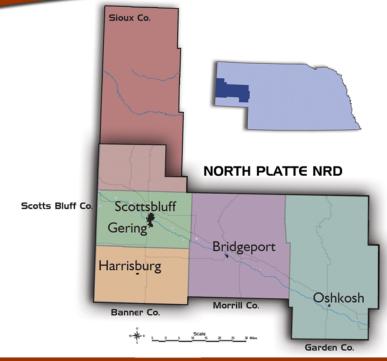
### NORTH PLATTE

Natural Resources District

Scottsbluff, NE

2013

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



### **NRD QUICK FACTS:**

'12 Precipitation: 6.9" (Scottsbluff)

Registered Wells: 2,900 Monitoring Wells: 750

Trees Planted: Over 5 million

Total Irrigated Acres: approximately 425,000

Ground Water Only Acres: 107,645 Over half (115,548) 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.

## Protecting Lives

### Protecting Property

# Protecting the Future



The North Platte NRD protects the well-being of western Nebraska residents by maintaining

and operating a public drinking water system in Harrisburg, managing a ground water management subarea in Garden County where nitrates are closely monitored, and measuring the static ground water levels at 750 monitoring wells located throughout the District. We administer a well decommissioning program to help landowners properly seal their abandoned wells, protecting children, pets, and property.



Conservation **Cost Share** Panhandle No-till **Partnership** 

The North Platte NRD helps protect property by partnering with other agencies such as the Natural Resources Conservation Service, Farm Service Agency and Pheasants Forever to help landowners make improvements in irrigation water management, planned grazing systems and tree planting. The District partners with the South Platte and Upper Niobrara-White NRDs for the Panhandle No-till Partnership which provides ongoing producer no-till education. The NRD also maintains 15 flood control structures in the District helping protect properties from flood damage.



The North Platte NRD protects the future by providing area producers with

tools to manage their ground water more effectively. The NRD provides flow meter maintenance to ensure more accurate ground water readings. The NPNRD Board of Directors voted to change the allocation in the Pumpkin Creek Subarea from 12 acre-inches per acre per year to 36 acre-inches per acre per three years. This change is in line with the existing allocations in the North Platte River Valley, and will allow irrigators great flexibility to manage crop rotations. By working with area producers, the North Platte NRD is poised to protect the future of western Nebraska's water.

### NRDs - Your Local Voice for Resources Management

### **Science-Based Management**

In efforts of making more informed, fact-based resource management decisions, the North Platte NRD has partnered with the United States Geological Survey (USGS), the 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 present and future management decisions. The North Platte NRD is



currently using the Western Water Use Management Model, which is specific to the North Platte and South Platte NRDs, to simulate and estimate future aquifer conditions and the effects of ground water withdrawal in specific areas of the District. The model will be used to help accomplish the goals of the North Platte NRD's water management efforts.

The North Platte NRD is protecting the future by coordinating with Irrigation Districts and Canal Companies in the District on recharge projects. In 2011, excess water in the North Platte River was diverted into the canals helping to alleviate flooding downstream and to provide ground water recharge. The NRD is also investigating leasing surface water from irrigated acres for future recharge projects. By using the Western Water Use Management Model, the NRD staff will be able to identify which land will be the most suitable for recharge. The recharge projects will provide additional ground water storage for helping meet the NRD's water management goals.

The 2012 Nebraska LiDAR Mapping Project is one of the most accurate and cost effective ways of mapping terrain. It is a partnership with DNR and NRCS. The data collected will help municipalities by providing maps for subdivision planning, utilities corridors, and road construction. LiDAR can help the NRD by updating data for the Western Water Use Management Model, and it provides a better understanding of the surface water systems.

The North Platte NRD has partnered with DNR, the South Platte NRD, the Upper Niobrara-White NRD, and the University of Nebraska-Lincoln to study the effects of limited irrigation on producers and look for methods to help them make crucial water management decisions. The program will also look at how reduced water allocations will affect their profitability and the long-term economic viability of agriculture in the Panhandle.

#### Wise and Safe Ground Water Use

In addition to placing a moratorium on new well drilling, certifying all ground water uses, and metering ground water uses, the North Platte NRD has also permanently retired ground water irrigated acres throughout the District. Since 2006, nearly 3,900 irrigated acres have been permanently retired in the Pumpkin Creek Basin. These lands were converted to dryland, rangeland, or wildlife habitat.

The allocation of ground water within the overappropriated area of the District has been in place for several years, and producers have adjusted well to the restrictions. These management actions will help the District comply with state statute in returning the District to 1997 levels of use and protecting the resource for long-term sustainability. The District also maintains approximately 750 monitoring wells to check ground water nitrate, arsenic, uranium, and static ground water levels.

- Protecting ground water by monitoring nitrate, arsenic, and uranium levels
- Protecting over 3 million acres in western Nebraska with tree planting, soil conservation, flood control, and ground water projects
- Effectively using only 5.8 cents per \$100 for programs and services

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 (107,645 ground water-only acres vs. 115,548 commingled waterirrigated acres). The North Platte NRD needs its surface water irrigation system in order to recharge the aquifer and is working to encourage irrigators to use their surface water first before tapping the ground water

# 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 a very small percentage 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 less than \$60 per year. To help fund programs, studies, and cost-share assistance, the NRD also utilizes money available from the Nebraska Environmental Trust, Bureau of Reclamation funds, and other state and federal agencies.