



Tri-Basin Topics

Winter 2025

Volume 39, Issue 1

A quarterly publication of Tri-Basin Natural Resources District



South-Central Water Conference January 23rd

Conference Presentations

- 1935 Republican River Flood
- Carbon Markets
- Nitrates in Drinking Water Study
- Weather Update
- Water Resources Updates

Don't miss the 2025 South-Central Water Conference on Thursday, January 23rd at the Phelps County Ag Center. There will be coffee and donuts at 9:30 a.m. The conference is free of charge and a lunch by Braxton's Smokehouse will be provided for those attending. The program will conclude around 2:30 p.m. A full agenda for the event will be posted at www.tribasinrd.org.



The conference is hosted by Tri-Basin Natural Resources District, Lower Republican Natural Resources District, Central Nebraska Public Power and Irrigation District, and UNL Extension. It is a joint effort to increase the public's understanding of water-related issues in Nebraska.

Area agri-businesses will display their products and services at the water conference and will have representatives on hand to visit with conference participants.

Tri-Basin NRD's Phase II or Phase III Groundwater Quality Management Area producers who attend the conference are eligible to receive nitrogen management recertification credit if they sign-in when they enter.

Order Conservation Trees and Shrubs Today!

(See enclosed information)

Contact Tri-Basin NRD or your local NRCS office for information about planting a windbreak or shelterbelt.



Nitrogen Reports

Nitrogen Management Reports for the 2024 crop year were due December 31, 2024. If you have fields in the Phase II or Phase III areas of the Groundwater Quality Management Area and have not turned in your reports, please do so as soon as possible. If you need forms or help filling them out, contact the TBNRD office.

Chemigation Renewals

Renewal forms will go out in early March to producers who had active chemigation permits in 2024. Producers whose chemigation certification has expired will need to attend one of the chemigation training sessions held in February and March or complete the online course. For dates and locations for classes go to www.tribasinrd.org.

Chemigation renewal permits are due in the Tri-Basin NRD office before **June 1, 2025**.

"Dedicated to Conservation of our Natural Resources"

<http://www.tribasinrd.org>



Manager's Message

by John Thorburn

Abandoned Wells: An Ever-Present Danger

A well is a pipe that extends down to the water table. Wells pose little danger while they are in use, because that pipe is sealed and protected from the elements. If the pump is removed, however, a well can become a source of contamination of the groundwater aquifer.

Abandoned wells pose other dangers. Depending on the diameter of the well column, animals and even small children can become trapped in them, if they are left uncovered. Most modern irrigation wells have an inside diameter of 12 inches or less, but even so, an adult could easily fall in one and break a leg. Proper well closing, or "decommissioning" is a good, safe practice for landowners to follow, but it is also required by state law. Nebraska's well decommissioning law dates back to 1897. It was enacted as a result of a particularly harrowing experience that a Custer County pioneer had with an abandoned well.

In the 1800s, before internal combustion engines became a readily available source of power for well drilling rigs, there were two common methods of well construction: driving a perforated pipe with a pointed tip into the ground or digging a well by hand. Driven wells were easier and safer to construct, but sometimes the volume of water needed, the presence of rock formations or great depth to water required that wells be dug by hand.

Many homesteads in Custer County relied on hand-dug wells as their water source. Because of the danger of cave-ins, hand-dug wells couldn't be dug very far down into the aquifer, so they were prone to dry up during droughts. A severe drought in the early 1890s led to the abandonment of many farms as both crops and wells dried out.

On August 14, 1895, a pioneer named F.W. Carlin steered his wagon off on the wrong track as he was crossing the prairie north of Broken Bow. The trail dead-ended at an abandoned sod house. He tried to turn his team of horses around and head back down the road, but one of them balked. He got off the wagon to see what was spooking his horse.

Here in his own words, as reported at the time by the *Custer County Beacon*, is what happened next: "without a moment's notice, I became aware of the fact that I had stepped into an old well and was going down like a shot out of a gun. I placed my feet close together, stretched my arms straight over my head and said O God have mercy on me!" According to a later measurement of the well, he fell 143 feet.

Amazingly, the only injuries he sustained when he landed in water and mud at the bottom of the well were a broken rib and a badly sprained ankle. In spite of this amazing stroke of luck, he still faced the staggering problem of getting out of this very deep hole by himself.

He struggled for hours before he was able to break away part of a board in the cribbing that lined the well hole. He shoved that board into the sidewall and used it as a seat. There he spent his first cold, wet night underground.

For the next two days he slowly, patiently inched his way up, digging footholds and handholds using his trusty pocketknife. Emerging from his would-be grave, he gave thanks to God for saving him from death by hypothermia or starvation, but his troubles weren't over. His horses and wagon were long gone, so he had to crawl on his hands and knees a mile and a half to the nearest house, which took all night.

It is critically important for the protection of our drinking water supplies to have licensed well drillers properly close old, unused wells. **Natural Resources Districts have cost-share funds available to help pay the cost of decommissioning old wells.** We are even willing to help close old hand-dug wells, and a few of them are still out there. So next time you're out wandering around an abandoned farmstead, watch your step!



Sod home of Mr. and Mrs. James McCrear near Berwyn, NE -1888 by Solomon Butcher.

Welcome to our New Administrative Secretary

Nicole Simeon is the new Administrative Secretary at Tri-Basin NRD. After her recent move to Heartwell, NE she joined a women's bowling league. She has a daughter, Kelsey, and son, Graeme, who are both grown. She loves to spend time with family and friends. In her free time, Nicole enjoys reading, crocheting and knitting. She is a 1993 Minden High School Graduate.



Trees Honor District Newborns



Tri-Basin NRD offers parents of newborns in the district the gift of a seedling tree. These trees are available to the family of any child born in Gosper, Phelps or Kearney Counties since the previous tree season (March 2024).

Reserve a baby tree by calling Tri-Basin NRD at 308-995-6688 or email drefior@tribasinprd.org with your request with the baby's name and birthdate and the parents' names, address, and phone number. We will contact you in April to let you know when and where to pick up your tree. If you have any questions, please call Tri-Basin and ask for Dalton.

Irrigator Incentives

CNPPID Customers who also have groundwater could benefit from the Water Conservation Incentive Program (WCIP). Tri-Basin will reimburse the cost of your CNPPID bill if you:

- Use surface water and don't pump more than one inch from your groundwater well per year.
- Not limited to pump one inch of groundwater, but if you pump more than an inch, your reimbursement will be reduced.

The purpose of WCIP is to reduce groundwater pumping and increase groundwater recharge. Priority is given to fields East of Hwy 183. Contact us to find out if you qualify for this program. Call 308-995-6688 or go to our website www.tribasinprd.org.

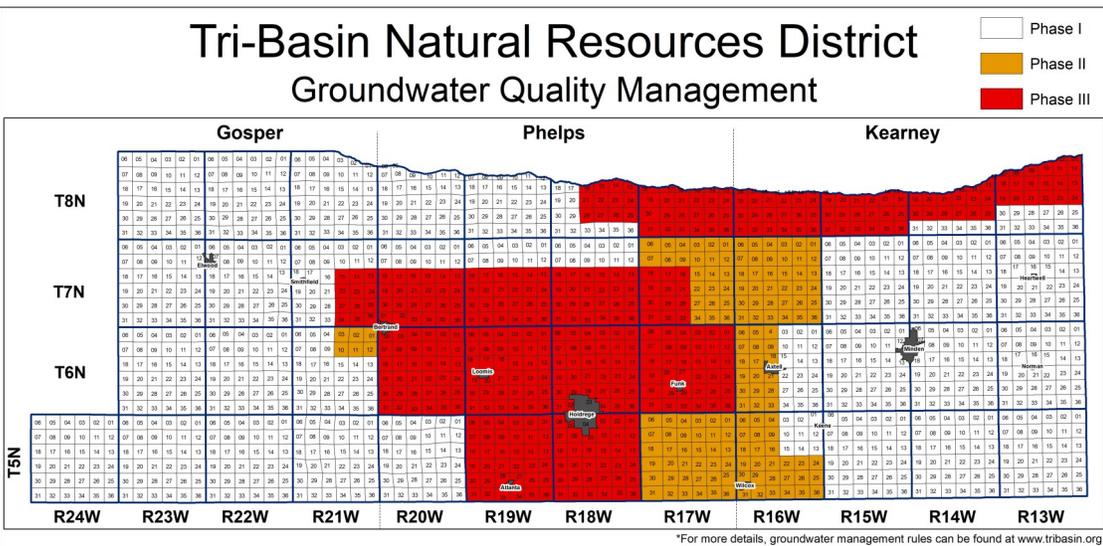


Nitrogen Management Certification Reminders

The Groundwater Quality Management Areas established by Tri-Basin NRD have allowed district staff to work cooperatively with farmers and agronomists for 35 years. Management area rules are intended 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 in much of the district, safeguarding the quality of our groundwater.

Producers in Phase II and Phase III areas of the Groundwater Quality Management Area must take soil samples this winter and water samples in Summer 2025. Current Nitrogen Management Certification is required.

Producers whose certification has expired will receive notification in January by mail. Training dates have been set and are listed on Tri-Basin's website at www.tribasinprd.org. Expiration dates are also listed on the website. Attendance at the South-Central Water Conference on January 23rd also qualifies for Nitrogen Management Certification. (However, you must sign-in to receive credit.)





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

January 15 NRD Board Meeting, 1:30 p.m.*
 January 20 NRD Closed for Martin Luther King, Jr. Day
 January 23 South Central Water Conference, Holdrege
 February 17 NRD Closed for Presidents' Day
 February 19 NRD Board Meeting, 1:30 p.m.*
 March 19 NRD Board Meeting, 1:30 p.m.*
 April 16 NRD Board Meeting, 1:30 p.m.*
 April 25 Arbor Day Tree Give Aways, District-wide
 April 29-30 Water Jamboree, Republican City

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

TRI-BASIN NRD BOARD OF DIRECTORS

| | |
|---------------------------------|-----------|
| Todd Garrelts, Chairman | Holdrege |
| Joe Bilka, Vice Chairman..... | Holdrege |
| Robin Hinrichs, Secretary | Axtell |
| Jeff Ryan, Treasurer | Heartwell |
| Brian Bergstrom | Axtell |
| Joel Grams..... | Minden |
| David Grimes | Minden |
| Ed Harris | Loomis |
| Joe Larson | Loomis |
| Bradley Lundeen | Wilcox |
| G. Reed Philips | Bertrand |
| David Raffety..... | Kearney |
| Larry Reynolds | Lexington |

TRI-BASIN NRD STAFF

| | |
|-------------------------|--------------------------------------|
| Dana Christensen..... | Water Resources Technician |
| Tammy Fahrenbruch | Water Programs Coordinator |
| Lori Hagan..... | Office Clerk |
| Sasha Hahn | Information & Education Coordinator |
| Nolan Little | Water Resources Manager |
| Patrick Nott..... | Water Resources Technician |
| Carrie Putnam | Integrated Water Programs Specialist |
| Tami Reese | Holdrege Office Secretary |
| Dalton Refior | Land Resources Coordinator |
| Carolyn Schaaf..... | Elwood Office Secretary |
| Lisa Schroeder | Minden Office Secretary |
| Nicole Simeon | Administrative Secretary |
| Esther Smith..... | Office Assistant |
| John Thorburn..... | General Manager |
| Jeff VanEperen..... | Water Resources Technician |

USDA is an equal opportunity provider, employer, and lender.

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 to shahn@tribasinprd.org.

TRI-BASIN NATURAL RESOURCES DISTRICT 2025 HAND PLANT ORDER FORM

NAME: _____ DATE: _____

ADDRESS: _____

CITY/STATE/ZIP: _____ PHONE: _____

ORDERS MUST BE IN MULTIPLES OF 25.

Tree Order Deadline is April 1, 2025.

| QUANTITY | SPECIES |
|----------|--|
| | CONIFERS |
| | AUSTRIAN PINE |
| | COLORADO BLUE SPRUCE |
| | PONDEROSA PINE |
| | RED CEDAR (Eastern) |
| | NORWAY SPRUCE |
| | BROADLEAFS |
| | BLACK WALNUT |
| | BUR OAK |
| | HACKBERRY |
| | RED OAK |
| | SWAMP WHITE OAK |
| | SHRUBS |
| | AMERICAN PLUM |
| | COTONEASTER |
| | CHOKECHERRY |
| | ELDERBERRY |
| | RED OSIER DOGWOOD |
| | LILAC |
| | SAND CHERRY |
| | SKUNKBUSH SUMAC |
| | Total # of Trees |
| | Multiply total # of trees x 1.00 |
| | Mulch x .45/foot |
| | Stakes x .15 |
| | Subtotal |
| | Tax (Holdrege 7%, Minden 7.5%, Elwood 6.5%) |
| | TOTAL AMOUNT DUE/PAID |

TREES PROTECT LIVESTOCK

- Increase calf survival by 12%
- Minimize winter stress
- Increase feed efficiency
- Increase milk production
- Improved animal health
- Increased forage yield
- Snow control
- Higher weights
- Improved heating efficiency of confinement buildings

TREES IMPROVE PROPERTY

- Reduce heating/cooling costs
- Increase property value
- Reduce noise and dust

TREES IMPROVE COMMUNITY

- Lower stress & increase wellbeing
- Improve air & water quality
- Stimulate economic development

TREES PROTECT WILDLIFE

- Provide habitat and food
- Shelter from bad weather
- Cover from predators

TREES IMPROVE WATER QUALITY

- Reduce soil erosion
- Stabilize stream banks
- Filter pollutants

TREES PROTECT CROPS

- Can Increase yields
- Conserve plant moisture
- Reduce wind damage

Tree Pickup will be at: _____ Tri-Basin NRD _____ Minden NRCS _____ Elwood NRCS

WHY PLANT A WINDBREAK?

Windbreaks and shelterbelts provide many benefits. Windbreaks planted along field boundaries reduce soil erosion by reducing wind velocity. Shelterbelts planted around farmsteads reduce heating costs in homes and shop buildings. Shelterbelts can protect livestock from blizzards and serve as "living snow fences." Trees and shrubs also provide food, shelter and nesting habitat for many species of birds and mammals.

NRD TREE & SHRUB PLANTINGS

Contact the NRD Office or your county NRCS for help with determining the type and number of trees and shrubs you need. The technician will make arrangements for the tree order and planting service. The NRD will plant the trees according to the plan.

Trees are planted in the spring as soon as conditions are suitable. The NRD tree planting crew will notify landowners of the approximate date and time of planting.

SITE PREPARATION

Good site preparation is a key to rapid tree growth and survival. The best site preparation begins the year before the trees are planted. On heavier soils, working the ground to kill competing vegetation is an excellent method of preparing the site. The technician assisting in planning a windbreak or habitat plot can advise you about the type of site preparation needed. The technician can also help you determine if herbicide carryover will be a problem.

WEED CONTROL

Weed control in the form of plastic mulch is available through the district. This woven material is installed over the trees after planting. Slots are then cut for the trees. Plastic mulch not only eliminates weeds but also helps to preserve soil moisture.

| PRICES | |
|--|-----------------------------|
| Trees & Shrubs | \$1.00 each/multiples of 25 |
| PLANTING SERVICE | |
| Tree planting (no mulch) | \$0.55/ft |
| Trees, tree planting, mulch and mulch installation | \$2.25/ft |
| Drip tape | \$0.30/ft |
| Drip tape set-up | Minimum \$35.00 |
| Pull-in Charge | \$55.00 |
| Renovations* | \$275.00 |
| Shrub thickets* | \$330.00 |
| Minimum 850 foot per planting | |
| Plastic Mulch (Material Only) | \$0.45 per ft |
| Stakes | \$0.15 each |
| Seedling Tubes | \$1.50 each |
| Prices are subject to change. | |
| *Contact Tri-Basin NRD for site review. | |

PLANTING YOUR OWN TREES

You can order trees and shrubs at the NRD or your local NRCS Office. Orders must be in multiples of 25 per species. We will send you a postcard when your trees arrive. We also have tree spades available to rent.

DRIP TAPE

Tri-Basin has subsurface "drip tape" available for watering trees planted by the District. The water source could be a portable tank or a hydrant. Check with the TBNRD Land Resource Coordinator for more information.

COST-SHARE

Tri-Basin NRD offers cost-share funds for tree plantings and plastic mulch installation. You should apply at your county NRCS office before March 1.

All sites must be properly prepared before planting to qualify for cost-share. Reimbursement is made only after full payment is received. The minimum total cost of plantings eligible for cost-share is \$500. Plantings must be a minimum of 850 feet.

Cost-share may also be available from your county USDA office. Pheasants Forever and Nebraska Game & Parks Commission also offer programs for wildlife habitat improvement. NRCS staff can help you determine which programs have funds available and best suit your needs.

BILLING ON NRD PLANTINGS

Tri-Basin NRD bills for trees/tree planting service after completion. Full payment is due upon receipt of the billing. Cost-share payments will not be made until payment is received at the Tri-Basin or NRCS office.