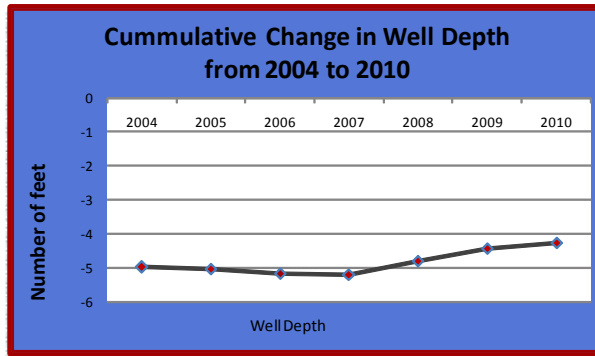
Plan & Policy to Protect the Future of Ground water

To Protect the future of ground water and to comply with the Republican River Compact, an *Integrated Management Plan* was created. The plan includes...

- ◆ Incentive programs for landowners to reduce irrigated acres.
- ◆ No new ground water uses permitted.
- ◆ Irrigation use levels are maintained at a sustainable level.
- ◆ Ground water use for irrigation is monitored to achieve 20% reduction from historical pumping volumes.

When It Rains, It Flows

Ground water levels began an upswing in 2007 following a severe drought which took a toll on ground water levels (Graph on right). Current irrigation well pumping levels allow ground water levels to continue to rise given normal to above normal precipitation.



Dry Year Planning

In the event of a dry year, the District will consider...

- ◆ Providing or sponsoring programs to permanently retire irrigated acres. By 2010, 2667 acres have been permanently retired. Nearly 13,000 acres are currently enrolled in CREP and another 3000 acres have been or are currently temporarily retired through EQIP and AWEP.
- ◆ Purchasing surface water or groundwater to augment streamflow depletion for compact accounting.
- ◆ a restriction on pumping in dry years to stay within our allowable percentage of streamflow depletion for compact accounting.

Water Balance Study

This 15 month basin wide study, which began in 2010, will evaluate water budgets on both an NRD wide and basin wide scale. The study will be used to develop, refine and support informed water management decisions and to set long term water management goals across the district and the basin.

River Restoration

The three Basin NRD's, Southwest Weed Management Area, and the Twin Platte Weed Management Area are continuing work on improving the flow of water in the Republican River through vegetation clearing efforts along the river channel and 100 feet on either side (See photos below). The project in 2007 was made possible as a result of LB701 providing grant funds to the USDA.



Two years after initial work, Dundy Co stretch of Republican River shows increased flows.



By May, native grasses fill in the sand bars and native trees remain along the border of the outer channel providing excellent wildlife habitat

NRD Programs

- Soil Conservation
- Cost Share Assistance
 - Well Abandonment
 - Terrace Enlargements
 - Wildlife Habitat
- Flood Control
- Tree Planting
- Wildlife
- Education

Nebraska's Natural Resources Districts were created in 1972 with the purpose of conservation and preservation of our natural resources. With this in mind, the MRNRD is involved in many programs relating back to the responsibilities the Nebraska State Legislature charged NRD's with in 1972.

To achieve those responsibilities, the District works closely with several other federal, state, and local agencies, clubs and organizations to carry out its programs and responsibilities.

Find out more about Nebraska's NRDs at

