

# YOUR NRD BASIN

# BLUE RIVER

Summer / Fall 2013

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



BLUE RIVER BASIN

## Blue River Basin Water Quality & Quantity FACTS

Groundwater irrigated acres: 1,899,015

Free water tests (1997-2012):

Nitrate tests: 7,593

Bacteria tests: 1,199

Wellhead Protection Areas established:  
58 communities

*The Blue River Basin is the  
"Watershed Capital of Nebraska"...*

Flood control dams built (1972-2012):  
200 structures

Recreation areas: 20 sites = 2,833 acres  
of water and land managed

Forestry (1975-2012): 5,086,488 trees  
sold

## Protecting Lives



### Flood Control Measures Stand the Test of Heavy Rains to Protect Lives and Property

While heavy rains throughout much of 2010-11 had flood control on the minds of many Nebraskans, flood control is always on the minds of NRD officials. Home to the "Watershed Capital of Nebraska," the Blue River Basin consists of many separate watersheds, and as a result, flooding poses a serious risk to lives and property across the basin. In an effort to protect lives and property, the three NRD's across the Blue River Basin have undergone measures to combat the flooding potential. Recently, the Little Blue NRD has been developing Dam Site 73 in the Little Sandy Creek Watershed which will provide flood control, groundwater recharge and public recreational opportunities.

## Protecting Property

### Groundwater Management Saves Our Most Precious Resource

The first Groundwater Management Area for Quantity was established in 1977 in order to preserve and maintain groundwater levels. As a result, groundwater rules and regulations were first adopted in 1979. Groundwater Management Areas for Quality were put into place across the Blue River Basin in 1993.



Groundwater Management Areas for both Quantity and Quality provide for water metering, allocation, domestic well monitoring, and nitrate and bacteria testing.

These controls protect and preserve our valuable groundwater resources, while at the same time ensuring the economic security of irrigated agriculture.

## Protecting the Future

### Wellhead Protection Assures Safe Drinking Water

Blue River Basin NRDs are working diligently with communities to develop plans and actions to protect municipal water supplies. This includes educating community members about potential pollution sources, enacting local ordinances, closing abandoned wells, and working with other local and state agencies on Wellhead Protection Area lands in and around cities and villages.

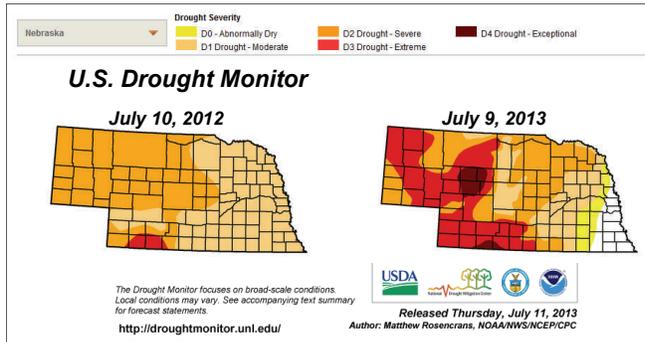
The Blue River Basin NRDs have helped 57 communities establish Wellhead Protection Area plans across 7,000 square miles.



*These communities account for over half of the protection plans for the entire state of Nebraska.*

**Just What are the NRDs Doing in Response to DROUGHT?**

2012 was an exceptionally dry year in Nebraska. The summer of 2013 is again experiencing drought as defined by the National Drought Mitigation Center. The two maps show the similarities between the center of the drought in July 2012 and July 2013. The U.S. Drought Monitor is produced in partnership between the National Drought Mitigation Center at the University of Nebraska-Lincoln, the United States Department of Agriculture, and the National Oceanic and Atmospheric Administration.



As Nebraskans, we can still count ourselves blessed because we have a bounty below our feet, namely the Ogallala Aquifer. Yet, the aquifer should not be taken for granted. With this in mind, the aquifer continues to be carefully supervised by both Nebraska's Natural Resources Districts through Groundwater Management Quantity & Quality Areas and Integrated Management Plans.

We can think of the aquifer as a savings account. In wet periods, we are adding water to our savings account for use in dry times. The purpose for our regulations is to manage the groundwater in times of shortage to ensure that we can sustain our long-term water supply for future generations and to avoid conflicts between users.

Having likened the Ogallala Aquifer to a checking account, obviously with the credits of rain, a drought can conversely drain or debit what we have in storage. That is to say, if the account is shrinking too quickly, the Nebraska's NRDs have **proactive measures in place to protect the aquifer from radically dipping**. Crop Water Use Reporting and Allocation Triggers, Integrated Management Plans, Certifying of Irrigated Acres, Water Meter Installations, Watermark Sensors & Atmometer equipment are permanent measures put in place for sustainability in conjunction to a host of water quantity and quality management tools and rules. NRDs across Nebraska are taking action to protect our groundwater resource for use by future generations. The NRDs are a vital link in local control that implements state objectives for water conservation and protection.

**Local Rainfall — "Any Rain?" Check NeRAIN:**

2012's rainfall in the York area was 11 ½ inches below normal by mid September. The long term annual average for York is 28 inches. Last year, we had normal rainfall with several rains throughout the growing season. What a contrast! The record for one York gauge in the NeRAIN network shows the differences between the three years:

Year	April	May	June	July	Aug.	Sept.	Oct.	Annual Total
2011	3.81	7.08	4.25	5.60	5.68	0.66	0.75	27.83
2012	2.90	3.92	2.06	0.82	0.98	0.31	1.00	11.99
2013	2.02	5.13	2.09	1.59	As of August 14, 2013 for publication:			10.83
Normal	2.76	4.54	3.96	3.26	3.19	2.58	1.84	28.00

\* As of publication, 2013 is 66% of normal for the year.

A frequently asked question around Nebraska is "Any Rain?" Hence the NeRAIN (get it?) network was created in 2004 by a partnership of 13 NRDs and the Nebraska Department of Natural Resources. Some 500 volunteers have been provided with special rain gauges. They report rainfall amounts each morning to NeRAIN. Anyone can view the rainfall data for individual stations or see maps of rainfall reports for counties, NRDs or statewide. Interested? Check out the NeRain website at <http://nerain.dnr.ne.gov/nerain/>.

Nebraska's NRDs

- Protect lives through flood protection
- Are leaders in ground-water management
- Use taxpayer dollars efficiently

Find out more about the Blue River Basin NRDs:

**Little Blue NRD**  
[www.littlebluenrd.org](http://www.littlebluenrd.org)  
 (402) 364-2145

**Lower Big Blue NRD**  
[www.lbbnrd.org](http://www.lbbnrd.org)  
 (402) 228-3402

**Upper Big Blue NRD**  
[www.upperbigblue.org](http://www.upperbigblue.org)  
 (402) 362-6601

Formed in 1972, Nebraska's Natural Resources Districts are local government entities with broad responsibilities to protect our natural resources.

NRDs help Nebraskans respond to natural resource challenges with local control and local solutions. Major Nebraska river basins form the boundaries of the 23 NRDs, each of which is governed by locally elected boards of directors. These directors are elected by registered voters within the Districts. The boards set policy for the Districts and work closely with NRD staff through a committee system to carry out the Districts' goals.

Statewide, NRDs are largely funded by property taxes and make efficient use of those tax dollars; typically a Natural Resources District uses only 1% to 2% percent of all property taxes collected in a county.

Find out more about all of Nebraska's 23 NRDs at [www.nrdnet.org](http://www.nrdnet.org)