

# YOUR NRD BASIN

# BLUE RIVER

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

Spring 2009



BLUE RIVER BASIN

## Blue River Basin Water Quality & Quantity FACTS

Groundwater irrigated acres: 1,730,000

Free home water tests (1997-2008):

Nitrate tests: 4,337

Bacteria tests: 808

Wellhead Protection Areas established:

46 communities

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

Flood control dams built (1972-2008):

192 structures

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

Forestry (1975-08): 4,764,081 trees sold

## Protecting Lives

### Flood and Erosion Control Benefits Residents

One of the main responsibilities of NRDs is flood control. Each NRD works with producers, city, and county officials to improve stormwater management and run-off, thereby protecting lives and property by constructing flood control dams in the Blue River Basin.



The Blue River Basin NRDs have enhanced 20 flood control dams to provide public recreation opportunities for fishing, boating, hiking, biking, and camping, as well as development of wildlife habitat. These dams capture sediment that would otherwise reduce the capacity of downstream public water reservoirs. NRDs also work with landowners by cost-sharing on construction/installation of soil and water conservation practices. These practices prevent or reduce soil erosion, water contamination, and the overuse of both surface water and groundwater.

## 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 established 46 community 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.*

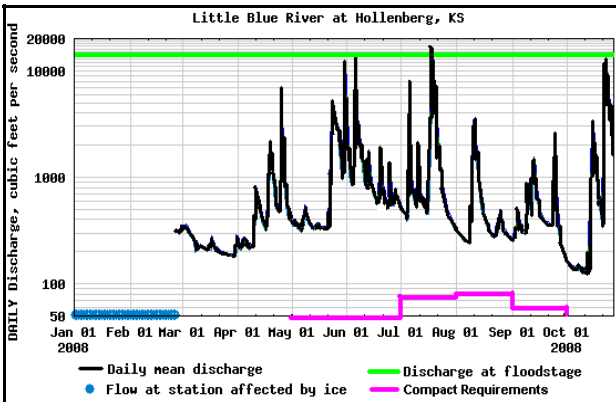


**Personal Safety: Knowing my Family is Safe**

The Blue River Basin NRDs carry out a variety of projects and programs in groundwater management, flood control, soil erosion prevention, forestry, recreation, and provision of safe drinking water through rural water projects. Blue River Basin NRD staff work hard because they too have families who daily rely upon and use the same resources that they monitor and test.

**Blue River Compact Agreement Meeting Objectives**

The states of Kansas and Nebraska signed the Blue River Compact in 1971 to promote interstate comity, achieve equitable apportionment of surface waters, and to cooperate in pollution abatement programs. The effective date of stream flow requirements was November 1, 1968.



The Big Blue and Little Blue Rivers flows must meet daily state line stream requirements during the five-month growing season, or action is taken by the Nebraska Department of Natural Resources to restore flow levels by closing natural flow appropriations granted after November 1, 1968. This chart reflects Little Blue River flows from January 1 to October 30, 2008 in relation to required Blue River Compact flows.

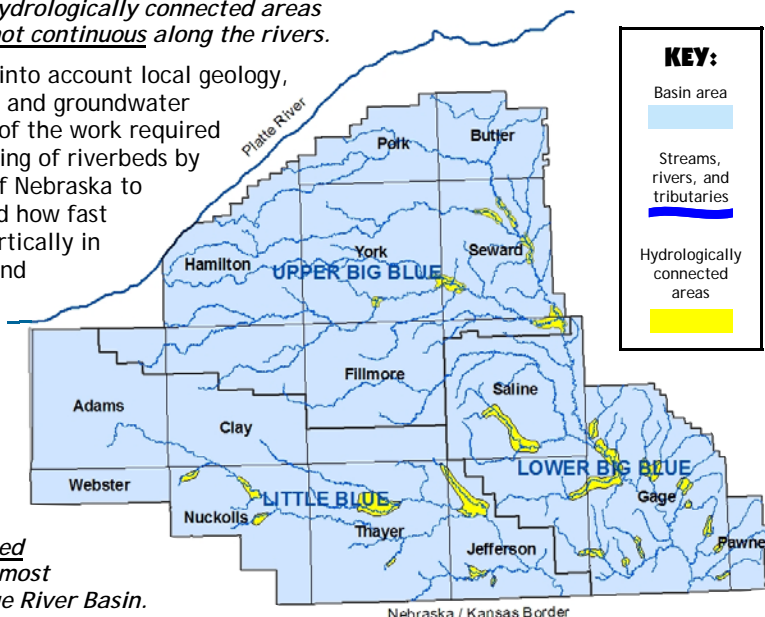
Since 1971, compact flows have been met in the Little Blue Basin 96% of the time, and in the Big Blue River Basin 97.7% of the time. The Blue River Compact is a working testament to cooperative water management and wise stewardship of our water resources between the two states.

**Study Proves Only Slight Ground and Surface Water Connection in Blue River Basin**

The Little Blue, Lower Big Blue and Upper Big Blue NRDs worked together on a groundwater computer study of the Big and Little Blue River Basins. This NRD study determined that only 2.8% of the 6,906 square miles of land in the three NRDs is within areas where groundwater is hydrologically connected to the rivers and streams. The hydrologically connected areas are not continuous along the rivers.

This study took into account local geology, rivers, aquifers, and groundwater recharge. Part of the work required drilling and testing of riverbeds by the University of Nebraska to determine if and how fast water moves vertically in the Blue River and its tributaries.

*This NRD study determined, by the Nebraska Department of Natural Resources definition, that the aquifers are not connected to the rivers in most areas of the Blue River Basin.*



**Nebraska's NRDs**

- Protects lives through flood protection
- Leaders in groundwater management
- Use taxpayer dollars efficiently

**Find out more about the Blue River Basin NRDs:**

Little Blue NRD  
www.littlebluenrd.org

Lower Big Blue NRD  
www.lbbnrd.org

Upper Big Blue NRD  
www.upperbigblue.org

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