

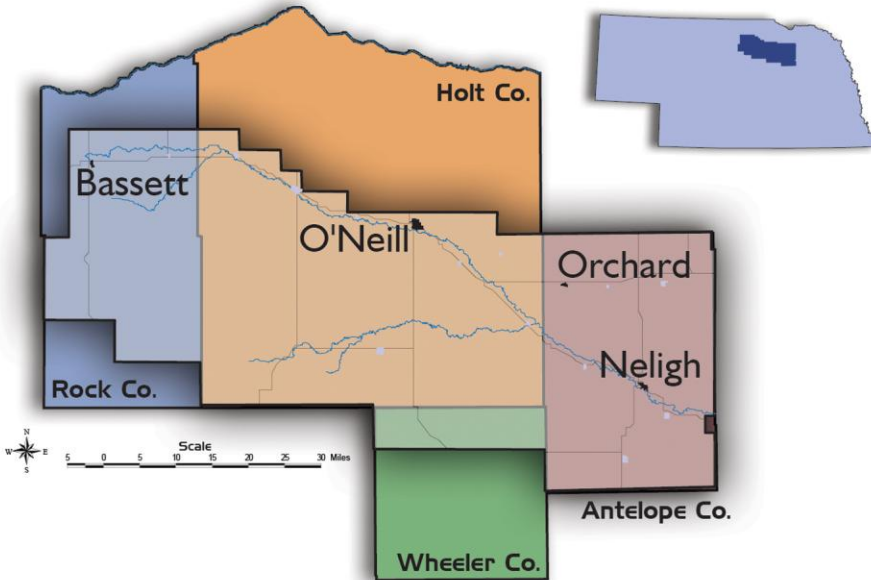
KNOW YOUR NRD



UPPER ELKHORN
Natural Resources District
O'Neill, NE

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

Winter 2008



UPPER ELKHORN NRD

UENRD QUICK FACTS:

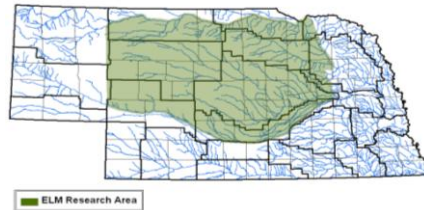
- UENRD encompasses 3,000 sq. miles or 1,954,560 acres
- District Population - 18,764
- 6679 Registered Wells
- Certified over 1,600 Producers in Nitrogen Management
- In FY 07-08
 - Planted 61,013 Conservation tree seedlings
 - Installed over 45 miles of Conservation Weed Mulch
 - Distributed \$127,196 in Cost Share to local Cooperators for Conservation Trees, Irrigation Water Mgt, Planned Grazing Systems, Domestic Water Quality, Water Well Decommissioning & Deep Soil Sampling

Protecting Our Natural Resources for Future Generations

The ELM Project

The increasing concern for water resources in Nebraska has prompted many NRDs to take an active role in the process of assessing our water resources. The Elkhorn-Loup Model (ELM) is a project to study the water resources in the Elkhorn and Loup River Basins and assist in the critical planning issues concerning Nebraska's water resources. The Upper Elkhorn NRD, Lower Elkhorn NRD, Upper Loup NRD, Lower Loup NRD, Middle Niobrara NRD, Lower Niobrara NRD, Lewis and Clark NRD and Lower Platte North NRD along with the Nebraska Department of Natural Resources and the USGS are in the process of developing this model to help the NRDs and DNR in assessing the effects of groundwater withdrawals and the availability of surface water. The model will be calibrated

to measure ground water levels and estimate ground water discharge to streams.



UENRD Receives ET Grant

April 4, 2008 the Upper Elkhorn NRD received an Environmental Trust Grant to implement the Irrigation Water Management Monitoring Program. This three year grant will be used to assist cooperators in installing water meters on their irrigation systems.

The project will allow a direct comparison between the amount of

water pumped and the average static water levels across the District. Cooperators participating in the program also have the potential of reducing production costs through better irrigation management.

Long-term benefits will be measured in both water quality and quantity through better irrigation management.

The Upper Elkhorn NRD along with the Nebraska Environmental Trust Fund have allocated over \$39,000 in cost share this summer to install 36 flowmeters within the District.



Protecting Lives

Protecting Property

Protecting the Future

East Branch Verdigris Creek

The East Branch of the Verdigris Creek watershed in northern Antelope County is one of the few Class A streams in Northeast Nebraska. As a result of the streams importance to Grove Lake and the Game & Parks fish hatchery, the UENRD has received two Environmental Trust grants and a DEQ 319 grant to cost share projects in the watershed and promote best management practices.



Over \$44,000 has been allocated in cost share to decommissioning 24 abandoned wells, upgrade 6 septic systems and establish best management and irrigation management incentives.

Safe Water Supplies Protect UENRD Residents

Nebraska's abundant ground water resources have always been a very high priority for the Upper Elkhorn NRD. The NRD has an extensive monitoring program to track both ground water quality and quantity. Each year the Upper Elkhorn NRD staff measures static water levels in 145 irrigation wells and 54 dedicated monitoring wells across the District.

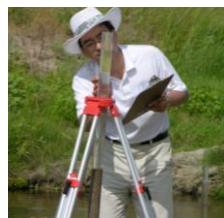
The ground water quality program consists of 550 irrigation wells and 54 dedicated monitoring well sites which the District samples for nitrates and various pesticides.



In 2008, the NRD sampled 369 irrigation wells in the monitoring program. This allows us to address areas of concern and implement best management practices for improved water quality. The UENRD is also able to assist rural communities throughout the District in solving their water quality and quantity issues for their residents.

Elkhorn Streambed Study

The Upper Elkhorn NRD and the Lower Elkhorn NRD have partnered up with the School of Natural Resources, Department of Natural Resources and the Conservation Survey Division to conduct Streambed Tests in the Elkhorn River Basin. The primary objectives for this project were to determine the geological makeup of the channel sediments in the Elkhorn River and its tributaries, establish the streambed thickness,



determine the vertical hydraulic conductivity of the channel sediments to a depth of 50 feet, and to quantify the hydrologic relations between stream flows in the Elkhorn River and the adjacent aquifers. Testing was conducted at a total of 15 sites throughout the Elkhorn Basin starting the summer of 2007 through summer 2008. A Geoprobe was used to produce an electrical conductivity test as it was drilled into the streambed as it also collected sediment samples at each site. Results of this testing should be available during summer of 2009.



Nebraska's NRDs

- Protecting Your Health through Water Quality
- Protecting Your Taxes through Local Control
- Protecting Our Natural Resources for Future Generations

Created by the Nebraska Legislature in 1969 with the passage of LB 1356, Nebraska's NRDs began operating on July 1, 1972. NRDs were formed using Nebraska's 13 major river basins to offer local solutions to local problems. Locally elected officials establish District policies to address the needs of our specific area. This unique form of local government assures that the concerns of the upper reaches of the Elkhorn River Basin are addressed by the people being affected. Locally led conservation for your future.

Locally funded through property taxes and customer sales, the Upper Elkhorn NRD continues to maintain a responsible budget to lessen the property tax burdens of its friends and neighbors. This has been accomplished by obtaining additional funding through the Nebraska Environmental Trust and the Dept of Environmental Quality 319 Grants. The 08-09 budget requests only 2.42 cents per \$100 of valuation for a total of \$478,682 which is less than a quarter of the total budget.

The Upper Elkhorn NRD Board of Directors meet on the 4th Monday of every month at the Upper Elkhorn NRD Office in O'Neill, unless otherwise noted in the public notice. Everyone is welcome to attend and share their thoughts or concerns for our natural resources.