

Winter 2019

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Tri-Basin Topics

A quarterly publication of Tri-Basin Natural Resources District

Buffer Strips Benefit Producers, Environment

Reprinted (with revisions) with permission from Upper Big Blue NRD's November 2018 *Blueprint* newsletter

The Nebraska Buffer Strip Program provides cost-share payments for landowners to install buffer strips in cropped fields adjacent to perennial and seasonal streams, ponds, and wetlands. These buffer strips are designed to protect waterbodies adjacent to cropland by stabilizing the environment and filtering agrichemicals such as fertilizers and pesticides. Fees assessed on registered pesticides provide the funding for the Nebraska Buffer Strip Program. Filter strips have been shown to remove 30 to 60 percent of pesticides in field runoff, and can remove 75 percent or more of sediment (depending on width of filter strip, pesticides used, field practices, and runoff volume).

Chris Erickson is an ag producer who farms ground benefiting from one of Tri-Basin Natural Resources District's (TBNRD) buffer strip contracts. Erickson explained that the field is intersected by a winding creek, which made it difficult to farm. With the buffer strip, Erickson has room between the portions of cropped ground in the field.

"We have a nice end on the field and a place to turn around," he explained. He added that the landowner uses the buffer strip to graze cattle during the winter months, another benefit of utilizing this program.

The program provides cost-share for two types of buffer strips. Filter strips are narrow strips of grass with a minimum width of 20 feet up to a maximum width of 120 feet. Riparian forest buffer strips contain trees and grass, and can be between 55 feet and 180 feet wide.

Landowners can sign up for the Buffer Strip Program alone, or in conjunction with other USDA programs such as

the Conservation Reserve Program (CRP) or the Conservation Reserve Enhancement Program (CREP). Payment rates vary by soil type and by adjacent cropland (irrigated or non-irrigated). Contracts run from five to ten years, and can be partnered with other government funding program payments. Payments range from \$20 per acre to a maximum rate of \$250 per acre.

The Nebraska Buffer Strip Program is administered by the Nebraska Department of Agriculture (NDA) and the local Natural Resources Districts. The NDA provides rules and regulations which specify types of vegetation suitable for buffer strips, widths of buffer strips, sets the rates based on land value and potential benefits, and provides an index to rank and select applications.

Once a contract has been awarded, the adjacent land must remain cropland. The landowner must maintain the buffer strip in accordance with the Noxious Weed Control Act and within the rules and regulations of the Buffer Strip Act. Failure to maintain the buffer strip in accordance with the contract shall cause forfeiture of future payments, and may cause recovery of previous payments.

In 2018, Tri-Basin Natural Resources District (NRD) had six contracts for 66.9 acres, with a total payment of \$14,527.50 (average cost-share of \$217 per acre). Statewide, the program included 659 contracts for 5,293 acres, with a total cost-share payment of \$666,807.94 (average cost-share of \$126 per acre).

For more information, go to: bit.ly/NDAbuffer. For questions about the Nebraska Buffer Strip Program or to apply, contact your local NRCS Office or Tri-Basin NRD.

South Central Water Conference is February 5

The 2019 South Central Water Conference will be held Tuesday, February 5 at the Phelps County Ag Center. Registration will be at 9:30 a.m. and sessions will start at 10:00. There is no charge for admission to the conference and a free lunch will be provided for those attending. The program should conclude by 3 p.m. A full agenda for the event will be posted at www.tribasinprd.org as soon as it is available.

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



South Central Water Conference

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

Producers in Tri-Basin NRD's Phase 2 or Phase 3 Groundwater Quality Management Areas will receive nitrogen management recertification credit for attending the conference.

"Dedicated to Conservation of our Natural Resources"

<http://www.tribasinprd.org>



Manager's Message

by John Thorburn
Win-Win Water Management

Water resources management usually requires difficult choices. The perception, and sometimes the reality, is that we are picking winners and losers. Some people have limits imposed on their water use, others don't. There are exceptions, however, to this general rule.

Tri-Basin NRD is cooperating with the US Fish and Wildlife Service, the Rainwater Basin Joint Venture, the Nebraska Department of Natural Resources and Central Nebraska Public Power and Irrigation District (CNPPID) on a project that all of the partners consider to be a "win." We are adding pipelines that will connect CNPPID's canals to five different publicly owned Rainwater Basin wetlands in Gosper and Phelps counties.

The pipelines will enable delivery of water through the canals to the wetlands. Water will usually be diverted at times when Platte River flows exceed US Fish and Wildlife Service target levels for endangered and threatened species habitat protection. Diversion opportunities are usually in the autumn, in November and early December. Water won't be available every year, but research indicates that we should be able to divert at least two out of five years.

We have targeted five federal Waterfowl Production Areas (WPAs) for these supplemental water deliveries. They are: Funk, Johnson, Linder and Cottonwood WPAs in Phelps County and Victor Lakes WPA in Gosper County. We have used existing old irrigation turnouts to deliver water to Funk and Cottonwood WPAs in past years, but the new pipelines will enable water to be delivered at a faster rate. New pipelines and delivery infrastructure will be created to provide water for Johnson, Linder and Victor Lakes WPAs.

These supplemental water deliveries will have several benefits. First, wetlands will have water during fall migration. Waterfowl need "stopover" habitat as they fly south, especially during bad weather. The water we deliver to the wetlands in the fall will seep into the ground, but wet soils benefit habitat as well. Saturating wetland soils in the autumn insures that the soils will freeze and seal up over the winter. In spring, melting snow and rainfall runoff flow into wetlands more efficiently because soils are already wet. Therefore, these fall water deliveries make wetlands wetter, enhancing habitat in

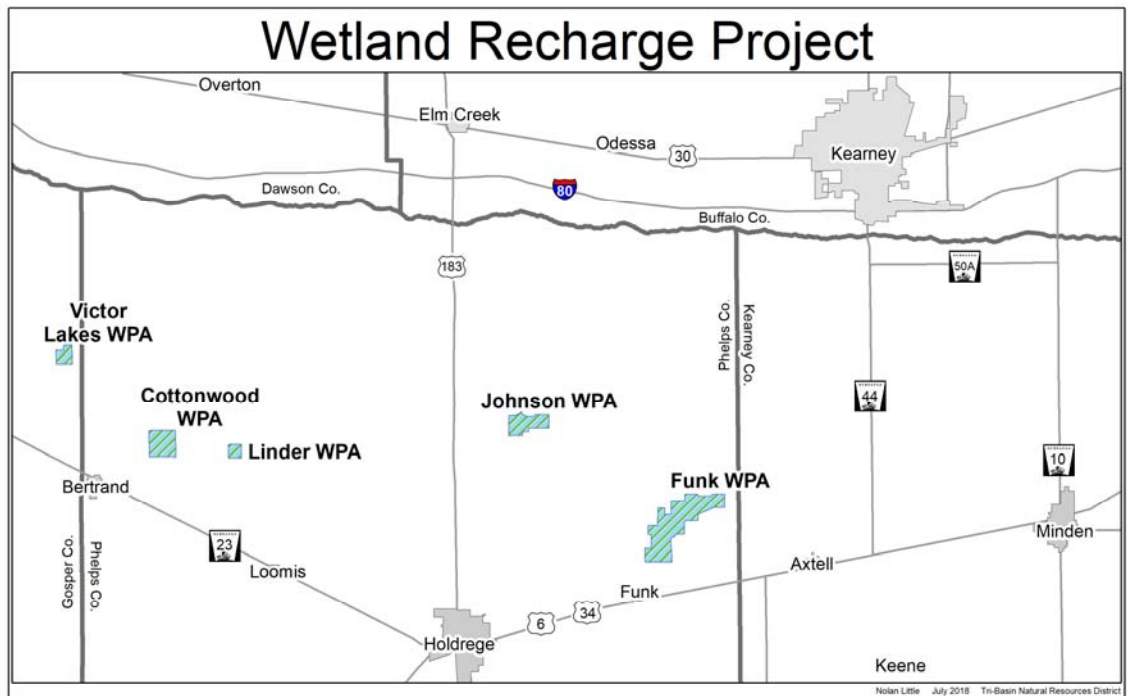
both late fall and spring.

Supplementing wetland water supplies doesn't just help birds. People benefit as well. Water that soaks into the ground eventually recharges groundwater supplies. This supplemental recharge helps to replace groundwater pumped for irrigation that gets consumed by growing crops.

Wetlands are natural filters. As water seeps through wetland soils, chemicals and microbes are filtered out, so that the water that reaches the aquifer is very clean. This recharge water also dilutes nitrates and other contaminants already in the aquifer.

We want to make sure that this project is a winner, not just for the project partners, but for the neighbors as well. Groundwater recharge is generally a good thing, but too much of it can cause perched water tables and water seepage problems on surrounding cropland. This problem occurred in the vicinity of Funk WPA beginning in 1967 and it persisted through the 1990s.

We are going to utilize the extensive network of dedicated groundwater observation wells that Tri-Basin and CNPPID have in place across the district to track groundwater levels in the vicinity of public wetlands. Using past data from these



wells, we know what the water table level was in the Funk area during the 1990s, when seepage problems occurred. We will set groundwater level "triggers" at levels low enough that there will be a buffer between the level at which we suspend deliveries and the level at which seepage problems are known to occur. Deliveries will resume when groundwater levels subside.

I am so pleased that Tri-Basin NRD is partnering with federal, state and local agencies on this important project to enhance wildlife habitat and groundwater resources. "Win-win" situations are rare in water resources management and life in general, so we need to make the most of these opportunities when they appear.

Chemigation Renewals

In January, Tri-Basin NRD will send out renewal forms to producers who had chemigation permits last year. Those producers whose chemigation certification has expired will need to attend one of the chemigation training sessions held in February and March. For more information about local training dates, call your county Extension Office.

Chemigation renewal permits are due in the Tri-Basin NRD office before June 1, 2019.

Nitrogen Reports Due

Nitrogen Management Reports for the 2018 crop year were due December 31, 2018. If you have fields in the Phase 2 or Phase 3 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.



TBNRD 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 (April 2018). You can reserve a baby tree by calling our office at (308) 995-6688 or 1-877-995-6688 or by emailing the baby's name, birthdate, parents' names, address and phone number to

nmunter@tribasinrd.org. We will send you a postcard in April letting you know when and where to pick up your tree. If you have any questions, please call our office and ask for Nate.

May Township Water Use

Producers with irrigated crop ground in May Township (6N-13W) in eastern Kearney County should have flowmeters installed on all irrigation wells for next year's crop season. Producers will receive Irrigation Water Management Record Forms (Water Use) for irrigation wells in May Township. In order to accurately complete these forms, we ask that you double check the meter reading at the beginning of the season and check the meter periodically throughout the summer to assure that it is working properly.

The Tri-Basin NRD Conservation Tree Program is underway!

(See enclosed information.)

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

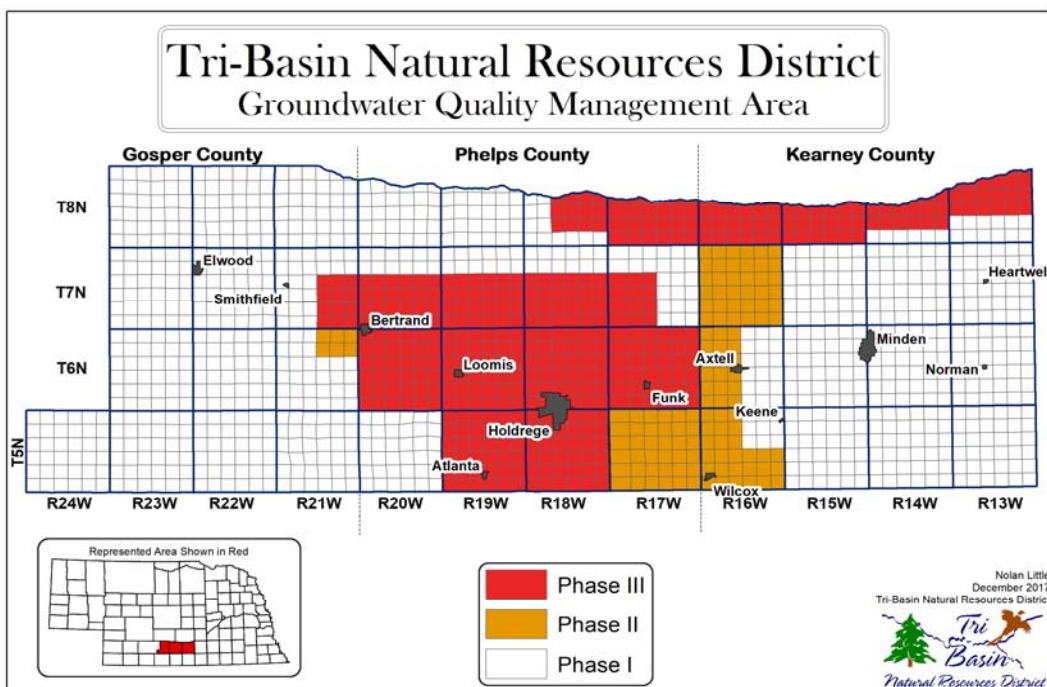
Nitrogen Management Certification Reminders

The Groundwater Quality Management Areas established by Tri-Basin NRD have allowed district staff to work cooperatively with farmers and agronomists for more than 25 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 much of the district, thus safeguarding the quality of our groundwater.

Industry Township (5N-19W) in Phelps County was added to Phase 3 and Blaine Township (7N-16W) in Kearney County was added to Phase 2 in February 2018. Those who farm in Blaine Township will need to take the Nitrogen Management Certification Training this winter. They will also need to take soil samples this winter and water samples in Summer 2019. Nitrogen Management Reporting forms will need to be completed for these areas in Fall 2019.

Producers in Phase 2 and Phase 3 areas of the Groundwater Quality Management Area need to have current Nitrogen Management certification. Producers whose certification has expired will receive notification, along with a list of training dates, in the mail in January. Training dates will also be posted on our website, www.tribasinrd.org, as soon as they are available. Attendance at the South Central Water Conference on February 5 also qualifies for Nitrogen Management Certification (be sure to sign in for credit).





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@tribasinrd.org
www.tribasinrd.org

RETURN SERVICE REQUESTED

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

CALENDAR

January 8.....NRD Board Meeting, 1:30 p.m.*
 January 21... NRD Closed for Martin Luther King, Jr. Day
 February 5 South Central Water Conference
 February 12NRD Board Meeting, 1:30 p.m.*
 February 18NRD Closed for Presidents' Day
 March 12.....NRD Board Meeting, 1:30 p.m.*
 April 9..... NRD Board Meeting, 7:30 p.m.
 * Times are tentative. All meetings are at TBNRD office in Holdrege unless otherwise noted.

TRI-BASIN NRD BOARD OF DIRECTORS

| | |
|--------------------------------------|---------------|
| David Olsen, Chairman | Minden, NE |
| Bradley Lundeen, Vice Chairman | Wilcox, NE |
| Joe Bilka, Treasurer | Holdrege, NE |
| Todd Garrelts, Secretary | Holdrege, NE |
| Brian Bergstrom | Axtell, NE |
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| Ed Harris..... | Loomis, NE |
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| Greg Jorgensen | Minden, NE |
| Joe Larson | Loomis, NE |
| David Raffety | Kearney, NE |
| Larry Reynolds | Lexington, NE |

TRI-BASIN NRD STAFF

| | |
|-------------------------|-------------------------------------|
| Amy Dutton | Minden Office Secretary |
| Tammy Fahrenbruch | Water Programs Coordinator |
| Lori Hagan | Elwood Office Secretary |
| Nolan Little..... | Water Resources Manager |
| Carie Lynch..... | Administrative Secretary |
| Nate Munter..... | Land Resources Coordinator |
| Patrick Nott | Water Resources Technician |
| Tami Reese | Holdrege Office Secretary |
| Dalton Refior..... | Land Resources Technician |
| Nicole Salisbury..... | Information & Education Coordinator |
| Esther Smith | Office Assistant |
| John Thorburn | General Manager |
| Jeff VanEperen..... | Field Technician |

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@tribasinrd.org.

**TRI-BASIN NATURAL RESOURCES DISTRICT
2019 HAND PLANT ORDER FORM**

NAME: _____ DATE: _____

ADDRESS: _____

CITY/STATE/ZIP: _____ PHONE: _____

ORDERS MUST BE IN MULTIPLES OF 25.

Tree Order Deadline is April 1, 2019.

| QUANTITY | SPECIES |
|----------|--|
| | CONIFERS |
| | AUSTRIAN PINE |
| | COLORADO BLUE SPRUCE |
| | NORWAY SPRUCE |
| | PONDEROSA PINE |
| | RED CEDAR (Eastern) |
| | BROADLEAFS |
| | BLACK WALNUT |
| | BUR OAK |
| | HACKBERRY |
| | RED OAK |
| | SWAMP WHITE OAK |
| | SHRUBS |
| | AMERICAN PLUM |
| | CHOKECHERRY |
| | COTONEASTER |
| | ELDERBERRY |
| | GOLDEN CURRANT |
| | LILAC |
| | SAND CHERRY |
| | SKUNKBUSH SUMAC |
| | Total # of Trees |
| | Multiply total # of trees x .80 |
| | Mulch x .35/foot |
| | Staples x .15 |
| | Subtotal |
| | Tax (Holdrege 7%, Elwood 6.5%, Minden 7.5%) |
| | TOTAL AMOUNT DUE/PAID |

| |
|---|
| 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..... 80¢ each/multiples of 25

PLANTING SERVICE

Tree planting (no mulch) 50¢/ft

Trees, tree planting, mulch and mulch laying..... \$ 1.75/ft

Drip tape 25¢/ft

Drip tape set-up Minimum \$35

Pull-in Charge..... \$50

Renovations* \$250

Shrub thickets* \$300

Minimum 500 foot per planting

Plastic Mulch (Material Only)..... 35¢ per ft

Stakes..... 15¢ each

Seedling Tubes..... \$1.10 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.

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.