

Fall 2013

Volume 27, Issue 4

Tri-Basin Topics

A quarterly publication of Tri-Basin Natural Resources District

2013 Annual Report

2013 Project Highlights

Tri-Basin NRD (TBNRD) started or continued work on several conservation projects in 2013.

In the Platte Basin, the North Dry Creek Streamflow Augmentation project utilizes groundwater to augment streamflows of North Dry Creek, a tributary of the Platte River. The purpose of the project is to help the State of Nebraska fulfill its commitment to the Platte River Recovery Implementation Program to reduce shortages to Platte River flow targets by offsetting impacts to Platte streamflows resulting from post-July 1, 1997 water uses within Tri-Basin NRD. The first phase of the project was completed in 2012. In 2013, TBNRD directors took steps to begin the second phase of the project, which is the first operational streamflow augmentation project in the state.

In July 2013, Tri-Basin directors voted to be a partner in the J-2 Reservoir Project, along with the Platte River Recovery Implementation Program, the Department of Natural Resources, and Central Nebraska Public Power and Irrigation District. The project, which calls for the construction of two reservoirs along the Platte River in northwest Phelps County and northeast Gosper County. Participation in the project will allow TBNRD to move even closer to meeting its offset requirements for the Platte River.

Tri-Basin NRD directors are also currently exploring options for a depletion offset project in the Republican Basin.

In the Little Blue Basin portion of Tri-Basin NRD, directors have moved forward with the proposed Sand Creek Reservoir project in eastern Kearney County. The reservoir would



store water for the purpose of groundwater recharge. A site has been chosen and funding options are currently being discussed. The dam is being designed by E A Engineering of Omaha and Miller Associates of Kearney.

In August of 2013, Tri-Basin NRD's directors voted to proceed with plans to form a new Improvement Project Area (IPA), called the Odessa IPA. The project will create a drainage ditch that will divert water to the Platte River, alleviating high groundwater and cropland flooding problems faced by landowners in the area.

Protecting Our Groundwater

Tri-Basin NRD is committed to sustaining groundwater supplies at levels equal to or greater than average groundwater levels in the period 1981-85. This commitment to protect existing groundwater supplies also protects Nebraska's credit for "imported water" in the Republican River Basin.

TBNRD staff continually monitor groundwater quantity throughout the district by measuring water levels in irrigation wells and dedicated observation wells. Tri-Basin has installed at least one dedicated observation well in every township in the district. Data loggers in the observation wells automatically measure water levels at regular intervals. Regularly measuring our aquifers helps Tri-Basin NRD directors make better informed decisions about our groundwater supplies and discern trends in water levels. Those trends prompted Tri-Basin NRD directors to enforce groundwater pumping limits in Union Township in Gosper County in 2009 in an effort to protect the declining groundwater supply there.

Tri-Basin NRD also operates a district-wide Groundwater Management Area to protect groundwater quality. The NRD has regulated fertilizer application to protect groundwater quality since 1989. District staff have worked cooperatively with farmers and agronomists for more than 20 years to help improve the timeliness, efficiency and effectiveness of fertilizer application. These efforts have resulted in stable or declining nitrate-nitrogen levels in groundwater supplies throughout the district. In 2013, TBNRD staff took 247 samples from irrigation wells, which were tested for nitrates and pesticides.

Chemigation, the process of applying fertilizer and ag chemicals through irrigation systems, is permitted and overseen by Tri-Basin NRD staff to assure that groundwater supplies are protected from contamination. The district issued 105 new chemigation permits and 1630 renewals in 2013. District staff inspected safety devices on 674 center

pivots in 2013, insuring that groundwater supplies are protected from contamination by fertilizer and ag chemicals.

Rural residents in Gosper, Phelps and Kearney Counties need to know whether they have safe drinking water. The district offers a program that allows rural residents to have their household drinking water tested for nitrates and bacteria free of charge once a year.

Conservation Cost-Share Assistance

Tri-Basin NRD provides or administers cost-share funds for many soil and water conservation practices, including well decommissioning, soil moisture sensors, irrigation well flowmeters, conservation tree plantings and conversion of irrigated cropland to dryland cropland and grassland. In fiscal year 2012-2013, Tri-Basin NRD approved \$24,187.00 in local funding for conservation tree planting cost-share and \$98,887.52 in state-funded NSWCP cost-share funds for other conservation practices.

Managing Financial Resources Wisely

TBNRD's total operating expense budget for July 1, 2013 to June 30, 2014 is \$1,165,931.78 with the levy set at .043236 per \$100 valuation. An owner of a house valued at \$100,000 will pay just \$43.23 in 2013 to protect this area's natural resources.

Planting Trees for Future Generations



Each year, Tri-Basin NRD offers conservation trees and shrubs for sale for windbreak and habitat plantings. In 2013, 2,199 trees and shrubs were planted by the NRD's contractor and 2,266 trees and shrubs were sold for hand-planting. Tri-Basin NRD also provides free tree seedlings for several educational events and for local Arbor Day celebrations. The district distributed nearly 1000 free trees to district residents in 2013. Tri-Basin staff also help landowners diagnose tree diseases and fungal blights and decide on treatment methods.

Educating and Informing Local Residents

Tri-Basin NRD sponsors several educational events, for both youth and adults. Each winter, Tri-Basin NRD joins Central Nebraska Public Power & Irrigation District, Holdrege Area Chamber of Commerce and UNL Extension to host the Holdrege Water Conference. At this event, agricultural producers and agri-business professionals gather to discuss current water issues relevant to the TBNRD area.

Other adult information and education programs include Nitrogen Management classes for agricultural producers and the weekly Natural Resources Report on KRVN 880 radio station.

In September, Tri-Basin NRD holds the Rainwater Basin Conservation Day for eighth grade students at Sacramento-Wilcox Wildlife Management Area. Over 200 students at-

tend this event each year to learn about geology, wetlands, soils, trees and wildlife. Tri-Basin also helps sponsor the Water Jamboree for area fifth grade students, held every April at Harlan County Reservoir. All aspects of water conservation are presented in hands-on sessions to the approximately 500 students who attend this event.



Vital Statistics

Counties: Gosper, Phelps, Kearney

Elevation Above Mean Sea Level

High = 2,741 (Gosper County)

Low = 1,985 (Kearney County)

River Basins

Little Blue (25% of land area)

Platte (35% of land area)

Republican (40% of land area)

Population: 17,721 (2010 census)

Land Area: 1920 square miles (1,228,800 acres)

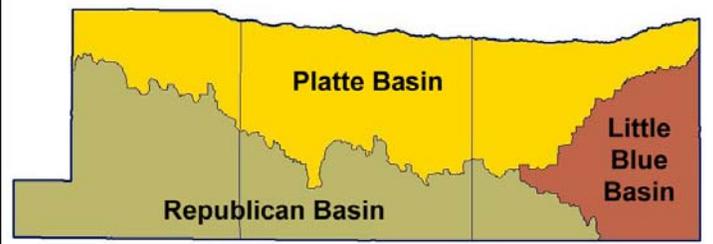
Vision Statement

The vision (overall goal) for Tri-Basin NRD is to “**work cooperatively with District residents and others to promote good stewardship of land and water resources.**”

Mission Statement

Tri-Basin NRD's mission is to “**manage, conserve and protect the District's land and water resources.**” This mission will be accomplished by protecting the quality and quantity of surface water and groundwater, reducing potential for soil erosion and flooding, promoting agricultural best management practices, forestry and wildlife habitat preservation. These tasks can only be accomplished by working cooperatively with local residents and agencies of local, state and federal government.

Tri-Basin Natural Resources District



About Tri-Basin Natural Resources District

Nebraska's Natural Resources Districts (NRDs) were established in 1972 to protect our natural resources. This system for managing natural resources through locally elected officials is unique to Nebraska.

In 1969, Senator Maurice Kremer introduced, and the Nebraska Legislature enacted Legislative Bill (LB) 1357, to combine 154 special purpose entities into 24 Natural Resources Districts. The NRDs' boundaries were organized based on Nebraska's major river basins, which allows for management practices to be applied more efficiently to similar topography. In 1989, the Middle Missouri NRD and the Papio NRD merged, becoming the Papio-Missouri NRD, which resulted in the current 23-NRD system.

Locally, Tri-Basin Natural Resources District was formed by consolidating the Phelps, Gosper, and Kearney County Soil and Water Conservation Districts. TBNRD is unusual because it encompasses portions of three different river basins: the Republican River Basin, the Platte River Basin, and the Little Blue River Basin.

Tri-Basin NRD is governed by a Board of Directors with 13 members, 12 of whom are elected from designated sub-districts and one at-large member.

**Check out our
website at
[www.tribasinnrd.org!](http://www.tribasinnrd.org)**

2012 Active Irrigation Wells

County	Total Number of Irrigation Wells	Certified Irrigated Acres
Kearney County	2,104	227,980.45
Phelps County	2,155	257,362.45
Gosper County	743	93,492.02
Total	5,002	578,834.92
Basin	Total Number of Irrigation Wells	Certified Irrigated Acres
Republican Basin	1,596	189,347.49
Platte Basin	2,586	298,603.94
Little Blue Basin	820	90,883.49
Total	5,002	578,834.92

Republican Basin Water Use*

Irrigation System	2008	2009	2010	2011	2012
Pivots	6.88	7.11	5.05	6.63	13.88
Gravity	11.79	12.42	8.62	10.86	21.33
Pivot/Gravity	8.06	7.79	5.31	7.20	14.28
Weighted Avg.	8.26	8.36	5.82	7.57	15.36

*All Republican Basin irrigation wells are metered. Metered water use is also reported from 464 wells in the Platte and Little Blue Basins. Data updated February 5, 2013.

Tri-Basin Staff to Inspect Meters



With irrigation season over, Tri-Basin NRD staff are beginning annual irrigation meter inspections. Each year, NRD staff inspect and take readings from meters in about one-third of the townships in the District.

This year we will be doing inspections in the following townships: Kearney County: 5N-14W, 6N-14W, 7N-14W, and 8N-14W; Phelps County: 5N-18W, 6N-18W, 7N-18W, 8N-18W; and Gosper County: 5N-22W, 6N-22W, 7N-22W, and 8N-22W.

If you have irrigation wells in these townships and you put your meters in storage for the winter, you can call the Tri-Basin NRD office at 1-877-995-6688 to schedule an inspection. If there is no meter at the site when TBNRD staff come to inspect, you will receive a letter requesting access to the meter for inspection.

Tri-Basin Cost-Share Must be Approved Before Work

In order to encourage well owners to decommission water wells, Tri-Basin NRD offers well decommissioning cost-share. Properly decommissioning wells is not only state law, it's also a matter of safety.

Tri-Basin staff have recently become aware of some confusion about Well Decommissioning Cost-Share rules. In Tri-Basin Natural Resources District, a cost-share application must be approved by the board of directors before any work can be done on the project. If work is completed before a cost-share application is submitted, the application will be denied.

If you have any questions regarding Tri-Basin NRD's Well Decommissioning Cost-Share Program, please contact me at 1-877-995-6688.

Reminder to Chemigators

Remember to drain your main line check valve to prevent freezing. This will extend the life of the check valve and may help prevent check valve failure.

Thank you for your cooperation!



Fall 2013

Tri-Basin Topics

Non-Profit Permit
U. S. Postage
PAID
Holdrege, NE 68949
Permit No. 220

Tri-Basin Natural Resources District
1723 Burlington St. Holdrege, NE 68949
(308) 995-6688
email: tribasin@tribasinprd.org
www.tribasinprd.org

RETURN SERVICE REQUESTED

Nebraska's NRDs: Protecting Lives, Protecting Property, Protecting the Future

CALENDAR

October 8.....NRD Board Meeting, 7:30 p.m.*
 October 14..... NRD Closed for Columbus Day
 November 11..... NRD Closed for Veteran's Day
 November 12.....NRD Board Meeting, 7:30 p.m.*
 November 28-29.....NRD Closed for Thanksgiving
 December 10.....NRD Board Meeting, 1:30 p.m.*
 December 25.....NRD Closed for Christmas
 January 1.....NRD Closed for New Year's

* Times are tentative. All meetings are at TBNRD office in Holdrege unless otherwise noted.

TRI-BASIN NRD BOARD OF DIRECTORS

David Nickel, Chairman	Kearney, NE
David Olsen, Vice Chairman	Minden, NE
Todd Garrelts, Treasurer	Holdrege, NE
Bradley Lundeen, Secretary	Wilcox, NE
Brian Bergstrom	Axtell, NE
Joe Bilka	Holdrege, NE
Ed Harris	Loomis, NE
Phyllis Johnson	Bertrand, NE
Joe Larson	Loomis, NE
David Nelson	Upland, NE
David Raffety	Kearney, NE
Larry Reynolds	Lexington, NE
Ray Winz	Holdrege, NE

TRI-BASIN NRD STAFF

John Thorburn	General Manager
Charles Brooks	Land Resources Coordinator
Carie Lynch	Administrative Secretary
Nolan Little	Water Resources Manager
Alex Hasenauer	Land Resources Technician
Patrick Nott	Water Resources Technician
Tammy Fahrenbruch	Office Manager
Esther Smith	Office Clerk
Nicole Salisbury	Information & Education Coordinator
Destinee Steinke	Data Entry Clerk
Jeff VanEperen	Seasonal Field Technician
Ruth Nielsen	Minden Office Secretary
Lori Hagan	Elwood Office Secretary
Tami Reese	Holdrege Office Secretary

A mailing list is maintained and requests to be placed on the list should be sent to the above address. Comments and suggestions may be addressed to the General Manager.

Get Tri-Basin Topics in your inbox instead of your mailbox!

To request an electronic version of this newsletter, send an email nsalisbury@tribasinprd.org.