

KNOW YOUR NRD

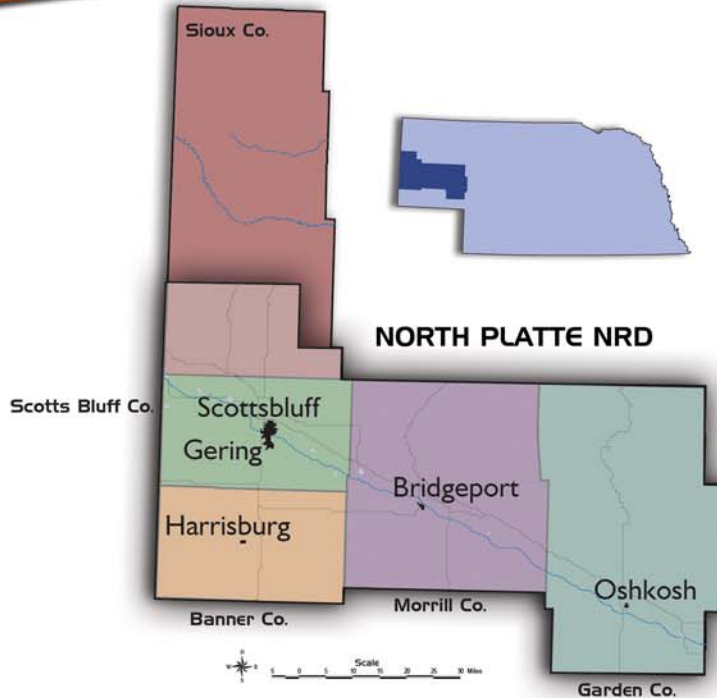


NORTH PLATTE
Natural Resources District

Scottsbluff, NE

FALL 2008

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



NPNRD QUICK FACTS:

Annual Average Precip: 12 inches
 Registered Water Wells: 3,000
 Monitoring Wells: approx. 450
 Trees Planted: Over 4 million since 1972
 Ground Water Acres: 105,020
 Total Irrigated Acres: 215,892
 Over half (110,320) of the District's total irrigated acres are supplied by commingled (canal AND well) water.
 Western Nebraska ground water is greatly dependent upon the series of canals, tributaries, and seasonal irrigation run-off, which recharge the aquifer.
 A moratorium on new water well drilling in 2001 was the first such moratorium on the Platte River.

Promoting Stewardship — Providing Management — Protecting Resources

Land Enhancement Projects



- Nine Mile Creek
- High Plains Weed Management Assoc.
- Panhandle No-Till Partnership

In 2003 the North Platte NRD began working with landowners along Nine Mile Creek northeast of Scottsbluff to remove Russian olive and Saltcedar that were clogging the channel. The NRD continues to work with landowners to establish grass filter strips, riparian forest buffers, reseed native grasses, trees and shrubs. Nine Mile Creek work has paved the way for other similar invasive species control projects throughout the state.

The High Plains Weed Management Association (continued...)

Science-Based Knowledge



- Canal Geophysics Survey
- HEM Survey
- Limited Irrigation Study

The North Platte NRD has partnered with the United States Geological Survey (USGS), University of Nebraska, Nebraska Environmental Trust, Department of Natural Resources (DNR), and other NRDs to conduct studies that will provide comprehensive science-based knowledge for better land and ground water management.

The Canal Geophysics Survey conducted by the USGS and partially funded by the DNR's Interrelated Water Management Plan Program fund, is helping (continued...)

Wise Ground Water Use



- Certification of Ground Water Uses
- Flow Meters
- Monitoring Wells
- Allocation of Ground Water Use

Accurate measurement provides for accurate management of ground water. The first-ever moratorium on drilling of new water wells within the Platte River System was set by the North Platte NRD in 2001. Two years later the first allocation of ground water began in the Pumpkin Creek Basin. In 2007-08 the NRD worked with landowners to certify all ground water uses within the District. The District now has accurate records of ground water uses. New uses are no longer allowed without (continued...)

Land Enhancement Projects

(Continued from front) was formed in 2007 through a joint effort between the North Platte and South Platte NRDs, county weed superintendents of Scotts Bluff, Sioux, Banner, Morrill, Garden, Kimball, Cheyenne, and Deuel Counties and the Panhandle Resource Conservation & Development (RC&D). The HPWMA's purpose is to **remove and treat the invasive and noxious plant species**, including Russian olive, Saltcedar, phragmites, and Canada thistle that are choking the North Platte River basin and its tributaries.

In 2008 the **Panhandle No-Till Partnership** was formed as a joint effort between the North Platte, South Platte, and Upper Niobrara-White NRDs, the Natural Resources Conservation Service (NRCS), and Panhandle RC&D. The partnership's purpose is to bring continuous no-till education to producers in Western Nebraska, including an annual Winter No Till Conference in Gering, ongoing producers' workshops and field tours, and the weekly column, "No-Till Notes" published in regional newspapers.

Science-Based Knowledge

(Continued from front) Western Nebraska water managers understand the region's geological characteristics and how they're related to the canal system. In time, the NRD would like to utilize the intricate irrigation project for intentional ground water recharge and storage projects. This study will help indicate the optimum places to hold excess surface water to sustain the aquifer.

The **Helicopter Electro Magnetic (HEM) Survey**, conducted in 2008 by the USGS and partially funded by the Nebraska Environmental Trust, will provide three-dimensional maps of the region's geological formations. These maps will be used by hydrologists and correlate with data from the Canal survey, to determine the most optimum ground water holding areas in the aquifer.

The **Pumpkin Creek Limited Irrigation Project**, with major funding and support provided by the North Platte NRD, NRCS, and the Nebraska Department of Agriculture, was conducted from 2004 to 2007 in the Pumpkin Creek Basin by UN-L soils specialist Dr. Gary Hergert. This worthy project demonstrated limited irrigation and no-tillage cropping systems to maximize efficient use of ground water. For Dr. Hergert's full details on the study, go to http://www.panhandle.unl.edu/pumpkin_creek/index.htm.



Wise Ground Water Use

(Continued from front) offsets equal to these new uses. The North Platte NRD has encouraged the **permanent retirement of irrigated acres** and in 2006-2007 nearly 3,500 acres were permanently retired in the Pumpkin Creek Basin. These lands were converted to dryland, rangeland, or habitat.

The use of **flow meters** is now required on all regulated wells within the overappropriated area of the District. **Allocation of ground water** will begin in the 2009 growing year to help preserve the long-term sustainability of our ground water aquifer. And the District maintains approximately **450 monitoring wells** to check nitrate and uranium levels in the region's ground water.



A **Buffalograss seed reimbursement program** is also available to help homeowners convert their thirsty bluegrass lawns to more water-conscious buffalograss, which is a logical solution for Nebraska.

- Protecting ground water by monitoring nitrate and uranium levels.
- Protecting Western Nebraska by covering 3,226,880 acres.
- Using only 7 cents per \$100 to protect your natural resources.

What is commingled water?

Commingled Water is one of our District's greatest assets--and greatest management challenges. Commingled water is irrigation water that is derived from both surface (canal) water and ground (well) water. Commingled water accounts for over half of the irrigation water that is used on lands within the District (105,020 ground water-only irrigated acres vs. 110,570 commingled water-irrigated acres). The North Platte NRD needs its surface irrigation system in order to maintain a sustainable ground water mound and is working to encourage irrigators to use their surface water first before tapping the ground water supply.

YOUR Investment in LOCAL Natural Resources

The North Platte NRD is a local government agency that operates on a portion of your annual property taxes. Compared to State and County Governments and School Districts, the NRD uses less than 1% of the total property taxes collected in each county. For example, in the North Platte NRD, on a \$100,000 home, this would equate to approximately \$78.00 per year. To help fund programs, studies, and cost-share assistance, the NRD utilizes money available from the Nebraska Environmental Trust, Bureau of Reclamation funds, and other state and federal agencies.