



Nitrogen Fertilizer Plot, Kearney County

2023 Annual Report of Integrated Water Management Activities in the Little Blue Basin Within Tri-Basin NRD



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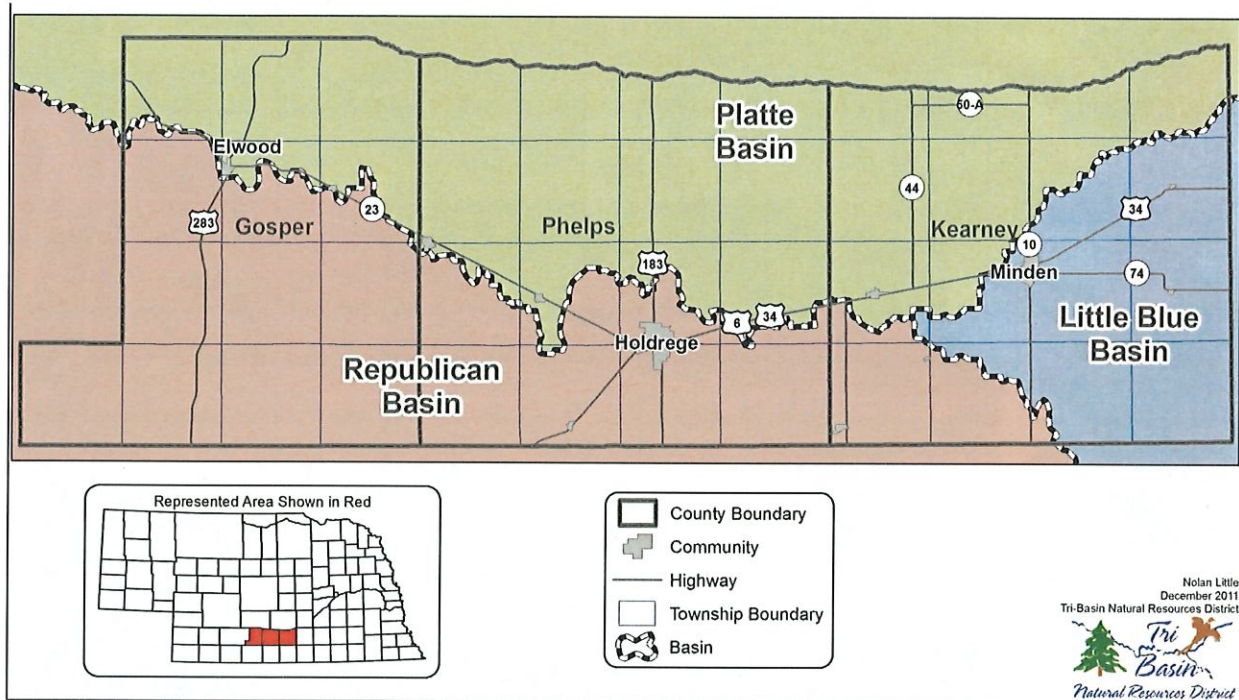
September 2024

**ANNUAL REPORT OF WATER USE ACTIVITIES
IN THE LITTLE BLUE BASIN WITHIN TRI-BASIN NRD**
TO MEET THE REQUIREMENTS OF THE JOINT INTEGRATED MANAGEMENT PLAN
FOR THE 2023 JOINT INTEGRATED MANAGEMENT PLAN PROGRESS REVIEW MEETING

I. SUMMARY

The purpose of this report is to convey information that Tri-Basin Natural Resources District (TBNRD) agreed to supply to the State of Nebraska as part of a joint voluntary Integrated Water Resources Management Plan for the Little Blue River Basin portion of the district.

Map 1: Basin Reference Map



II. INTRODUCTION

TBNRD encompasses portions of the Republican, Platte, and Little Blue River Basins (see **Map 1**, above). The district also contains an area commonly referred to as the “Groundwater Mound,” a large area spanning portions of all three basins that is characterized by groundwater levels that are generally higher than historic “pre-development” groundwater elevations.

III. CERTIFIED IRRIGATED ACRES

The District began certifying irrigated acres in the Little Blue Basin in 2006. The initial certification process in the Little Blue Basin ended on November 1, 2006, at which time, a moratorium on development of new groundwater irrigated land took effect. Since that time, corrections and revisions to the certified acre database have occurred with a net result of 91,849.78 certified irrigated acres in the Little Blue Basin portion of Tri-Basin NRD as of December 31, 2023. Data regarding certified irrigated acres can be found in **TABLE 1: Certified Irrigated Acres**, at top of page 3. The commingled acres referred to in the table are acres that may be watered with either groundwater or surface water, or a combination of both. Detailed information about locations and distribution of certified irrigated acres is available in the Tri-Basin NRD office.

TABLE 1: Certified Irrigated Acres					
Year	Groundwater	Co-Mingled	Surface	Environmental	Totals
2014					91,466.65
2015					91,487.69
2016					91,487.69
2017					91,573.87
2018					91,636.40
2019					91,636.40
2020	89,683.70	1,500.73	160.50	291.47	91,636.40
2021	89,668.08	1,500.73	160.50	291.47	91,620.78
2022	89,667.18	1,500.73	160.50	521.37	91,849.78
2023	89,667.18	1,500.73	160.50	521.37	94,849.78

IV. APPROVED CERTIFIED ACRE AND GROUNDWATER TRANSFERS

TBNRD allows certified irrigated acres to be transferred from one parcel to another within the Little Blue Basin portion of the district, with some limitations. Certified irrigated acres cannot be transferred from parcels with surface water or commingled water resources to parcels that have groundwater wells as their only water source. Transfers of certified irrigated acres into townships that are classified as Phase 2 for groundwater quantity management (see **Map 3**) are also prohibited.

Between January 1, 2023, and December 31, 2023, the District approved four certified irrigated acre transfers in the Little Blue Basin. A total of 22.38 certified irrigated acres were involved in this transfer. Data regarding the location, amount, and conditions associated with each transfer can be found in **TABLE 2: Little Blue Basin Transfers-Acres** (below).

Table 2: Little BlueBasin Transfer Acres							
Permit Number	Legal Description			New Irrigated	Legal Description		Decertified
TBAT-0408	Section	22	- 5 - 14	10.88	Section	21 - 5 - 14	10.88
TBAT-0413	Section	34	- 6 - 15	3.50	Section	36 - 6 - 15	3.50
TBAT-0414	Section	34	- 6 - 15	4.00	Section	10 - 5 - 15	4.00
TBAT-0415	Section	34	- 6 - 15	4.00	Section	31 - 6 - 15	4.00
					Total		22.38

A. TBNRD regulates groundwater pumping off overlying land by requiring landowners to secure groundwater transfer permits before they can pump groundwater to parcels that are not under the same ownership. Groundwater transfer permits can only be used to supply groundwater for irrigation of certified irrigated acres. Landowners are required to install flowmeters on wells that are permitted for transfers and to report pumping from these wells annually to TBNRD. TBNRD issued no groundwater transfer permits in the Little Blue Basin between January 1, 2023, and December 31, 2023.

V. WELL CONSTRUCTION PERMITS

A. Since 1989, TBNRD has required landowners to secure well construction permits before they drill wells capable of pumping more than 50 gallons per minute. The district issues three categories of well permits: New well permits, Conditional Replacement well permits, and Replacement well permits.

- B. TBNRD requires landowners to agree to several conditions on the operation of new wells and conditional replacement wells before permits are issued. These conditions are listed in an agreement that is signed by landowners when they apply for these types of well permits. A copy of that agreement is attached to this report as **Appendix A**.

TABLE 3: TBNRD Well Permits	
Well Permit Type	Permits
New (variance) irrigation [Acre transfer involved]	0
Replacement irrigation	14
Conditional replacement irrigation - supplemental to groundwater	0
Conditional replacement irrigation—supplemental to surface water	0
Dewatering	0
New commercial/industrial	0
Domestic (over 50 gallons per minute)	0

- C. **TABLE 3: TBNRD Well Permits** (above) is a breakdown of well permits TBNRD issued in the Little Blue Basin between January 1, 2023, and December 31, 2023. A detailed listing of well permits issued by TBNRD in 2023 is found in **TABLE 4: Well Permit Summary** (below).

TABLE 4: Well Permit Summary				
Permit Number	Well Permit Type	Legal Description	NDNR Reg Number	NDNR Well ID Number
TBRP-G058506-R1	Replacement	Section 20 - 7 - 14	G-058506	272299
TBRP-G064009-R1	Replacement	Section 7 - 5 - 13	G-064009	272441
TBRP-A005839-R3	Replacement	Section 15 - 5 - 14	A-005839	272527
TBRP-G027754-R2	Replacement	Section 3 - 5 - 15	G-027754	272544
TBRP-G021389-R1	Replacement	Section 27 - 7 - 14	G-021389	272613
TBRP-G029383	Replacement	Section 17 - 5 - 13		272999
TBRP-G040277	Replacement	Section 14 - 6 - 15	G-040277	272998
TBRP-G033658	Replacement	Section 25 - 6 - 15	G-033658	273000
TBRP-G069422	Replacement	Section 36 - 6 - 14	G-069422	273076
TBRP-G125971	Replacement	Section 22 - 5 - 13	G-125971	273223
TBRP-G037473	Replacement	Section 13 - 5 - 15		266971
TBRP-G120697	Replacement	Section 5 - 5 - 15	G-120697	275631
TBRP-G041668	Replacement	Section 36 - 6 - 15		275863
TBRP-A005076	Replacement	Section 29 - 6 - 14	A-005076	275925

VI. VARIANCES

TBNRD issues new well permits to landowners of parcels that do not have a prior irrigation history only after they have transferred sufficient certified irrigated acres to the previously dryland parcel for the intended new use. The TBNRD Board must approve a variance to the rule prohibiting new well construction before new well permits can be issued.

TBNRD allows for corrections to the district's certified irrigated acre database if landowners can provide historical proof of irrigation between 1997 and 2006. These acres were not previously included in the district's database, because they weren't classified as irrigated cropland by the County Assessor. Since October 2013, producers also have to show proof that the corrected acres had been watered three out of the past five years.

TBNRD also adjusts the irrigated acre database as a result of revisions made by the county

assessor to taxable irrigated acres. Additions or reductions of taxable irrigated acres of four acres or less are automatically accepted by the District. Larger additions or reductions must be reviewed by the NRD Board before they are approved.

No acre correction variances were issued in the Little Blue Basin between January 1, 2023, and December 31, 2023.

TABLE 5: Certified Acre Variances				
Permit Number	Variance Type	Legal Description	NDNR Reg. Number	NDNR Well ID Number

VII. MUNICIPAL AND INDUSTRIAL ACCOUNTING

TBNRD collects water use data annually from all municipalities and industries within the district. Municipal and industrial water use data for communities and industries located in the Little Blue Basin reported to TBNRD in 2023 is shown in the next two tables. A summary of municipal water use may be found in **TABLE 6: Little Blue Basin Municipal Water Use Data** and **TABLE 7: Industrial and Commercial Water Use Data** (below).

TABLE 6: Little Blue Basin Municipal Water Use Data (in gallons)							
	2017	2018	2019	2020	2021	2022	2023
Minden	208,998,000	194,870,000	188,530,000	249,810,000	161,686,000	241,039,000	225,002,000

TABLE 7: Little Blue Basin Industrial and Commercial Water Use Data				
NDNR Reg. Number	Well ID	Owner	Legal Description	Gallons Used
G-093179-R1	230789	Nutrien Ag Solutions	Section 16-7- 13	3,115,983
G-142905	181415	Aurora Co-Op	Section 7-6- 14	1,050,000
G-152287	182917	Village Cleaners	Section 7-6- 14	935.75
G-152288	182918	Village Cleaners	Section 7-6- 14	
				4,166,919

VIII. FLOWMETER DATA

TBNRD requires flowmeters to be installed and annual water use to be reported to TBNRD when landowners drill new wells, receive irrigation-related cost-share funds, or when groundwater is transferred from one parcel to another. Flowmeters are also required on all wells in Townships that are designated Phase Two for Groundwater Quantity Management (see map, **Map 3**).

There are 844 irrigation wells in the Little Blue basin portion of the Tri-Basin NRD. Of that total, 397 wells (47%) are metered, and report water use to the district. Twelve of those 397 wells were reported as not used in 2023. Of the wells that were used, farmers reported that they pumped 40,047.9 acre-feet of groundwater on 47,036.5 certified irrigated acres, an average of 10.2 acre-inches per acer.

Due to the installation of additional reporting flowmeters each year in the Little Blue Basin, flowmeter data and reported irrigated acres change from year to year. All district flowmeter

data is reported annually to the Nebraska Department of Natural Resources (NDNR) for Republican River Basin Compact Administration accounting. Detailed Little Blue Basin flowmeter data is available from the Tri-Basin NRD office.

IX. WATER BANKING ACTIVITIES

TBNRD has a program called the Water Conservation Incentive Program (see program summary in **Appendix C**). Participants in this program sign contracts agreeing to limit irrigation to the UNL Average Corn Crop Irrigation requirement. In exchange, Tri-Basin NRD agrees to pay them if they use less water than their allocated amount. Participants will be provided with credit accounts that track available water use credits for participating fields. No new acres were enrolled in 2023 in the Little Blue Basin. As of the end of 2023, 534.49 acres in the Little Blue Basin were enrolled in this program. The TBNRD Board of Directors has committed funds sufficient to pay incentives for as many as 8000 acres to be enrolled in the program.

X. CONSERVATION TILLAGE

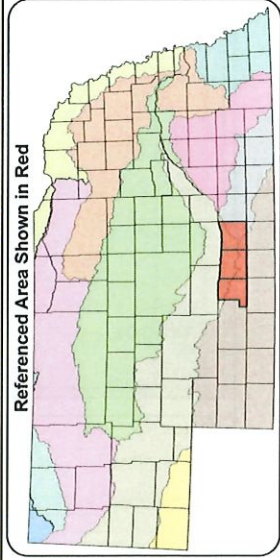
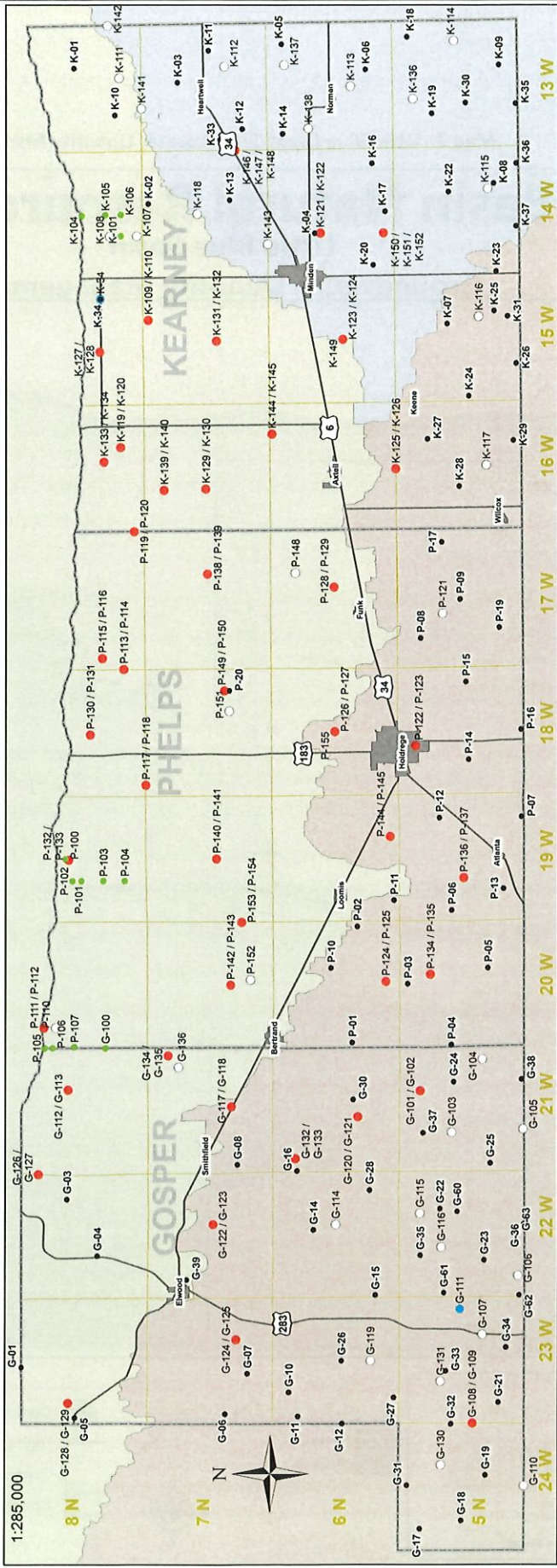
Based on landowner reports within Tri-Basin we estimate that conservation tillage practices were adopted or continue to be utilized on 25,301 certified irrigated acres in the Little Blue Basin portion of the district during the 2023 season. University research (Klocke, et al, 2009) indicates that evapotranspiration (ET) is reduced by as much as 3 inches per acre on minimally tilled irrigated cropland, as compared to conventional tillage systems. If the estimates of no-till acres are accurate, as much as 6,325.48 acre-feet of water was conserved in the Little Blue Basin in TBNRD in 2023 through this conservation practice.

XI. GROUNDWATER LEVELS

TBNRD has an extensive network of 137 dedicated groundwater observation wells (19 in the Little Blue Basin) and 90 irrigation wells (21 in the Little Blue Basin) that are used to measure groundwater levels (see **Map 2**). TBNRD also works cooperatively with CNPPID to gather groundwater level data. Data from one well in the Little Blue Basin that is measured by CNPPID is included in TBNRD's groundwater observation well database. District water level data is reported semi-annually to U.S. Geological Survey and UNL Conservation and Survey Division. Groundwater level data for the district is available from the Tri-Basin NRD office.

Map 2: Dedicated Groundwater Observation Wells

Tri-Basin Natural Resources District Static Water Measurement Wells



	Irrigation Well		Highway
	Transect Well		County Boundary
	Nested Well		Township
	Single Well		Little Blue Basin
	Other Well		Republican Basin
	Community		Platte Basin

- Irrigation Well Stats:**
- 10 Platte Basin
 - 21 Little Blue Basin
 - 59 Republican Basin
 - 90 Measured Wells
 - Spring & Fall
- Observation Well Stats:**
- 93 Sites
 - 43 Nested Wells
 - 137 Data Loggers
 - 12 Hour Interval

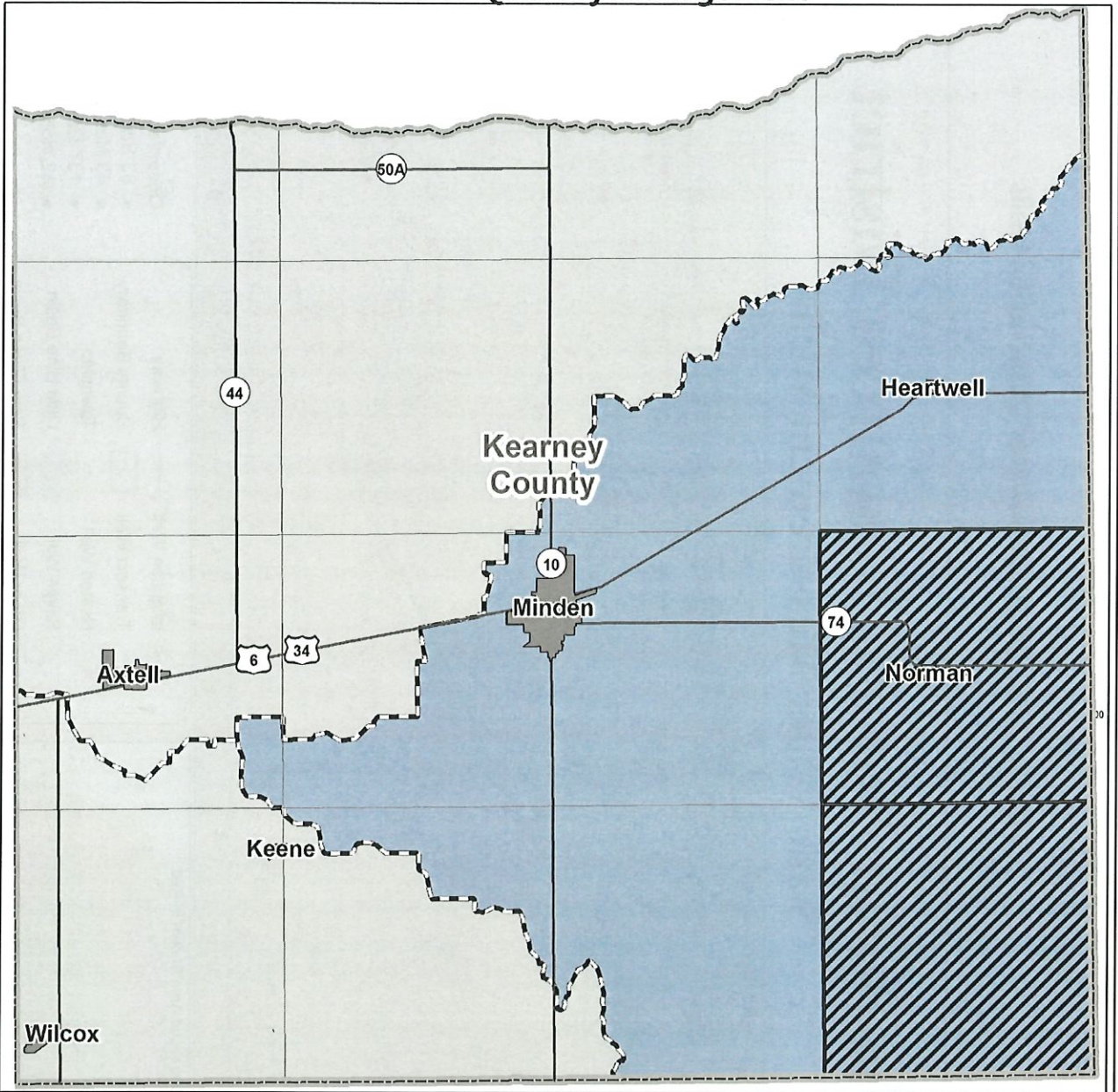
Nolan Little
May 2021
Tri-Basin Natural Resources District

Map 3: Little Blue Basin Groudwater Quantity Management

Tri-Basin Natural Resources District

Little Blue Basin

Groundwater Quantity Management



Groundwater Quantity Management

- Phase II
- Phase III



- Community
- Highway
- Township
- County



Nolan Little
August 2023
Tri-Basin Natural Resources District

Appendix A: Tri-Basin NRD – Little Blue Basin

Tri-Basin Natural Resources District New Well and Conditional Replacement Well Permit Applicant Certification and Agreement

Applicant Certification and Agreement to be bound by Conditions and Limitations on operation of a Well permitted as a New Well or as a Conditional Replacement Well pursuant to Rule 1.13, Tri-Basin Natural Resources District Rules and Regulations for Management of Land and Water Resources

NRD Permit # _____ Applicant _____

Applicant is the owner of the following- described real estate:

_____ ¼ Section T N - R W

Applicant accepts and agrees to be bound by the following conditions and limitations on the operation of a well that is constructed under the authority of a permit issued by the Tri-Basin Natural Resources District ("NRD"). The conditions and limitations are (check the box and initial those that apply):

1. Applicant agrees to offset any "new depletions" to streamflows of the Platte River, Little Blue River, Republican River, or their tributaries that may be determined to be associated with use of this well. Applicant agrees to use methods to offset those depletions that are deemed acceptable by the NRD and the State of Nebraska. Applicant understands and agrees that Applicant's failure to offset said new depletions may result in closure of this well or restrictions being imposed by the NRD on the number of acres of land that can be irrigated by this well.
2. Applicant agrees to abide by well spacing and pumping capacity limitations that apply to the well that is the subject of this permit, whether such limitations arise pursuant to federal or state law or by rule or regulation of the NRD. Applicant understands and agrees that Applicant's failure to comply with all rules and regulations of the NRD that pertain to this well may result in closure of this well and civil or criminal prosecution and other penalties.
3. Applicant agrees to comply with all current and future rules and regulations of the NRD that pertain to this well. Applicant understands and agrees that Applicant's failure to comply with all rules of regulations of the NRD that pertain to this well may result in closure of this well and civil or criminal prosecution and other penalties.
4. Applicant agrees to maintain any and all surface water rights associated with the land to be irrigated by this well for the lifespan of the permitted well. Applicant understands and agrees that Applicant's failure to comply with all rules and regulations of the NRD that pertain to this well may result in closure of this well and civil or criminal prosecution and other penalties.
5. Applicant agrees to irrigate only land that has been certified for irrigation by the NRD (no new irrigated acres will be allowed). Applicant understands and agrees that Applicant's failure to prevent irrigation of land not certified for irrigation by the NRD may result in closure of this well and prosecution by the State of Nebraska.

Applicant certifies that Applicant is familiar with the information contained in this instrument and that to the best of Applicant's knowledge and belief, such information is true, complete and accurate. Applicant further acknowledges and agrees that the NRD and/or the State of Nebraska may impose additional conditions, limitations and restrictions on operation of the well that is the subject of this permit. Applicant further acknowledges and agrees that the conditions and limitations agreed to herein shall also be binding upon Applicant's successors-in-interest to the well and/or the subject real estate.

**Appendix A: Tri-Basin NRD – Little Blue
Basin**

I certify that I am familiar with the information contained in this application and that to the best of my knowledge and belief such information is true, complete and accurate. I further acknowledge that Tri-Basin Natural Resources District or the State of Nebraska may impose additional conditions, limitations and restrictions on operation of the well that is the subject of this permit.

Date

Signature of Applicant

Date

Signature of Applicant

Date

Signature of Witness

Approval by Tri-Basin Natural Resources District

Date

Signature of Tri-Basin NRD Representative

Appendix C: Tri-Basin NRD Water Conservation Incentive Program

3/12/19

Introduction: The Tri-Basin NRD Water Conservation Incentive Program (WCIP) is intended to address two natural resources management issues: ensuring sustainability of groundwater supplies and protecting streamflows from diminishment due to groundwater pumping. The goal of this voluntary program is to reduce groundwater pumping and increase irrigation water use efficiency in Tri-Basin NRD.

The Program: Tri-Basin will allow landowners to enroll up to 8000 NRD-certified irrigated acres in the program. The enrollment period will be from March 26 through April 19, or until the program acre enrollment limit is reached. Once the enrollment limit is reached, water savings to the district could reach 650 acre-feet per year. Incentives in this program will likely be most attractive to landowners in phase two and phase three groundwater quantity management areas, so the water-use reductions should be greatest where the need is greatest (there are approximately 30,000 certified irrigated acres in Tri-Basin's phase two and phase three townships).

In exchange for their participation, landowners will be paid for the equivalent of one acre-inch of water credit per acre per year, with the opportunity to sell additional credits to the NRD at a set price. In addition to NRD purchases, landowners will have the opportunity to sell water credits on the open market at any agreed-upon price (private transactions require NRD board approval). Tri-Basin will maintain an "electronic bulletin board" to facilitate connections between buyers and sellers. Landowners will also be granted flexibility to irrigate any acres within enrolled parcels and to share (pool) allocations between parcels. Pooling agreements will be required to enable sharing allocations between parcels under different ownership.

The Contract: The NRD and the landowner will sign a five-year agreement. The agreement commits the landowner to limiting water use (allocation) on parcels that they select. The allocation will be equal to the UNL average corn crop consumptive irrigation requirement, which is nine inches per acre per year in Kearney County, ten inches per acre per year in Phelps County and eleven inches per acre per year in Gosper County (allocation will be limited to current allocation of nine inches per acre per year in Union Township in Gosper County). Landowners will be required to have flowmeters installed on all wells serving participating parcels and to report water use annually to the NRD. Tri-Basin NRD will offer cost share on flowmeters for participants. Tri-Basin NRD will spot check flowmeter readings on 20% of participating parcels annually. As a condition of their participation, landowners will agree to subject enrolled parcels to (most of) the same rules that apply to all landowners in Phase three groundwater quantity management areas. An instrument will be filed with the county clerk recording these contracts, to provide notice to potential buyers of water use limitations associated with program participation.

In exchange for their participation, the NRD agrees to buy one acre-inch per acre per year from every acre enrolled in the contract. Landowners will have two payment options: an annual payment of \$5 per acre-inch credit for one acre-inch per year, or payment at the end of the contract period for up to five acre-inches of credits per acre (assuming the landowner has that much unused allocation) at a rate of \$4 per acre-inch. The NRD may also choose to purchase additional credits from participants. NRD purchases of additional acre-inches will be prioritized in Groundwater Quantity Management Phase 2 and Phase 3 areas and 50%+ stream depletion zones. The NRD will have the right of first refusal to purchase unused allocations from landowners, so landowners would need NRD board approval before they make private sales.

Landowners will also have the option to irrigate any and all acres within participating parcels. They can also pool acre-inches between parcels under the same ownership (pooling water credits associated with parcels under different ownership, but the same management will

Appendix C: Tri-Basin NRD Water Conservation Incentive Program

require a separate NRD-approved pooling agreement). Pools are only allowed for multiple parcels in the same basin and with the same groundwater quantity management phase status. Water use will be deducted from landowner water credit "accounts."

If a producer overuses their allocation, they will need to purchase credits from other landowners to eliminate their deficit. Otherwise, they will be prohibited from irrigating enrolled parcels until the deficit is eliminated. The only way a landowner can cancel a contract would be to pay the NRD for the full contracted amount (refund any payments that we've already made to them and pay the NRD the amount we would have paid them at the end of the contract period).

Terminology

Accounts- An account will track the number of acre-inches of water available for pumping on a parcel. Each parcel will have a separate account, unless landowners form pool accounts.

Allocations- Allocation amounts would be based on estimated safe yields from aquifers that would not result in long-term declines in groundwater levels. An initial allocation will be equal to the University of Nebraska's average annual irrigation water consumption requirement for corn (that amount is nine inches per acre in Kearney County, ten inches per acre in Phelps County and eleven inches per acre in Gosper County).

Credits (Water Use Credits)- Credits are accumulated on a per-NRD-certified irrigated acre per-parcel basis. Allocation credits are granted at the beginning of each allocation period.

Debits- Debits would be made against accounts based on actual pumping or water credits marketed and sold to the NRD or other water users.

Tri-Basin NRD

Water Conservation Incentive Program

Introduction: Tri-Basin NRD launched the Water Conservation Incentive Program (WCIP) in March 2019. WCIP is intended to address two natural resources management issues: ensuring sustainability of groundwater supplies and protecting streamflows from diminishment due to groundwater pumping. When participating in the WCIP groundwater option, irrigators agree to accept an allocation on their certified irrigated acres in exchange for the NRD offering them flexibility on which acres they can irrigate. Financial incentives for water conservation are also available to participants.

The program was initially aimed at groundwater irrigators. One of the main benefits that is anticipated is that it will encourage participants to be more efficient irrigators and help sustain groundwater supplies. We initially excluded Central Nebraska Public Power and Irrigation District (CNPPID) customers from the WCIP because the incentives set up for groundwater irrigators don't encourage conservation on commingled fields.

Tri-Basin wants to encourage irrigators who have parcels that have both surface water turnouts and groundwater wells (commingled parcels) to use canal water rather than groundwater on those fields to the greatest extent possible. This has the dual benefit of reducing groundwater pumping and increasing groundwater recharge. For this reason, we developed a "commingled" option for CNPPID customers. The Nebraska Department of Natural Resources pays 60% of the cost of landowner payments through the Water Resources Cash Fund, because they recognize the benefits of incentivizing irrigators to become more efficient and of utilizing surface water, when available, to reduce groundwater withdrawals and increase groundwater recharge.

The Program: Tri-Basin will allow landowners to enroll up to 8000 NRD-certified irrigated acres in the program. The enrollment period will be open until the program acre enrollment limit is reached. Once the enrollment limit is reached, water savings to the district could reach 650 acre-feet per year. Incentives in this program will likely be most attractive to landowners in phase two and phase three groundwater quantity management areas, so the water-use reductions should be greatest where the need is greatest (there are approximately 30,000 certified irrigated acres in Tri-Basin's phase two and phase three townships).

In exchange for their participation, landowners will be paid for the equivalent of one acre-inch of water credit per acre per year, with the opportunity to sell additional credits to the NRD at a set price. In addition to NRD purchases, landowners will have the opportunity to sell water credits on the open market at any agreed-upon price

(private transactions require NRD board approval). Landowners will also be granted flexibility to irrigate any acres within enrolled parcels and to share (pool) allocations between parcels. Pooling agreements will be required to enable sharing allocations between parcels under different ownership.

The Contract: The NRD and the landowner will sign a five-year agreement. The groundwater option agreement commits the landowner to limiting water use (allocation) on parcels that they select. The allocation will be equal to the UNL average corn crop consumptive irrigation requirement, which is nine inches per acre per year in Kearney County, ten inches per acre per year in Phelps County and eleven inches per acre per year in Gosper County (allocation will be limited to current allocation of nine inches per acre per year in Union Township in Gosper County). Landowners are required to have flowmeters installed on all wells serving participating parcels and to report water use annually to the NRD. Tri-Basin NRD offers cost share on flowmeters for participants. Tri-Basin NRD spot checks flowmeter readings on 20% of participating parcels annually. As a condition of their participation, landowners agree to subject enrolled parcels to (most of) the same rules that apply to all landowners in Phase three groundwater quantity management areas.

In exchange for their participation, the NRD agrees to buy one acre-inch per acre per year from every acre enrolled in the contract. Landowners have two payment options: an annual payment of \$5 per acre-inch credit for one acre-inch per year, or payment at the end of the contract period for up to five acre-inches of credits per acre (assuming the landowner has that much unused allocation) at a rate of \$4 per acre-inch. The NRD may also choose to purchase additional credits from participants. NRD purchases of additional acre-inches will be prioritized in Groundwater Quantity Management Phase 2 and Phase 3 areas and 50%+ stream depletion zones. The NRD will have the right of first refusal to purchase unused allocations from landowners, so landowners would need NRD board approval before they make private sales.

Landowners will also have the option to irrigate any and all acres within participating parcels. They can also pool allocations between parcels under the same ownership (pooling water credits associated with parcels under different ownership, but the same management will require a separate NRD-approved pooling agreement). Pools are only allowed for multiple parcels in the same basin and with the same groundwater quantity management phase status. Water use will be deducted from landowner water credit "accounts."

If a producer overuses their allocation, they need to purchase credits from other landowners to eliminate their deficit. Otherwise, they will be prohibited from irrigating enrolled parcels until the deficit is eliminated. The only way a landowner can cancel a contract would be to pay the NRD for the full contracted amount (refund any payments

that the NRD has already made and pay the NRD the amount we would have paid them at the end of the contract period).

Commingled Option: A different approach is needed to incentivize surface water use. We need to incentivize commingled water users to use canal water rather than groundwater. CNPPID customers and landowners with individual surface water rights are eligible to enroll commingled parcels in five year contracts. Participants will be reimbursed by Tri-Basin NRD for the equivalent of the cost per acre of CNPPID water delivery, with the understanding that payments will be reduced by \$6 per acre inch of groundwater used in excess of one inch per acre during the contract period. If, however, CNPPID is unable to deliver the full amount of contracted water to a parcel for any reason, a landowner will be allowed to pump groundwater without penalty to make up the difference between what CNPPID is able to deliver and the full contract amount.

CNPPID charges \$42.00 to deliver nine inches of water to their irrigation customers (2024). Their prices are subject to annual increases. Tri-Basin will pay incentives to landowners based on the current delivery rate at the time of enrollment in WCIP, but payment rates won't be increased during the contract period if CNPPID raises rates.

WCIP incentives will be paid on CNPPID contracted acres. Because NRD funds are limited, we will initially approve contracts for 8000 acres. Because applications exceed the number of acres allowed for enrollment, applications are selected for approval using a ranking system.

The WCIP commingled option requires annual reporting of groundwater use. As of 2018, only 15,597 commingled acres (TBNRD definition) have flowmeters in place and are reporting water use to Tri-Basin NRD. Applications from landowners with flowmeters currently in place are favored in the ranking system.

Parcels in which CNPPID water service contracts are in the process of cancellation are not eligible for enrollment. Landowners are allowed to enroll additional acres on existing CNPPID water service contracts. Individual landowners are limited to enrolling a total of no more than 320 acres in the WCIP. In the case of fields with fewer CNPPID contract acres than NRD-certified irrigated acres, landowners need to agree to have seals installed on valves or risers that would enable use of groundwater on CNPPID contract acres. If the seals are broken, recorded groundwater use will be divided among all NRD-certified irrigated acres.

If you are interested in enrolling in WCIP, please call the Tri-Basin NRD office at (308) 995-6688, or email us at jthorburn@tribasinrd.org.

number of NRD-certified irrigated acres in a parcel.

- 8.4. Phase II Rules and Regulations - The following regulations shall apply to all Landowners in a Phase II Quantity GMA:
- A. Continue controls set forth in sub-sections 8.3.1 through 8.3.4, as required in Phase I Areas, except to the extent that they are superseded by controls set forth in this section.
 - B. Landowners shall not develop any new irrigated acres within a Phase II area or transfer Groundwater out of a Phase II area after the effective date of Phase II area designation. Landowners will be allowed to transfer irrigated acres within or out of a Phase II area as described in Section 10 "Irrigated Land Certification". The NRD Board may allow Groundwater transfers within a phase II management area, as described in Section 7, "Groundwater Transfers". Landowners must also notify the county assessor of such re-location.
 - C. The Board of Directors must approve all Well construction Permits in Phase II areas that result in re-locating certified irrigated acres.
 - D. Landowners must agree to submit and implement Conservation Plans for a period of three years before new Well Permits that result in re-locating certified irrigated acres will be approved by the NRD Board of Directors.
 - E. All Wells or series of Wells with a capacity in excess of 50 g.p.m. in Phase II areas must have Flowmeters installed in accordance with specifications listed in Section 6 of the District rules and regulations and Well owners must report water use to Tri-Basin NRD no later than November 30 of each year on forms provided by the District.
 - F. Owners of all non-domestic Wells or interconnected series of Wells with a pumping capacity greater than 50 g.p.m. must be able to demonstrate to Tri-Basin NRD staff once every five (5) years that their Wells are operable and comply with applicable Well construction standards. If a Well is not operable and/or does not comply with applicable Well construction standards it must be repaired, registered with the Nebraska Department of Natural Resources as inactive or be properly decommissioned.

Eaton Township Phase 2 Groundwater Quantity Management Designation Timeline

September 10, 2024- Tri-Basin NRD Board holds public hearing on designating Eaton Township as Phase 2 for groundwater Quantity Management. The board may choose, after this hearing to declare that phase 2 groundwater management is needed.

November 9, 2024- If the board designates Eaton Township as Phase 2, the board's order will take effect 60 days after approval.

November 15, 2025- Annual water use reports due. Water use will need to be estimated for wells that don't have meters on them yet.

November 15, 2026- Annual water use reports due. Water use will need to be estimated for wells that don't have meters on them yet.

November 15, 2027- Annual water use reports due. ALL wells capable of pumping more than 50 gallons per minute will need to have functional flowmeters installed by this date.

Township	Number of Wells Used For Average	Phase 2 Trigger	2022-2024 Rolling Average	Static Water Level in relation to Phase 2 Trigger	Average Pre-1986 Saturated Thickness (feet)	90% Saturated Thickness	Phase 3 Trigger	Static Water Level in relation to Phase 3 Trigger
Grant (T5N R13W)	49	-5	-4.14	0.86	102.75	92.475	-10.275	6.135
May (T6N R13W)	14	-5	-9.56	-4.56	138.92	125.028	-13.892	4.332
Eaton (T7N R13W)	18	-5	-5.14	-0.14	129.16	116.244	-12.916	7.776
Lowell (T8N R13W)	1	-5	-4.82	0.18	107	96.3	-10.7	5.88
Cosmo (T5N R14W)	29	-5	4.71	9.71	109	98.1	-10.9	15.61
Lincoln (T6N R14W)	28	-5	4.87	9.87	107.75	96.975	-10.775	15.645
Liberty (T7N R14W)	8	-5	-1.85	3.15	137.5	123.75	-13.75	11.9

Tri-Basin NRD

Eastern Kearney County

Groundwater Levels

Rolling Average ('22-'24)

Vs. Baseline (1981-1985)

Rolling Average Comparison

Observation Well Change

- >-10'
- -5' - -10'
- 0' - -5'
- 0' - 5'
- 5' - 10'

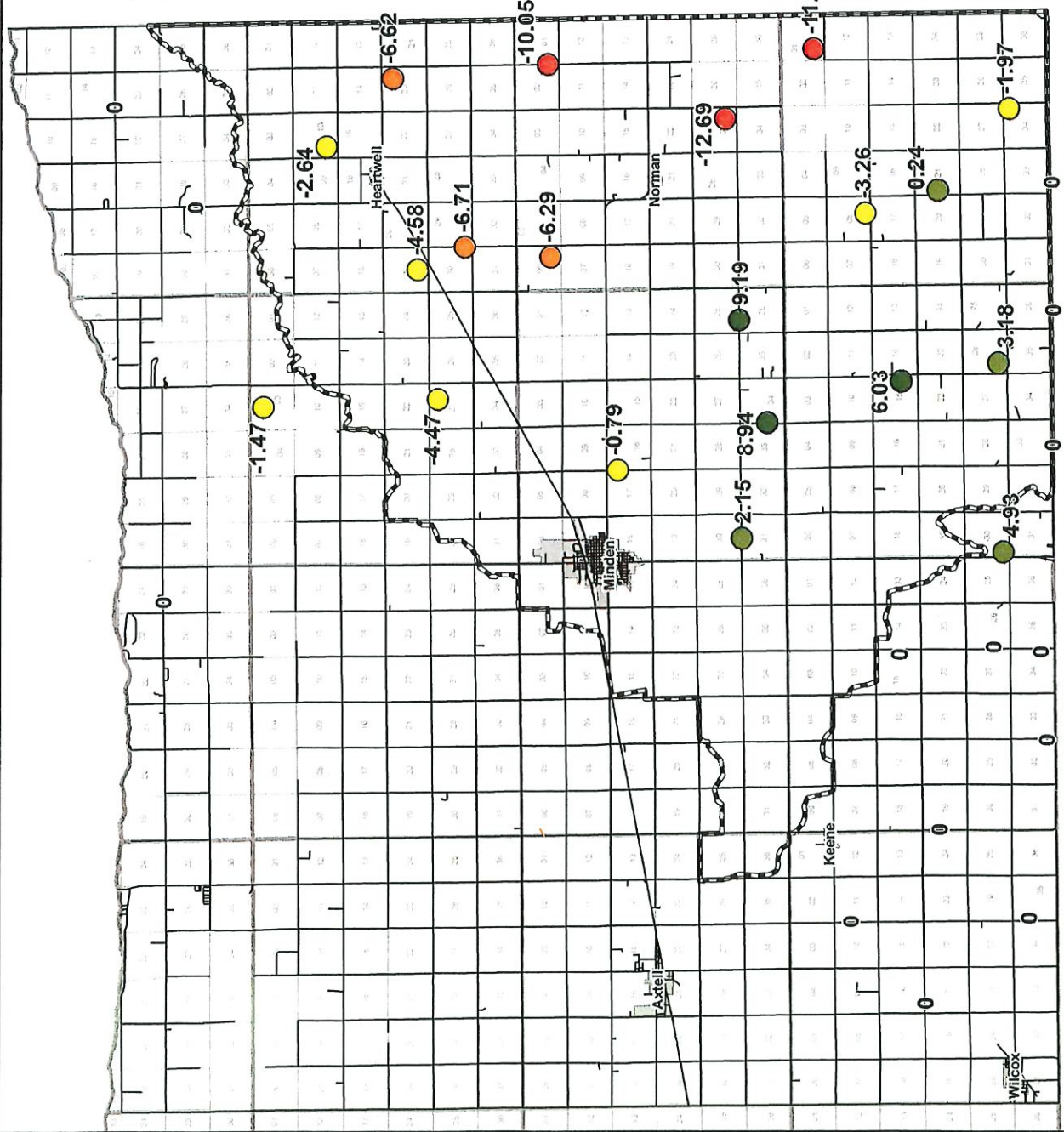
- Roadway
- Section
- Little Blue Basin
- Community
- Township



Nolan Little
August 2024
Tri-Basin Natural Resources District



Natural Resources District



Wilcox

