

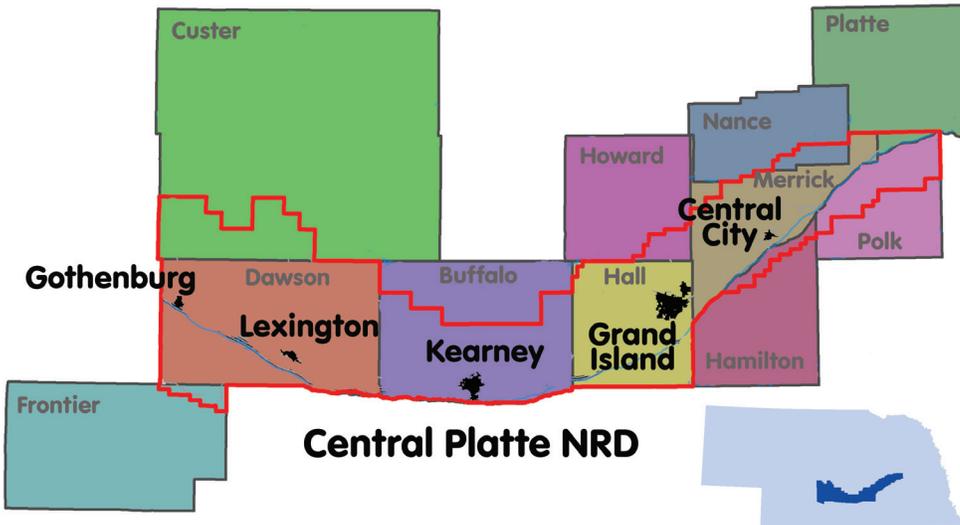
KNOW YOUR NRD

Central Platte
Natural Resources District
Grand Island NE



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

Fall 2019



NRD QUICK FACTS

Central Platte NRD manages natural resources for all or parts of 11 counties along the Platte River.

RIVER SYSTEM

- Platte River: 205 miles
- North Channel: 49.9 miles
- Wood River: 173 miles

WATER MANAGEMENT

1,028,616 irrigated acres
936,894 groundwater only acres
14,356 surface water only acres
77,129 co-mingled acres

575 wells are monitored both in the spring and fall for water levels. 1/3 of those same wells are also monitored for nitrates.

Protecting Lives

Water Quality Management for over 30 Years

In 1987, Central Platte NRD's Groundwater Quality Management Program was the first in the Central Platte Valley to address widespread high groundwater nitrate problems. Over the last 32 years, nitrate levels in the groundwater and vadose zones have been reduced using a long-term management approach.

Before the Program was initiated, nitrate levels in some areas increased to 19 parts per million (ppm); with the current average down to 13.0 ppm.

Several changes have been made over the years. Cost-share practices to help producers reduce water usage and the amount of fertilizer applied were modified to implement new practices. The NRD's reporting requirements have also evolved to an online form to save producers time and to save taxpayers money. Prior to using the online form, the data compliance officer would

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Protecting Property

Communities Protected by Flood Reduction Projects

The Flood of 2019 embodied Nebraska's Natural Resources Districts' purpose to *Protect Lives, Protect Property, and Protect the Future.*



Upper Prairie/Silver/Moores detention cells working as designed and providing wildlife habitat to thousands of snow geese. Photo taken Friday, March 15, 2019.

CPNRD has built over 40 projects to prevent flood water from damaging homes, businesses, and land. These projects protected the majority of the District- from Gothenburg to Columbus- during the cyclone bomb storm that hit the state in March.

In the western part of the District, Buffalo Creek Watershed structures

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Protecting the Future

Protecting the Platte

Landowners attended Water Programs updates held in Amherst and Kearney in March to address groundwater decline concerns in northern Buffalo and Dawson counties (Sub-Area 9) of the District's Groundwater Management Program. The management area is down an average of 12.39' since 1982 and has continually declined since 2001.

Open discussion sessions made it clear that the decline needs to be stabilized. The NRD board wants to help landowners address the decline on their own instead implementing regulations right away; whether it's through funding, educational opportunities, providing speakers, or technical advice.

Participants said they were thankful to have the opportunity to address the situation on their own. The board will work with landowners to determine opportunities to move forward.

Spring groundwater level maps are available at: cpnrd.org/groundwater-quantity.

Water Quality Management - 32 Years (continued)

manually enter up to 7,000 forms annually. Nearly 800 producers participate in the Program and are credited for lowering contamination levels through their management efforts. Another effective learning tool are the 400 demonstration sites located on local producers' fields.

Although average nitrate levels have dropped 5 ppm since 1982, there are still high nitrate areas. The NRD will continue to work with producers to implement best management practices and regulations as needed to reach safe nitrogen levels in our groundwater.

Communities Protected (continued)

protected Custer, Dawson, & Buffalo counties. B-1 Reservoir, the largest of 7 structures, filled to capacity for the first time since it was built in 1983; holding over 2,000 ac/ft of flood water. The Kearney Northeast Project completed in 2006, protected the City of Kearney as a result of the channel improvements on the Wood River and the detention cells.

Two major projects protected the City of Grand Island. The Wood River Flood Risk Reduction Project in southern Grand Island was completed in 2004. The left bank levee system is 7.9 miles long and located on the north side of the Wood River. It protected 15,514 acres of residential, commercial, and industrial land uses; including 9,360 people and 3,919 buildings. The right bank is 4.7 miles long, located on the south side of the Wood River and protected an additional 1,337 acres consisting of mostly farmland.



Channel of the Wood River Flood Project in Grand Island at full capacity. Photo taken Friday, March 17, 2019.

The Upper Prairie/Silver/Moores Project (near completion) held massive amounts of floodwater protecting 23,000 acres south of Hwy 2 and east of Hwy 281 in Grand Island. The project includes four dry dam sites, one levee, and detention cells that held 5,000 ac/ft of runoff; protecting 2,800 properties in western and northern Grand Island.

Projects in the eastern part of the District worked as designed as well. The Warm Slough/Trouble Creek Project, completed in 1993, helped protect the entire watershed by reducing flooding caused by storm runoff into the Warm Slough, Dry Run, and Trouble creeks.

Based on the flows, the communities within the Central Platte NRD benefitted more from the projects than were anticipated. The NRD partners with local and state, and federal agencies to develop projects in areas that are prone to flooding. For more details visit cpnrd.org/flood-control.

Education

With the addition of 4 outdoor classrooms in 2018, CPNRD has provided funding for 20 classroom areas. The NRD's Outdoor Classroom Program was developed in 2001 to promote the education of our natural resources. Outdoor learning areas, prairie gardens, a greenhouse, rain gardens, pollinator, and Monarch Butterfly habitats have been funded.

Providing lessons in nature ensures that children today are growing up with meaningful daily connections to nature. When children spend time in nature-filled outdoor learning environments, research shows that conflict is replaced by pleasant and positive exploration.



INTEGRATED MANAGEMENT PLANS

The Platte Basin Natural Resources Districts (NRDs) and the Nebraska Department of Natural Resources are working together to protect and preserve Platte River water rights of existing users for surface water and groundwater.

Both Plans were developed in 2009 and are currently being updated with future goals to ensure that Nebraska is in compliance with the New Depletions Plan for the Platte River Recovery Implementation Plan.

In May, the NRD's board approved the Basin-Wide and CPNRD Individual Integrated Management Plan drafts to hold public hearings on July 15, 2019, at 3:00 and 3:30 p.m. respectively.

A public information meeting will be held at 2:30 p.m. just prior to the hearings.

BASINWIDE IMP

The NRDs partnering in the proposed second increment Basin-Wide Plan for Joint Integrated Management of the overappropriated portions of the Platte River Basin include: North Platte NRD (Scottsbluff), South Platte NRD (Sidney), Central Platte NRD (Grand Island), Twin Platte NRD (North Platte), and Tri-Basin NRD (Holdrege).

CPNRD INDIVIDUAL PLAN

Central Platte NRD's Integrated Management Plan sets objectives to incrementally reduce the difference between over and fully appropriated levels of development.

The main change in CPNRD's second increment Plan is the amount of water that must be offset upstream of Elm Creek in the overappropriated area of the District. The NRD must offset 15,000 acre-feet by 2029.

In 2004, the NRD complied with LB962 by putting a stay on new development of irrigated acres without offsets; and by initiating several projects that increase groundwater recharge and enhance streamflow.

Additional details are available at: dnr.nebraska.gov/iwm.