

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



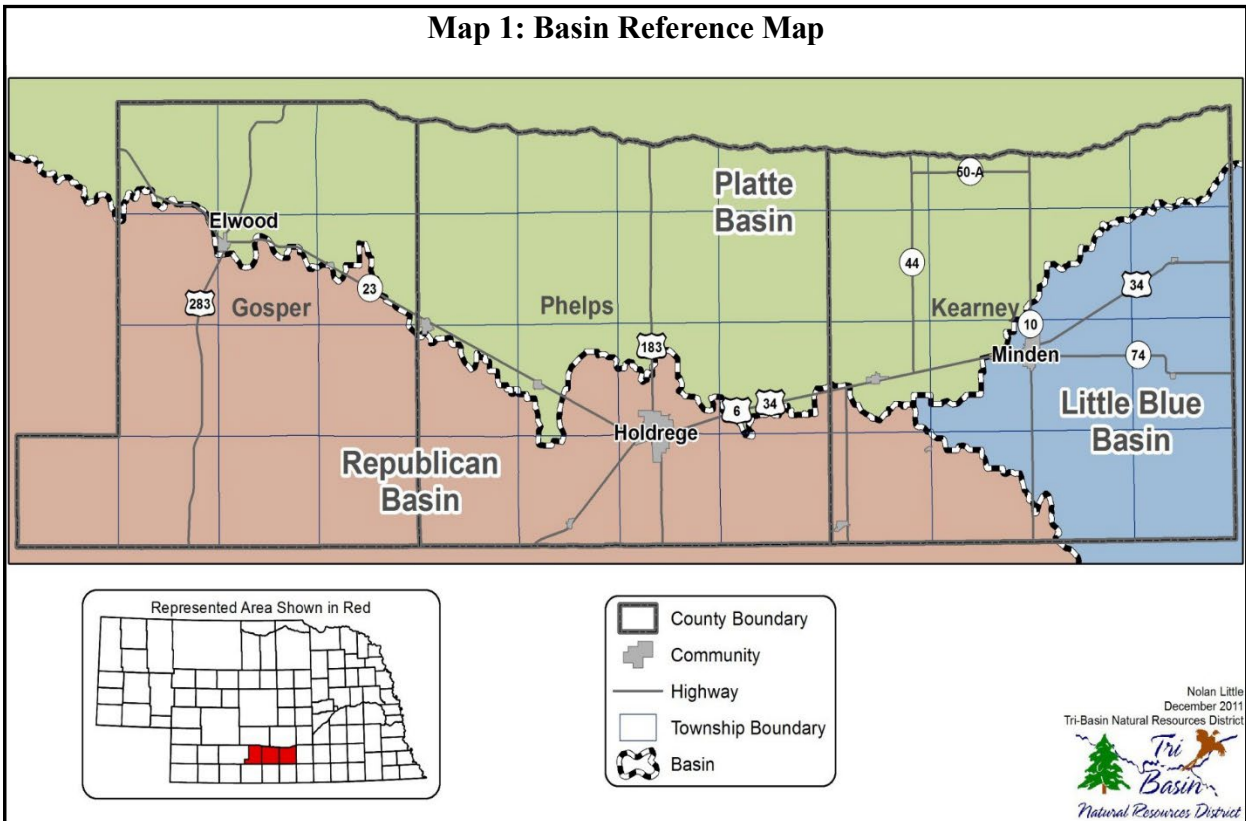
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**ANNUAL REPORT OF WATER USE ACTIVITIES
IN THE PLATTE BASIN WITHIN TRI-BASIN NRD
TO MEET THE REQUIREMENTS OF THE JOINT INTEGRATED MANAGEMENT PLAN
FOR THE 2023 BASIN-WIDE MEETING**

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 Integrated Management Plan for the fully and over-appropriated portions of the Platte River Basin.



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” spanning portions of all three basins, that is characterized by groundwater levels that are higher than historic, “predevelopment,” groundwater elevations.

More than 100,000 acres of cropland within the Platte Basin portion of TBNRD are irrigated with water diverted from the Platte River and distributed through the canals of the Central Nebraska Public Power and Irrigation District (CNPPID). Surface irrigation water and the canals that distribute it enhance recharge of groundwater supplies within the district. In addition to helping sustain groundwater supplies, this incidental recharge has increased streamflows in Platte and Republican tributaries. High groundwater levels have also saturated soil and sub-soil in parts of northern Phelps and Kearney counties, requiring TBNRD to construct drainage ditches (Improvement Project Areas or IPAs) in an attempt to stabilize groundwater levels below the crop root zone. For this reason, the TBNRD has designated portions of the Platte Basin as a “High Groundwater Management Area” pursuant to TBNRD rule 8.6 for purposes of groundwater quantity management.

III. CERTIFIED IRRIGATED ACRES

The district began certifying irrigated acres in the Platte Basin in 2004. The initial certification process in the Platte Basin ended on June 15, 2006. Since that time, corrections and revisions to the certified acre database have occurred with a net result as of December 31, 2023, of 298,955.85 certified acres in the Platte Basin within TBNRD. Data regarding certified irrigated acres can be found in **TABLE 1** below. Commingled acres are acres that may be watered with either groundwater or surface water. Detailed information about locations and distribution of certified irrigated acres is available in the Tri-Basin NRD office.

Table 1: Platte Basin Certified Irrigated Acres			
County	Year	Commingled	Total Certified Acres
Gosper	2014	10,395.25	35,800.39
	2015	10,554.56	35,655.82
	2016	10,469.07	35,658.57
	2017	10,473.49	35,651.20
	2018	11,075.78	35,631.92
	2019	11,216.16	35,636.12
	2020	11,627.28	35,958.57
	2021	11,775.99	35,958.58
	2022	11,797.26	36,245.17
	2023	11,868.39	36,167.38
Phelps	2014	78,500.37	167,222.82
	2015	78,127.66	167,337.72
	2016	78,277.00	167,381.05
	2017	78,136.85	167,384.10
	2018	79,026.45	167,318.88
	2019	78,712.01	167,318.57
	2020	78,859.37	167,237.37
	2021	78,848.66	167,089.45
	2022	78,850.63	167,079.63
	2023	78,855.95	167,015.95
Kearney	2014	23,441.29	95,738.64
	2015	23,325.27	95,700.64
	2016	23,455.16	95,674.61
	2017	23,312.60	95,560.25
	2018	23,913.89	95,560.25
	2019	23,841.55	95,575.13
	2020	23,841.55	95,608.13
	2021	24,528.69	95,682.33
	2022	24,962.07	95,804.93
	2023	24,962.07	95,772.52
Basin Wide	2014	112,336.91	298,761.85
	2015	112,007.49	298,694.18
	2016	112,201.23	298,714.23
	2017	111,922.94	298,595.55
	2018	114,016.12	298,511.05
	2019	113,769.72	298,529.82
	2020	114,328.20	298,804.07
	2021	115,153.34	299,322.96
	2022	115,609.96	299,129.73
	2023	115,686.41	298,955.85

IV. APPROVED CERTIFIED ACRE AND GROUNDWATER TRANSFERS

A. TBNRD allows certified irrigated acres to be transferred from one parcel to another within the Platte Basin portion of the district, with some limitations. These limitations include a prohibition on transfers from the fully appropriated portion of the district to the over-appropriated area. Certified irrigated acres also cannot be transferred from parcels with surface water or commingled water resources to parcels that have groundwater wells as their only water source.

Furthermore, district rules require that the number of certified acres that can be transferred be limited or “discounted” to ensure that there is not an increase in depletions to streamflows when acres are transferred from low to higher depletion zones. Between January 1 and December 31, 2023, the district approved 7 certified irrigated acre transfers in the Platte Basin. A total of 59.60 certified irrigated acres were involved in these transfers. Data regarding the location and number of acres associated with each transfer can be found below in **TABLE 2**.

TABLE 2: Platte Basin Transfer Acres																
NRD Permit Number	Legal Description							New Irrigated	Legal Description							Acres Dried Up
TBAT-0406	Section	16	-	7	-	17	W	9.87	Section	17	-	7	-	17	W	9.87
TBAT-0407	Section	16	-	7	-	17	W	6.00	Section	20	-	7	-	17	W	6.00
TBAT-0416	Section	16	-	8	-	20	W	7.00	Section	9	-	8	-	20	W	7.00
TBAT-0417	Section	16	-	8	-	20	W	7.00	Section	11	-	8	-	20	W	7.00
TBAT-0418	Section	16	-	8	-	20	W	6.11	Section	21	-	8	-	20	W	7.00
TBAT-0419	Section	10	-	7	-	15	W	10.00	Section	9	-	7	-	14	W	10.00
TBAT-0420	Section	23	-	7	-	15	W	12.73	Section	15	-	7	-	15	W	12.73

B. TBNRD regulates groundwater pumping off of overlying land by requiring landowners to secure groundwater transfer permits before they can pump groundwater to properties that are either not contiguous or 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 the TBNRD. Three permanent groundwater transfer permits were issued in the Platte Basin between January 1, 2023, and December 31, 2023. TBNRD allows CNPPID customers to pump groundwater into canals to supplement surface water diversions when necessary. Such permits are temporary and must be renewed annually. No Temporary Groundwater Transfer Permits were issued by TBNRD in 2023. Data regarding groundwater transfers can be found in **Table 3** below.

TABLE 3: Groundwater Transfers											
NRD Permit Number	Legal Description						Acres	Well Reg Number	Well ID #	Transfer Type	
GWT-0359	Section	36	-	7	-	19	W	80	G-127891	157224	Permanent
GWT-0360	Section	36	-	7	-	19	W	14	G-127891	157224	Permanent
GWT-0361	Section	36	-	7	-	19	W	7	G-127891	157224	Permanent

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. *Of the 22 permits issued in 2023, one replacement well permit was corrected and reapplied for as a supplemental to groundwater well and one replacement well was not drilled as they were able to fix the current well.

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** (page 14).

TABLE 4: TBNRD Well Permits	
Well Permit Type	Permits
New (variance) irrigation	
Replacement irrigation	13
Conditional replacement irrigation - supplemental to groundwater	5
Conditional replacement irrigation - supplemental to surface water	3
Dewatering (streamflow augmentation)	
New commercial/industrial	1
Domestic/Other (over 50 gpm)	

B. **TABLE 4:** TBNRD Well Permits (above) is a breakdown of well permits that TBNRD issued in the Platte Basin between January 1, 2023, and December 31, 2023. A detailed listing of well permits issued by TBNRD in 2023 is found in **TABLE 5** (below).

TABLE 5: Well Permit Summary				
NRD Permit Number	Well Permit Type	Legal Description	Well Reg Number	Well ID
TBSG-1545	SG_Supplemental to Ground	Section 22 - 8 - 15 W	G-197292	272201
TBSG-1546	SG_Supplemental to Ground	Section 29 - 8 - 15 W	G-197276	272202
TBRP-G058771-R1	Replacement Well	Section 20 - 6 - 19 W	G-058771	272440
TBRP-G050030-R1	Replacement Well	Section 35 - 7 - 20 W	G-050030	272604
TBRP-G004949	Replacement Well	Section 17 - 8 - 13 W	G-004949	272904
TBRP-G060506_2	Replacement Well	Section 19 - 8 - 18 W	G-060506	272996
TBRP-G127903	Replacement Well	Section 18 - 7 - 18 W	G-127903	272997
TBIN-1549	Industrial	Section 4 - 8 - 22 W	G-197419	273014
TBSS-1550	SS_Supplemental to Surface	Section 6 - 7 - 21 W	G-197341	273395
TBRP-G033288	Replacement Well	Section 26 - 7 - 20 W	G-033288	264526
TBRP-G037262*	Replacement Well	Section 24 - 8 - 15 W		
TBRP-G038740*	Replacement Well	Section 6 - 7 - 18 W		
TBSG-1551	SG_Supplemental to Ground	Section 16 - 8 - 18 W	G-197643	271393
TBSS-1548	SS_Supplemental to Surface	Section 19 - 7 - 19 W		274345
TBSS-1552	SG_Supplemental to Ground	Section 24 - 8 - 15 W	G-198584	273673
TBSS-1553	SS_Supplemental to Surface	Section 17 - 7 - 20 W		275044
TBRP-G100592	Replacement Well	Section 7 - 7 - 17 W	G-100592	275388
TBRP-G038170	Replacement Well	Section 25 - 8 - 14 W	G-038170	275575
TBRP-G007468	Replacement Well	Section 4 - 7 - 20 W	G-007468	275585
TBRP-G065013	Replacement Well	Section 27 - 8 - 20 W	G-065013	275586
TBRP-G051375	Replacement Well	Section 28 - 8 - 17 W	G-051375	275944
TBSG-1555	SG_Supplemental to Ground	Section 15 - 7 - 15 W	G-198947	269521

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. No new irrigation well construction permit variances were issued in the Platte Basin between January 1, 2023, and December 31, 2023.

TBNRD allows for corrections to the district's certified irrigated acre database by providing proof showing a history of irrigation between 1997 and 2005. These acres were not previously included in the district's database, because they were not classified as irrigated cropland by county assessors. Beginning in October 2013, producers also had to show proof that the corrected acres had been watered three out of the past five years. TBNRD also adjusts the district's irrigated acre database as a result of revisions made by county assessors 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 new well variances were issued in the Platte Basin in 2023.

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 Platte 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** (page 10) and Industrial and Commercial Water Use in **TABLE 7** (page 12).

VIII. FLOWMETER DATA

TBNRD requires flowmeters to be installed and annual water use to be reported to TBNRD whenever landowners drill new wells, receive irrigation-related cost-share funds, or when groundwater is transferred from one property to another.

In 2023, landowners reported data from 514 flowmeters in the Platte Basin. Thirty-seven of those 514 wells were reported as not used in 2023. An additional 15 supplemental wells that were used reported little use, generally 1 or 2 rotations. Of the wells that were used, farmers reported that they pumped 47,993 acre-feet of groundwater on 57,450 certified irrigated acres. That results in an average application of 10.02 acre-inches of groundwater per acre.

Due to the installation of additional reporting flowmeters and depending on use of supplemental irrigation wells by CNPPID customers, flowmeter data and reported irrigated acres change from year to year. All District flowmeter data is reported annually to the Department of Natural Resources (DNR) for purposes of Republican River Basin Compact Administration accounting. Platte Basin flowmeter data is included in **Appendix B** (page 16).

IX. WATER BANKING ACTIVITIES

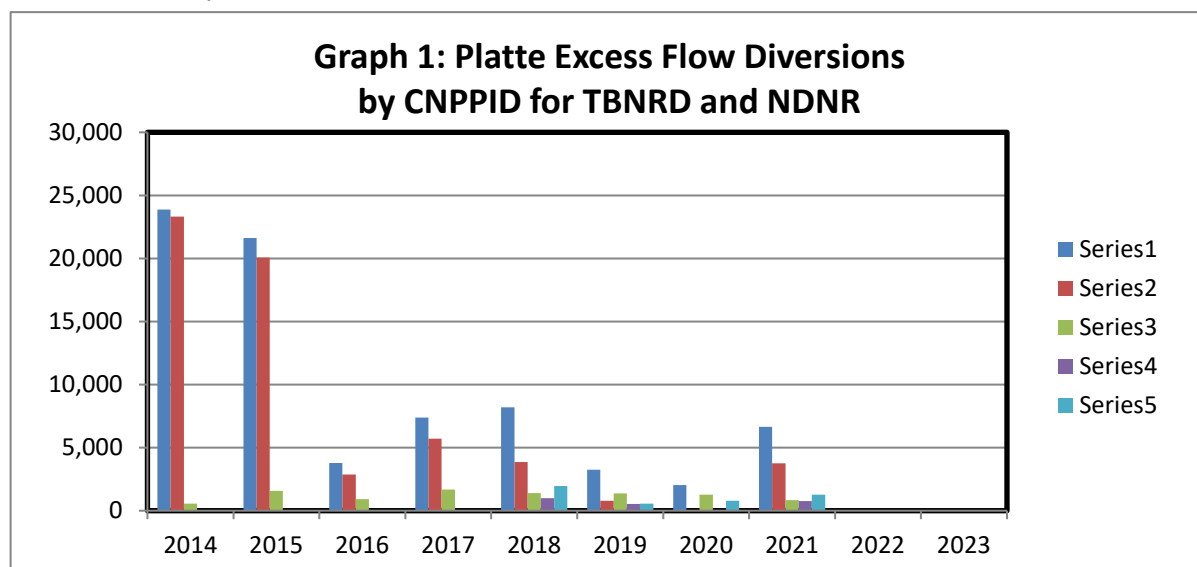
TBNRD initiated the Water Conservation Incentive Program (WCIP) in 2018 (see program summary in **Appendix E**, page 37). Participants in this program sign contracts agreeing to limit irrigation to the UNL Average Corn Crop Irrigation requirement. In exchange, Tri-Basin NRD agrees to pay them if they use less water than their allocated amount. Participants will be provided with credit accounts that track available water use credits for participating fields. Sign-up for the 2023 irrigation season concluded on April 1st. Tri-Basin received one application for groundwater WCIP contracts in the Platte Basin in 2023 for 136.16 acres.

A "commingled option" was added to the WCIP in 2019 (see program expansion summary in **Appendix E**, page 37). This option is particularly targeted at owners of fields that have access to both CNPPID canal water and a groundwater well. Owners of these commingled fields who sign up for this option are incentivized to use surface water and limit their groundwater use to one inch or less per acre per year. The purpose of this option is to increase groundwater recharge. For this reason, the option has a ranking system that prioritizes incentives to parcels located in areas with groundwater declines. No new contracts were written in 2023 for this option. At the end of 2023 a total of 3071.2 acres were in commingled WCIP contracts.

X. STREAMFLOW ACCRETION ACTIVITIES

Tri-Basin NRD started utilizing the facilities of Central Nebraska Public Power District (CNPPID) to provide groundwater recharge and to augment streamflows when the district and the NE Game and Parks Commission paid CNPPID to divert 9,551 acre-feet of water from the Platte River into Elwood Reservoir in Gosper County in 2006. Additional diversions (see **Appendix C**, page 28, and **Graph 1**, on the next page) have been made regularly over the past twelve years, including 2021, when NDNR and TBNRD paid CNPPID \$188,110 to divert 6646 acre-feet into Elwood Reservoir, Victor Lakes WPA and E-65 Canal. Diversions in 2018, when added to past diversions, result in a grand total of 121,526 acre-feet of water diverted from 2006-2021. In all these

instances, diversions were made when Platte streamflows exceeded target flows, or when irrigation deliveries were suspended due to heavy rainfall in the CNPPID irrigated area. Drought conditions precluded any opportunities for diverting excess flows from the Platte in 2022. CNPPID did not provide 2023 data as contract is with NDNR.



Tri-Basin NRD and NeDNR provided \$1,301,775 of local, state and Water Resources Cash Funds to the Rainwater Basin Joint Venture and CNPPID to construct pipelines from CNPPID canals to five federally owned wetlands (Victor Lakes, Cottonwood, Linder, Johnson, and Funk WPAs). (See **Appendix D**, page 36) This enables CNPPID to deliver excess flows to these wetlands. Supplementing natural runoff with Platte excess flows enhances wildlife habitat and increases groundwater recharge, which helps offset groundwater pumping depletions, sustains groundwater supplies and augments baseflows in nearby Platte tributaries. The pipeline to Funk WPA was completed in 2018 and over 1950 acre-feet were diverted into that wetland in November and December 2018. The remaining pipelines were constructed in 2019. Excess flows were diverted into Johnson WPA in April 2019 (252 a-f) and into Victor Lakes WPA in December 2019 to January 2020 (1090 a-f). (See **Appendix D**).

The Platte River Recovery Implementation Program (PRRIP) paid CNPPID to divert 19,173 acre-feet of water into the Phelps County Canal in 2012. Since then, PRRIP has made additional diversions on several occasions when the Platte is flowing above target levels (see **Appendix C**, page 28). While recharge resulting from these diversions cannot be used as a credit to offset depletions to Platte baseflows from post-1997 uses, Tri-Basin NRD anticipates that they will be credited toward reducing depletions to fully appropriated levels.

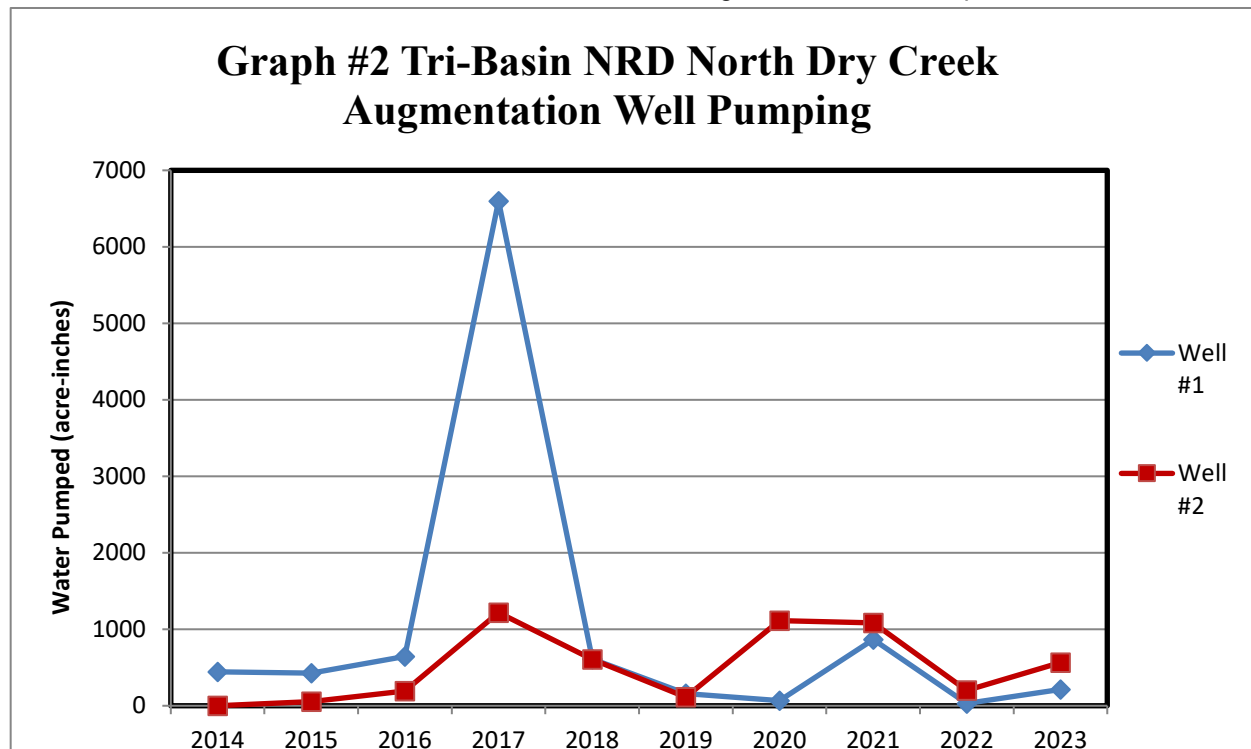
Tri-Basin NRD completed construction of a streamflow augmentation well along North Dry Creek in Kearney County in 2011. A second well was installed in 2015. Each well can pump as much as 1250 gallons per minute. A study of the augmentation wells' impacts, conducted by HDR Engineering in 2014 and commissioned by TBNRD and DNR, indicates that the average depletion caused by pumping augmentation well #1 over a 25-year period is equivalent to 44% of total pumping (see **Graph 2**, on the next page).

Tri-Basin NRD, PRRIP and NDNR initiated a streamflow augmentation and recharge re-timing project at Cottonwood Ranch in northwest Phelps County in 2021. Seven wells were drilled to the North and west of PRRIP's recharge cells at that site. The wells have capacities ranging from 400 to 800 gallons per minute. PRRIP's existing demonstration well on the Cook property has subsequently been integrated into the project as well. Although the wells were tested in 2022, due to some delays in construction of pipelines from the wells, the project didn't become fully operational until March 2023. Tri-Basin will operate the augmentation wells on behalf of PRRIP and NDNR. Possible additional well construction is being evaluated. Pumping by augmentation wells also has an ancillary benefit of providing forage fish habitat during extreme drought conditions.

Tri-Basin NRD also accrued credit for 257.57 acre-feet of water pumped into the Platte River near Kearney in 2021 through a wastewater pipeline from the KAAPA ethanol plant near Axtell. This pipeline was constructed in 2008. The total discharge was 83,928,000 gallons.

Irrigated land was temporarily retired in TBNRD during 2022 through five contracts totaling 42.6 irrigated acres that were signed up for USDA-EQIP Dryland Corners.

Landowners reported to TBNRD on district Groundwater Quality Management Area crop reports that conservation tillage practices have been adopted or continue to be utilized on 65,323 certified irrigated acres in the Platte Basin portion of the district during 2023. It is estimated that no-till or minimum tillage practices have been adopted on at least 82,353.5 irrigated acres in the Platte Basin portion of the district. Recent university research (Klocke, et al, 2009) indicates that evapotranspiration (ET) is reduced by as much as 3 inches per acre on irrigated cropland, as compared to conventional tillage systems. Therefore, as much as 20,588 acre-feet of water was conserved in the Platte Basin in TBNRD in 2023 through this conservation practice.



Tri-Basin NRD signed agreements with DNR, Central Platte NRD (CPNRD) and Twin Platte NRD to participate in funding the proposed “J-2 Re-regulation Reservoir” project southwest of Overton, Nebraska. It was anticipated that this reservoir would store up to 8000 acre-feet of water, and that it would fill as often as three times per year. Funding for the project was suspended by the PRRIP in 2016. Tri-Basin NRD and other project partners are evaluating possible feasible alternatives to this project. Tri-Basin NRD has accrued 2040 acre-feet per year of depletion offset credit from its participation in this project. This credit remained in place through 2021.

Tri-Basin NRD and Central Platte NRD reached an agreement in 2013 that will enable TBNRD to compensate CPNRD in return for accruing credit from Platte baseflow enhancements that result from rehabilitation of three irrigation canal systems in Dawson County. In 2014, CPNRD provided 512 acre-feet of water to offset depletions caused by groundwater irrigation in TBNRD. No offset water credit has been provided under this agreement since that time, but the agreement remains in effect until 2033.

XI. GROUNDWATER LEVELS

TBNRD has an extensive network of 137 dedicated groundwater observation wells (74 in the Platte Basin) and 91 irrigation wells (ten in the Platte Basin) that are used to measure groundwater levels (see **Map 2**, page 12). TBNRD also works cooperatively with CNPPID to gather groundwater level data. Data from 158 wells measured by CNPPID are included in TBNRD’s groundwater observation well database. District water level data is reported biannually 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.

TABLE 6: Platte Basin Municipal Water Use Data

	Year	January	February	March	April	May	June	July	August	September	October	November	December	Yearly Total
Axtell	2014	2,653,500	2,359,000	2,740,400	3,836,900	7,461,100	7,534,900	12,794,400	8,925,000	5,467,700	5,640,300	2,475,500	2,180,300	64,069,000
	2015	2,282,900	2,027,700	4,393,300	4,318,200	4,664,300	5,876,500	12,441,200	10,301,700	10,976,400	7,525,900	4,008,900	2,699,700	71,516,700
	2016	2,379,000	2,755,600	3,040,700	4,168,700	3,985,900	13,891,900	14,882,100	11,692,100	9,021,300	7,816,500	3,537,100	2,310,600	79,481,500
	2017	2,288,000	1,988,100	2,493,500	3,609,100	4,904,500	14,414,100	14,784,100	7,672,900	10,143,900	3,942,000	2,797,400	2,430,100	71,467,700
	2018	2,487,000	2,289,700	2,421,700	2,379,200	6,946,500	12,633,200	9,746,700	8,058,000	6,823,000	3,239,900	2,139,300	2,421,400	61,585,600
	2019	2,457,000	2,265,400	2,411,600	2,931,200	4,443,300	6,385,100	9,487,000	7,732,400	7,671,600	3,046,500	2,241,100	2,209,400	53,281,600
	2020	2,259,900	2,092,600	2,132,000	4,100,500	7,021,600	11,247,200	16,882,800	16,333,800	11,553,300	7,813,600	2,668,700	2,185,500	86,291,500
	2021	2,299,800	2,258,300	2,262,600	3,861,500	5,424,400	13,903,400	11,587,900	10,636,800	8,164,300	5,333,900	2,118,100	2,194,200	70,045,200
	2022	2,208,000	2,139,300	3,083,300	7,209,500	7,657,600	12,870,500	13,080,500	13,780,200	10,480,700	6,049,800	2,946,700	2,315,800	83,821,900
	2023	9,224,700	8,755,600	9,889,500	18,102,700	24,546,900	44,406,200	51,038,200	48,483,200	37,869,900	22,243,800	9,974,600	8,904,900	240,158,600
Bertrand	2014	4,422,000	3,817,000	4,069,000	4,949,000	11,419,500	8,539,000	16,089,200	11,456,000	7,427,000	8,972,000	4,710,000	4,114,000	89,983,700
	2015	4,294,000	3,807,000	6,038,000	8,605,000	8,294,500	9,873,100	21,287,600	15,234,800	15,246,600	9,881,500	4,519,000	3,981,000	111,062,100
	2016	4,467,000	4,003,000	4,548,000	8,925,400	6,381,000	14,827,300	14,993,000	15,371,700	11,076,700	11,481,000	7,061,000	5,398,000	108,533,100
	2017	5,477,000	4,266,000	4,763,000	8,036,000	6,728,100	19,708,400	17,701,100	10,483,000	13,751,700	6,601,200	4,552,000	5,166,000	107,233,500
	2018	5,215,000	4,682,000	4,490,000	4,829,700	9,412,811	14,385,000	12,214,100	11,105,700	10,056,700	5,838,400	4,190,000	4,154,000	90,573,411
	2019	4,243,000	3,856,000	3,948,000	4,824,400	7,114,600	8,675,000	12,384,000	11,275,600	10,606,100	6,878,400	4,301,000	4,663,000	82,769,100
	2020	4,637,000	4,169,000	4,148,000	6,121,100	9,069,400	15,119,000	19,730,300	20,081,700	16,261,800	11,846,800	5,379,000	5,259,000	121,822,100
	2021	5,592,000	5,206,000	5,170,000	6,432,000	8,712,700	17,522,700	14,316,300	16,740,400	10,647,600	9,763,000	5,140,000	5,656,000	110,898,700
	2022	5,737,000	5,018,000	5,746,000	11,971,800	12,737,100	16,538,900	18,566,500	20,561,200	14,515,200	11,472,000	6,315,000	6,096,000	135,274,700
	2023	5,982,000	4,746,000	4,725,000	9,757,100	10,635,000	13,554,800	12,665,400	16,117,400	13,863,600	8,537,500	4,546,000	5,055,000	110,184,800
Elwood	2014	3,729,600	4,188,000	4,915,000	4,968,000	12,601,700	10,104,800	20,316,600	15,146,100	9,033,400	6,043,600	3,827,000	4,682,500	99,556,300
	2015	3,067,700	3,531,000	6,951,100	5,160,200	6,668,600	10,586,900	19,270,800	11,772,800	10,001,500	6,784,900	3,373,000	3,468,000	90,636,500
	2016	3,467,900	3,235,000	3,817,300	5,768,000	5,770,000	14,979,700	13,372,200	15,078,400	9,390,000	11,215,400	3,825,000	4,302,000	94,220,900
	2017	4,283,600	4,994,000	4,074,900	6,153,800	12,262,600	12,577,800	17,753,700	10,229,900	12,605,600	4,944,800	3,536,900	3,677,000	97,094,600
	2018	4,439,000	3,754,000	3,928,200	4,162,000	9,938,200	15,358,800	12,971,100	9,499,900	8,555,000	6,843,000	4,364,000	6,179,000	89,992,200
	2019	6,389,000	6,027,000	6,875,000	5,885,000	8,496,700	8,583,700	11,223,200	8,537,900	12,192,000	3,265,000	4,452,000	4,740,000	86,666,500
	2020	5,705,000	3,048,000	5,440,000	6,627,900	9,726,000	14,016,100	16,005,900	12,192,100	15,980,600	8,310,700	4,039,000	5,431,900	106,523,200
	2021	4,970,000	3,165,000	4,758,000	5,572,300	7,655,000	17,342,800	16,254,200	15,234,800	11,136,000	8,213,500	5,750,400	5,631,700	105,683,700
	2022	5,943,500	4,998,100	5,207,800	10,018,300	13,061,500	18,744,700	13,931,500	18,799,700	14,389,100	8,388,600	4,549,900	11,277,800	129,310,500
	2023	4,311,000	4,698,000	4,809,700	6,885,000	6,899,000	13,005,400	14,442,200	11,716,000	12,677,400	6,164,000	3,832,500	5,478,000	94,918,200

TABLE 6: Platte Basin Municipal Water Use Data (Continued)

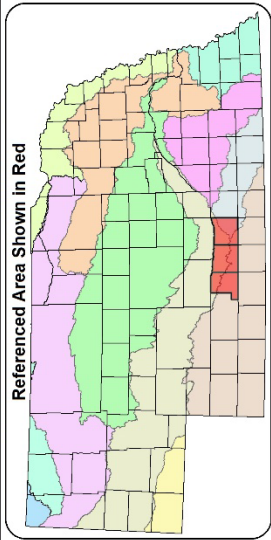
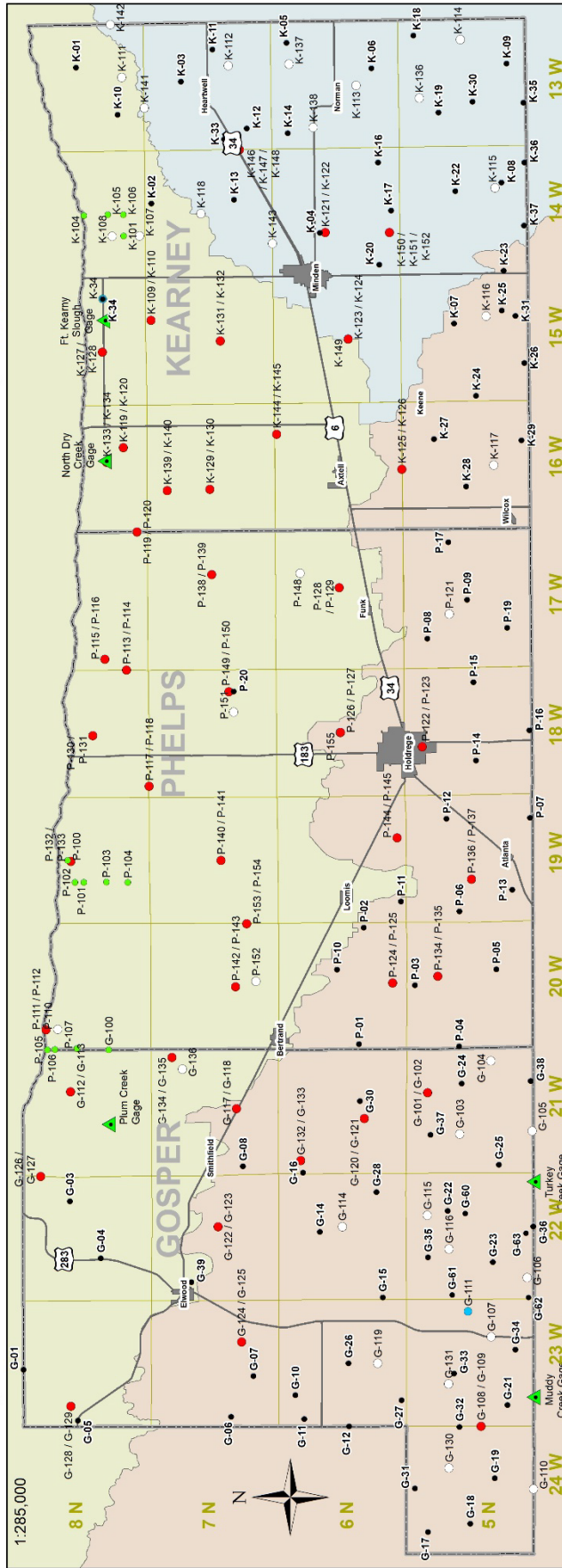
	Year	January	February	March	April	May	June	July	August	September	October	November	December	Yearly Total
Funk	2014	758,000	694,000	725,000	796,000	2,346,000	1,669,000	3,132,000	2,394,000	1,443,000	1,045,000	809,000	760,000	16,571,000
	2015	737,000	726,000	1,004,000	1,279,000	1,347,000	1,580,000	3,150,000	1,443,000	3,291,000	1,535,000	717,000	1,047,000	17,856,000
	2016	1,239,000	1,121,000	1,368,000	1,195,000	908,000	3,739,000	3,584,000	3,240,000	1,375,000	1,176,000	615,000	539,000	20,099,000
	2017	581,000	503,000	592,000	608,000	795,000	1,998,000	3,786,700	1,670,300	2,294,000	1,080,000	912,100	1,296,000	16,116,100
	2018	1,820,000	1,624,000	1,960,000	1,803,000	1,703,000	5,737,000	7,370,700	4,910,300	3,669,000	2,256,000	1,527,100	1,835,000	36,215,100
	2019	1,662,200	1,766,800	1,403,600	1,215,300	1,290,200	1,585,400	2,746,600	2,708,800	2,410,800	1,251,500	1,260,400	1,288,200	20,589,800
	2020	1,332,100	1,376,000	1,492,100	1,724,200	2,501,800	4,063,500	4,870,200	4,164,800	3,953,000	3,314,600	1,727,600	1,177,000	31,696,900
	2021	1,125,600	1,148,800	1,261,700	2,074,800	1,396,900	4,014,600	2,936,900	2,921,400	2,589,000	1,797,100	1,085,000	1,169,100	23,520,900
	2022	983,500	1,077,200	1,265,400	1,493,100	3,250,700	3,727,100	6,032,200	1,626,400	3,098,200	1,801,800	994,800	1,082,200	26,432,600
	2023	343,800	1,193,700	1,894,900	1,153,700	4,824,000	2,483,700	2,644,500	4,096,000	3,038,800	1,928,300	1,048,900	998,100	25,648,400
Loomis	2014	1,223,000	1,150,000	1,341,000	1,952,000	5,636,000	4,465,000	8,702,000	5,563,000	2,847,000	2,970,000	1,437,000	1,289,000	38,575,000
	2015	1,163,000	1,177,000	2,116,000	4,199,000	2,763,000	5,302,000	8,388,000	6,377,000	6,215,000	3,215,000	1,382,000	1,113,000	43,410,000
	2016	1,066,000	1,119,000	1,362,000	2,828,000	1,952,000	7,843,000	6,982,000	7,775,000	5,093,000	4,769,000	1,995,000	1,254,000	44,038,000
	2017	1,522,000	823,000	1,835,000	3,033,000	3,124,000	9,538,000	9,616,000	2,699,000	6,351,000	2,228,000	1,401,000	653,000	42,823,000
	2018	1,440,000	1,282,000	1,235,000	1,432,000	4,451,000	6,398,000	6,346,000	4,138,000	3,901,000	1,944,000	1,084,000	1,342,000	34,993,000
	2019	1,086,000	972,000	986,000	1,273,000	1,579,000	2,621,000	5,587,000	5,196,000	5,656,000	2,152,000	1,181,000	1,165,000	29,454,000
	2020	1,143,000	1,058,000	1,170,000	2,031,000	3,304,000	7,559,000	6,338,000	11,240,000	7,536,000	4,471,000	1,690,000	1,585,000	49,125,000
	2021	1,411,000	1,532,000	1,764,000	2,228,000	3,813,000	8,872,000	7,088,000	9,758,000	5,456,000	3,571,000	1,829,000	1,598,000	48,920,000
	2022	1,574,725	1,268,725	881,725	4,769,725	5,210,725	7,737,725	7,011,725	9,318,725	6,165,725	4,199,725	1,348,725	1,097,725	50,585,700
	2023	1,371,467	1,153,467	1,112,467	2,884,467	5,144,467	4,984,467	5,265,467	7,153,467	5,078,467	3,573,467	962,467	689,467	39,373,604
Smithfield	2014													
	2015													
	2016	178,100	79,200	93,100	182,300	210,600	189,900	1,028,800	1,173,700	386,200	290,500	164,400	180,700	4,157,500
	2017	121,600	151,200	127,700	128,900	236,000	489,300	725,400	267,900	375,100	168,400	162,000	99,600	3,053,100
	2018	160,800	82,400	113,300	199,800	254,200	393,900	436,600	271,700	248,000	207,100	131,600	202,300	2,701,700
	2019	99,900	201,800	156,500	152,000	254,900	259,300	230,900	412,700	183,700	164,400	143,300	109,700	2,369,100
	2020	145,300	164,000	173,400	179,600	261,800	570,500	483,300	488,700	775,100	682,200	258,200	288,800	4,470,900
	2021	160,700	244,600	214,500	240,400	346,800	534,400	309,600	632,200	367,600	404,200	267,800	314,300	4,037,100
	2022	402,700	123,300	164,400	384,400	292,600	301,000	519,500	561,600	308,200	320,000	157,500	130,000	3,665,200
	2023	142,100	134,600	127,600	224,800	393,500	385,600	289,400	486,900	385,900	239,800	105,300	117,100	3,032,600

- 2014 Smithfield monthly data unavailable. Papers fell into water; all they are able to provide is beginning and ending reading for the year.
- 2015 Smithfield monthly data unavailable. Water Manager passed away; village staff was unaware that they were to be keeping monthly readings. They will begin January 2016.
- 2015 IMP Report data for Bertrand contained an error; data from one well was not included in the report.

TABLE 7: Platte Basin Industrial and Commercial Water Use Data				
Well Reg	Well ID	Owner	Legal Description	Gallons Used
G-095842	112013	Aurora Co-Op	Section 19-7-20	950,000
G-116982	141058	KGLD, LLC -- Awarii Dunes	Section 11-7-16	39,000,000
G-122576	151178	Bullhead Point Assoc- Water Supervisor	Section 5-8-22	17,226,500
G-092923	102854	Central Nebraska Public Power & Irrigation District	Section 4-8-22	30,714,063
G-156977	199850	Central Nebraska Public Power & Irrigation District	Section 7-8-21	344,021,429
G-197419	273014	CNPPID	Section 4-8-22	7,010,749
G-139944	171644	Fort Kearny Consolidated	Section 6-7-14	0
G-165728	219082	Fort Kearny Consolidated	Section 5-7- 14	38,291,400
G-165729	219083	Fort Kearny Consolidated	Section 5-7- 14	291,100
G-123753-R1	194279	KAAPA Ethanol, LLC	Section 13-6-16	135,103,700
G-123754-R2	210900	KAAPA Ethanol, LLC	Section 13-6-16	525,700
G-124061	152898	KAAPA Ethanol, LLC	Section 13-6-16	4,490,000
G-134413-R1	194280	KAAPA Ethanol, LLC	Section 13-6-16	38,997,100
G-181488	243777	KAAPA Ethanol, LLC	Section 13-6-16	9,040,900
G-076515	85080	Lakeside Golf Club	Section 8-8-22	20,000,000
G-076780-R1	124121	Lakeside Golf Club	Section 8-8-22	25,000,000
G-177447	238330	Loomis Pork LLC	Section 19-7-19	7,377,100
G-071961	80123	Mosiac of Axtell	Section 15-6-16	0
G-071962	80124	Mosiac of Axtell	Section 15-6-16	0
G-073205	81395	Nebraska Public Power District	Section 4-8-21	169,977,800
G-080853	89509	Nebraska Public Power District	Section 4-8-21	129,000
G-177982	239716	Olsen Cattle Co LLC	Section 5-6- 15	3,510,000
G-147025	188561	Paul Johnson & Sons	Section 10-7-20	4,955,690
G-087812	99723	Rusty's Fertilizer Inc	Section 21-8-18	1,184,400
G-073875	82215	Village of Bertrand	Section 6-6-20	25,090,200
G-093253	106683	Wolfdenn Dairy	Section 28-8-16	4,750,000
G-093254	106684	Wolfdenn Dairy	Section 28-8-16	4,750,000
				932,386,831

Map 2: Dedicated Groundwater Observation Wells

Tri-Basin Natural Resources District Static Water Measurement Wells



Well Types:

- Irrigation Well
- Transect Well
- Nested Well
- Single Well
- Other Well
- Community

Geographical Features:

- Highway
- ▭ County Boundary
- ▭ Township
- ▭ Little Blue Basin
- ▭ Republican Basin
- ▭ Platte Basin
- ▲ Stream Gage

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

Nolan Little
May 2021
Tri-Basin Natural Resources District

Appendix A: Tri-Basin NRD – Platte Basin

**Tri-Basin Natural Resources District
New Well and Conditional Replacement Well Permit
Applicant Certification and Agreement
(Form for NON- CNPPID customers)**

This Applicant Certification and Agreement imposes mandatory Conditions and Limitations on the 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 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 as follows (Note: Carefully read each condition checked by the NRD and then place your initials on the line next to the checked box):

1. _____ Applicant agrees to offset any “new depletions” to streamflows of the Platte River, Little Blue River, Republican River, or their tributaries that the NRD determines 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 will 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 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 will 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 will result in closure of this well and civil or criminal prosecution and other penalties.

4. _____ 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 will result in closure of this well and prosecution by the State of Nebraska.

Appendix A: Tri-Basin NRD – Platte Basin

I certify that I am familiar with the information contained in this certification and agreement 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, and that all conditions, limitations and restrictions shall be binding upon any successors in interest to the well and real property.

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 B: Tri-Basin NRD Platte Basin Flowmeter Data for Irrigation Wells - 2023

Well Reg	Well ID	Certified Acres	Gallons Used	Meter Comments
A-005254	805	152.00	46,497,400	
A-005527	1006	136.70	34,120,700	
A-005544-R1	113944	152.00	41,583,700	
A-005573-R1	203922	81.00	17,166,900	
A-005616	1053	154.00	44,738,930	
A-005727-R1	247613	90.00	26,162,064	
A-005851-R2	234961	156.40	41,598,400	
A-005964B-R1	182843	116.00	26,694,282	
A-005987	1325	73.90	25,884,000	
A-006470	1647	130.00	44,773,959	
A-006862	1917	148.00	40,803,900	
A-007012-R1	2028		0	Well Not Used in 2023
A-007219-R1	263005	168.00	42,066,433	
A-007398-R1	219835	139.50	35,285,535	
A-008164-R1	174548	100.00	37,725,595	Series Well: 2 Wells, 2 Meters Usage with G-073863
G-000273-R1	98237	127.00	41,821,776	
G-000317-R2	219289	132.00	27,566,200	
G-000533	3831	126.00	27,096,705	
G-000559-R1	262531	97.00	46,128,672	
G-000597-R1	207683	135.00	49,726,305	
G-000671-R1	3992	300.00	65,424,900	
G-001136-R1	238751		0	
G-001152	4544		0	Supplemental Well Not Used in 2023
G-001169	4563	149.00	35,122,300	EQIP Contract; Water Use Report not required but operator was willing to provide data.
G-001228-R1	92085		0	
G-001374-R1	222615	135.00	35,757,900	
G-001498	4954	245.15	25,587,400	
G-001705	5190	150.00	36,044,491	
G-002216-R1	166014	143.00	35,836,800	
G-002383-R1	128836	132.00	11,001,400	
G-002482	6081	130.00	7,525,731	
G-003468	7201	77.00	30,398,400	
G-004871	8801	80.00	15,945,100	
G-004955-R1	8893	148.00	38,485,000	
G-005097-R1	114236	151.30	41,892,105	
G-005392	9390		0	Supplemental Well Not Used in 2023
G-006383	10549	138.00	7,602,848	Supplemental Well
G-006536	10727	147.00	5,646,131	
G-007340-R1	162706	130.00	82,490,600	
G-007342-R1	162707	119.00	47,324,400	

Appendix B: Tri-Basin NRD Platte Basin Flowmeter Data for Irrigation Wells - 2023

Well Reg	Well ID	Certified Acres	Gallons Used	Meter Comments
G-007488-R1	11845	150.00	4,237,366	
G-007764	12171		0	WCIP Program: Well Not Used in 2023
G-008178	12651	130.00	32,346,934	
G-009462	14164		0	Supplemental Well Not Used in 2023
G-009596	14319	147.00	29,215,900	
G-010388-R1	213868	65.00	14,489,374	
G-011357-R1	16352	115.00	29,921,807	
G-011745-R1	16802	132.00	76,715,145	
G-012318	17473	137.00	40,468,000	
G-012651-R1	191520	67.00	21,184,191	
G-013097-R1	121819	132.00	25,771,800	
G-013149-R1	223630	75.00	36,004,846	
G-013423-R1	209336	260.00	61,777,794	
G-013974	19370	135.60	34,013,100	
G-014026	19432	146.00	9,118,000	
G-014735-R1	20244	78.00	18,851,392	
G-016206	21928	146.00	38,417,207	
G-016446-R1	22203	130.00	35,631,478	
G-016616-R1	169839		0	Supplemental Well Not Used in 2023
G-016633	22408	75.00	47,671,600	
G-016869	22679		113,504	Well Used to water Cattle
G-017090-R1	172826	131.60	50,257,166	
G-020681	26927	133.60	20,193,072	
G-020831	27090	120.00	32,106,346	
G-021172	27458	93.00	27,312,700	
G-021193	27482	124.00	67,960,216	
G-021609-R1	258322	151.00	25,961,124	
G-021735-R1	28060	152.00	52,292,358	
G-021830-R1	163082	123.00	5,214,111	Supplemental Well
G-022286	28646	30.00	7,619,955	
G-022950	29350	130.00	28,440,700	
G-023149	29563	26.00	9,890,845	
G-023266	29683	149.00	38,764,700	
G-023268-R1	241542	62.00	24,097,002	
G-023479	29912	135.00	49,500,000	
G-023572	30014		0	Supplemental Well Not Used in 2023
G-023615	30058	155.00	40,555,700	
G-024078-R1	98512	150.35	32,493,200	
G-024220	30697	130.00	533,400	
G-024327	30807	152.00	42,344,000	

Appendix B: Tri-Basin NRD Platte Basin Flowmeter Data for Irrigation Wells - 2023

Well Reg	Well ID	Certified Acres	Gallons Used	Meter Comments
G-024329	30809	76.00	2,322,210	Supplemental Well
G-024483-R1	30966	132.43	35,960,042	This well is in WCIP
G-024606-R1	228630	105.00	26,374,400	
G-024787-R1	97572	150.00	37,115,987	
G-024986	31500	130.00	9,449,592	
G-025069	31589	142.00	30,846,944	Estimate: Required - Platte basin well, waters into Republican basin.
G-025152	31677	125.00	26,709,760	
G-025207	31736	127.00	14,235,300	
G-025703-R1	242435	151.50	46,085,000	
G-025803	32369	140.00	36,883,900	
G-026446	33051	170.00	41,523,896	
G-027184	33850	140.00	33,489,000	
G-027484-R1	225652	135.00	21,319,148	
G-028077	34788	146.00	53,479,000	
G-028109-R1	34822	109.00	42,346,935	
G-028636	35400	132.00	42,070,500	
G-028660-R2	160179	145.00	3,572,500	
G-028765-R1	35540	142.00	29,304,596	
G-028884	35667	140.00	46,898,800	
G-029347	36156	105.00	25,317,000	
G-029951-R1	217569	38.00	11,571,134	
G-030265	37128	50.00	11,412,283	
G-030496	37375	130.00	36,875,675	
G-030668-R1	164677	135.00	5,657,400	
G-030676	37576	130.00	22,275,512	
G-030705	37605	148.00	35,828,000	
G-030936-R1	176011	120.00	27,516,700	
G-031102	38030	150.00	37,691,000	
G-031153	38092	155.00	4,876,000	
G-031354	38311	139.00	39,028,000	
G-031657	38620	62.00	23,651,600	
G-031862-R1	170685	147.50	42,381,800	
G-031885-R1	168468	149.90	5,789,900	
G-032220	39203	145.00	86,561,521	
G-032221	39204	21.00	5,368,889	
G-032462-R1	166009	124.00	36,161,600	
G-032999-R2	189200	65.00	19,783,861	
G-033196-R1	158873	130.00	32,409,385	
G-033788	40819	147.20	11,108,000	

Appendix B: Tri-Basin NRD Platte Basin Flowmeter Data for Irrigation Wells - 2023

Well Reg	Well ID	Certified Acres	Gallons Used	Meter Comments
G-033845	40877	132.00	35,140,400	
G-034024	41062	85.00	10,242,000	
G-034034-R1	93086	65.00	14,799,600	
G-034439	41489	130.00	15,590,469	
G-034522	41576		0	Supplemental Well Not Used in 2023
G-034601	41656	70.00	19,548,700	
G-034607-R1	95424	191.00	80,591,171	
G-034763	41826	142.00	4,904,012	
G-034808	41871		0	Meter Exemption:
G-035001-R1	246956	151.00	51,319,973	
G-035027	42096	116.70	37,868,000	
G-035028	42097	154.80	38,323,900	
G-035046-R1	149129	94.80	21,317,000	
G-035210-R1	42287	132.00	28,300,984	
G-035230-R1	209844	100.50	37,460,572	
G-035840-R1	221855		0	
G-036171-R1	217862	148.00	40,502,091	
G-036219-R1	213455	75.00	21,659,931	
G-036220-R1	204099	53.70	15,616,536	
G-036447-R1	203726	135.00	35,388,200	
G-036476	43608	144.00	31,232,530	
G-036500	43633	149.00	49,641,856	
G-036585	43719	44.90	15,506,834	
G-036677	43812	130.00	49,992,958	
G-037041	44181	50.00	1,205,300	Supplemental Well. Surface primary source
G-037482	44633	152.00	45,780,015	
G-037931-R1	227572	140.00	53,977,400	
G-038167-R2	209014	134.00	41,449,800	
G-038172	45343	130.00	52,102,281	
G-039054	46251	119.00	28,814,738	
G-039106	46304	128.00	47,779,500	
G-039190	46392	156.00	35,679,813	
G-039297	46502		0	WCIP Program: Well Not Used in 2023
G-039572	46786	77.90	55,646,149	
G-039663-R1	199851	100.00	16,586,500	
G-040337	47575	145.00	32,938,100	
G-040839	48087	118.00	29,656,141	
G-041057	48311	14.00	9,989,685	
G-041183	48439	154.00	59,141,800	
G-041329-R1	219361	136.00	3,467,294	

Appendix B: Tri-Basin NRD Platte Basin Flowmeter Data for Irrigation Wells - 2023

Well Reg	Well ID	Certified Acres	Gallons Used	Meter Comments
G-041350	48611	127.00	35,268,701	
G-041369-R1	188563	66.00	13,718,100	
G-041374	48636	141.00	39,799,889	
G-041826	49107	157.80	33,550,800	
G-041978-R1	222393	230.00	5,454,325	Supplemental Well
G-041996-R1	228128	17.00	3,714,396	
G-042019	49302	145.00	31,498,640	
G-042824	50125	159.94	34,999,000	
G-042992-R1	198737	135.00	27,559,200	
G-043275-R1	50593	137.00	34,033,737	
G-043276-R1	169041	148.00	32,918,522	
G-043366-R1	127238	83.00	15,376,500	
G-043639	50973	120.00	60,920,542	
G-043947	51286	136.00	30,492,200	
G-044047	51391	135.00	34,585,235	
G-044222	51568	165.00	85,669,200	
G-044570	51919	130.00	31,500,000	
G-044608	51959	132.00	42,669,900	
G-044680	52031	141.00	31,261,314	
G-044918	52271	156.40	97,769,063	
G-045284	52644	135.00	25,467,800	
G-045549-R1	118572	136.00	41,251,000	
G-046380	53760	135.00	31,799,777	
G-046434	53847	150.00	46,544,000	
G-048424	55885	111.00	39,657,900	
G-049528	57016	133.00	33,351,300	
G-049567-R1	221186	146.00	45,758,291	
G-050030	272604	144.00	17,595,792	
G-050941	58466	17.00	77,207,047	
G-053420	60983	160.00	48,795,738	
G-053870	61445	150.00	41,243,100	Estimate+G121
G-054523	62111	150.00	32,310,900	
G-055251	263060	166.30	33,715,800	
G-055382-R1	172201	156.70	40,617,600	
G-055521	63130	137.00	109,984,833	
G-056004	63618	102.50	32,286,400	
G-056606-R1	64243	133.00	36,275,000	
G-057082	64744	134.00	39,103,100	
G-057427-R1	222051	187.00	52,131,000	
G-058508	66218	136.00	41,883,687	

Appendix B: Tri-Basin NRD Platte Basin Flowmeter Data for Irrigation Wells - 2023

Well Reg	Well ID	Certified Acres	Gallons Used	Meter Comments
G-059592	67347	149.26	33,737,000	
G-059676	67433	57.30	23,606,329	
G-060270-R1	254482	62.00	21,356,892	
G-060768	68553	136.16	35,949,180	
G-060797-R1	212228	130.00	32,579,640	
G-061063-R1	213557	240.00	67,446,734	
G-061501-R1	221352	152.00	39,524,700	
G-061654	69490	138.50	42,995,600	
G-061946	69783	128.00	33,872,000	
G-063158	71057	153.77	41,724,500	
G-063177	71076	138.68	44,212,414	
G-063232	71133	150.00	41,243,100	
G-063877	71796	91.00	23,468,100	
G-063968	71890	130.00	58,410,969	
G-064069	71993	65.20	24,693,200	
G-064756	72722	77.21	32,599,500	
G-064840	72808	145.00	93,938,500	
G-065598	73589	130.00	54,458,161	
G-066150	74154	130.00	38,292,700	
G-066270	74279	134.00	35,640,000	
G-066404	74421	130.00	34,985,213	
G-066511	74530	149.20	44,561,200	
G-067478	75541	65.00	25,397,679	
G-067820	75893	135.00	28,312,400	
G-067926	76002	103.00	7,270,300	
G-067939-R1	176352	149.00	54,178,475	
G-067960	76038	132.00	84,859,700	
G-068188	76269	131.00	28,253,000	
G-068235	76316	127.00	45,363,743	
G-068317	76399	173.30	37,716,906	
G-068903	77028	134.80	16,534,400	
G-068938	77063	135.00	22,871,542	
G-069457	77609	240.00	28,023,186	
G-069536	77689	130.00	72,956,700	
G-069613	77769	315.00	21,142,647	
G-070512-R1	264615	153.00	45,900,578	
G-070731	78892	158.20	39,743,000	
G-070802	78963	145.00	32,444,000	
G-070946	79107		0	Well Not Used in 2023
G-071177-R1	225427	133.00	19,707,287	

Appendix B: Tri-Basin NRD Platte Basin Flowmeter Data for Irrigation Wells - 2023

Well Reg	Well ID	Certified Acres	Gallons Used	Meter Comments
G-071178-R1	162859	146.80	37,994,600	
G-071179	79340	120.00	35,843,280	Estimate
G-071541	79703	130.00	35,691,489	
G-072455-R1	206053	132.00	33,074,115	
G-072667	80855	151.42	29,090,351	
G-072681	80869	7.00	3,584,000	
G-073172	81360	72.00	22,773,516	
G-073798	82134	140.00	29,470,507	
G-073863	82203	150.00	21,023,100	Series Well: 2 Wells, 2 Meters Usage with A-008164-R1
G-074144	82484	134.00	22,941,599	
G-074176	82517	130.00	33,595,200	
G-074256	82601	73.00	33,695,400	
G-074282	82627	140.00	40,568,000	
G-074365	82710		0	Supplemental Well Not Used in 2023
G-074392	82739	66.00	18,650,500	
G-074662	83011	105.00	46,228,400	
G-077557	86175	150.00	39,102,031	
G-079825	88482	0.00	0	Meter Not Required, But willing to Report 2024 First Year
G-087842	99647	133.00	41,316,200	
G-091120	102868	142.00	48,463,800	
G-091407	102859	133.00	49,903,500	
G-096150	109726	130.00	36,268,783	
G-096555	109842	130.00	53,036,700	
G-096676	112194	130.00	33,722,281	
G-096815	110571	77.00	17,139,333	
G-097100	110814		0	Supplemental Well Not Used in 2023
G-097707-R1	236661	143.30	50,395,651	
G-098970	115138	64.00	21,384,318	
G-100388	114419	145.00	63,390,300	
G-109999	128947	225.00	35,947,008	
G-110172	129232	151.78	44,336,500	
G-116457	140343	80.00	26,670,658	
G-116906	141679	75.00	61,245,000	Estimate: 1361 hours at 750 GPM
G-118169	142719	160.00	68,276,560	
G-119660	146805	88.00	19,988,874	
G-121077	147633	152.80	48,500,000	
G-121219	146009	120.00	33,124,800	
G-121766	146008	150.00	34,085,058	

Appendix B: Tri-Basin NRD Platte Basin Flowmeter Data for Irrigation Wells - 2023

Well Reg	Well ID	Certified Acres	Gallons Used	Meter Comments
G-121894	148344	181.97	3,747,740	
G-122529	147634	78.00	16,958,000	
G-123303	149183	64.00	17,378,560	Estimate
G-124617	152724	128.00	34,191,275	NEW Meter
G-125286	152448	40.00	34,245,800	
G-125287	152447	130.00	49,609,600	
G-127496	153919	116.00	30,250,400	
G-127559	155815	135.00	27,624,800	
G-128172	154500	37.50	20,861,100	
G-129150	154896	131.00	29,915,700	
G-129241	158555	90.00	69,745,300	
G-129257	160440	137.00	16,594,800	
G-129577	158376	120.00	32,135,500	
G-129685	156989	136.20	47,230,309	
G-129692	160438	140.00	96,636,300	
G-130058	154894	100.00	41,167,907	
G-130108	159812	19.00	24,409,545	
G-130225	160878	134.00	31,585,200	
G-130382	153921		0	Supplemental Well Not Used in 2023
G-130445	153920		0	Supplemental Well Not Used in 2023
G-130451	154496	133.00	2,564,695	
G-130559	156326	152.50	27,892,700	
G-130635	159808	130.00	38,910,400	
G-130699	161380	135.10	2,403,100	
G-130801	154254	130.00	41,679,200	
G-130918	161076	152.20	48,797,400	
G-130954	162385	10.00	5,420,300	
G-130969	161430	148.00	4,019,335	Supplemental Well
G-131043	161371	143.00	38,878,000	
G-131271	156876	130.00	20,341,800	
G-131440	156871	124.00	4,269,200	
G-131490	154924	80.00	24,526,035	
G-131622	155819	100.00	23,159,000	
G-131623	155812	135.00	28,045,200	
G-131624	160071	114.00	51,568,976	
G-131726	162133	150.80	31,180,900	
G-131774	163016	144.00	36,288,300	
G-131925	162127	133.40	3,091,900	
G-131927	161757	130.00	34,781,300	
G-131930	162388	122.60	41,550,800	

Appendix B: Tri-Basin NRD Platte Basin Flowmeter Data for Irrigation Wells - 2023

Well Reg	Well ID	Certified Acres	Gallons Used	Meter Comments
G-131993	159890	125.00	38,289,000	
G-132158	163442	139.00	29,609,500	
G-132168	160566	135.00	34,339,500	
G-132241	165009	128.00	10,692,300	
G-132339	156879		0	Supplemental Well Not Used in 2023
G-132340	156877		0	Well Not Used in 2023
G-132341	156875	0.00	0	Supplemental Well Not Used in 2023
G-132344	156789	12.00	14,054,800	
G-132359	160881	133.00	13,697,020	
G-132512	161373	135.00	38,652,400	
G-132514	165545	165.00	9,094,500	Supplemental Well
G-132515	161839	144.23	7,090,900	
G-132529	161379	141.50	2,634,700	
G-132531	161571	140.00	35,971,175	
G-132532	161572	151.12	45,315,100	
G-132544	159256	131.00	89,108,837	
G-132547	159597	145.00	31,283,000	
G-132644	160439	158.00	26,885,600	
G-132663	164229	154.30	34,972,449	
G-132700	165015	132.00	89,055,500	
G-132701	165016	132.00	96,109,700	
G-132733	159884	160.00	39,142,200	
G-132734	164687	115.00	29,282,602	
G-132768	165657	140.00	27,929,700	
G-132769	160567	144.00	60,162,800	
G-132798	159254	130.00	33,275,054	
G-132840	160488	151.00	35,660,805	
G-133038	165739	136.25	37,991,100	
G-133088	157915	130.00	30,614,505	
G-133180	161381		0	Supplemental Well Not Used in 2023
G-133181	161382		0	Supplemental Well Not Used in 2023
G-133233	162390	119.68	25,452,600	
G-133234	161749	146.00	40,834,200	
G-133235	158379	117.00	5,023,200	Supplemental Well
G-133352	162136	140.00	39,122,940	
G-133405	165547	120.00	25,011,000	
G-133416	165335	71.50	28,152,100	
G-133421	161383	101.00	31,573,041	
G-133426	165471	65.00	30,760,000	
G-133471	163782	130.00	69,476,000	

Appendix B: Tri-Basin NRD Platte Basin Flowmeter Data for Irrigation Wells - 2023

Well Reg	Well ID	Certified Acres	Gallons Used	Meter Comments
G-133725	162123	130.00	22,983,500	
G-133759	160323	87.00	24,278,391	
G-133929	164406	75.00	28,654,600	
G-133952	166448		4,961,200	Well Used to fill Pond @ MOSAIC
G-134113	166449	111.00	41,241,300	
G-134130	162140	130.00	49,516,948	
G-134132	162139	67.00	22,504,600	
G-134186	166699	10.00	4,469,005	
G-134199	162134	130.00	37,009,272	
G-134206	166528		0	Supplemental Well Not Used in 2023
G-134230	166010	63.00	49,936,700	
G-134566	160564	123.00	44,572,800	
G-134706	167566		0	Well Not Used in 2023
G-134879	162601	65.00	3,264,000	
G-134880	161156	145.00	28,133,716	
G-135119	169328	156.30	75,335,100	
G-135169	166605	149.00	37,847,200	
G-135192	167715		0	Supplemental Well Not Used in 2023
G-135193	167716	65.00	6,741,800	
G-135213	166040	86.00	34,897,000	
G-135516	169018	116.00	34,804,000	
G-135532	160565	140.00	40,943,500	
G-135822	169468	99.60	13,522,692	Estimate
G-135950	161750		0	Well Not Used in 2023
G-136259	169013	86.00	35,877,300	
G-136650	169774	135.00	64,367,500	
G-136691	165017	135.00	17,790,400	
G-137318	169448	110.00	17,921,640	Estimated Usage
G-137329	169841	134.30	21,911,105	
G-137381	170158	145.00	4,570,833	
G-137402	170172	135.00	38,907,608	
G-137403	170742	72.00	28,957,500	
G-137447	165018	135.00	23,740,300	
G-137702	169770	133.00	43,662,274	
G-137739	166606	138.00	17,221,881	
G-137937	172642	134.00	84,947,500	
G-137967	166808	292.00	20,303,100	Supplemental Well
G-138203	172442	155.00	49,112,896	
G-138280	162142	64.85	18,749,293	
G-138534	172370	151.00	33,199,023	

Appendix B: Tri-Basin NRD Platte Basin Flowmeter Data for Irrigation Wells - 2023

Well Reg	Well ID	Certified Acres	Gallons Used	Meter Comments
G-138594	172862	74.60	4,827,100	Supplemental Well
G-139059	172599	100.00	33,965,100	
G-139271	170679	90.00	27,288,600	
G-139360	165336	90.00	41,083,200	
G-139572	169042	100.00	28,667,800	
G-140012	167002	24.50	8,379,300	
G-140625	172547	132.00	17,496,300	
G-141518	173834	68.00	80,213,300	
G-141860	177863	93.00	15,924,061	
G-142036	170682	122.27	94,922,400	
G-142430	178761	130.00	22,379,900	
G-142530	173630	139.00	38,496,200	
G-142566	178584		0	Supplemental Well Not Used in 2023
G-142967	178585	215.00	62,760,800	
G-143253	177864		0	Well Not Used in 2023
G-144298	182757	72.00	22,817,900	
G-144555	181381		0	Supplemental Well Not Used in 2023
G-144716	182053	150.00	32,156,400	
G-144783	183104	137.00	32,382,700	
G-144784	180131	76.00	5,956,773	
G-144823	182952	205.00	5,413,600	Supplemental Well
G-144980	182209	135.00	41,173,300	
G-145042	183105	100.00	39,010,800	
G-145565-R1	190217	130.00	32,769,447	
G-145863	185009	260.10	49,439,287	Estimate:
G-145885	178762	40.00	10,168,900	
G-145993	183670		0	Supplemental Well Not Used in 2023
G-146977	180054	80.00	23,274,800	
G-147124	182953	150.00	10,501,600	Supplemental Well
G-147456	188634	77.00	25,128,311	
G-147457	188635	142.00	45,148,141	
G-148411	189364	135.31	37,154,200	
G-148565	187309	131.70	1,486,953	
G-148621	191026	75.00	23,165,892	
G-148622	190543	130.00	40,584,400	
G-148685	188800	125.00	49,194,087	
G-148702	189813	94.00	36,036,888	
G-148722	191249	73.00	15,945,643	
G-148743	187694		0	Supplemental Well Not Used in 2023
G-149188	191318	134.00	63,975,700	

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Well Reg	Well ID	Certified Acres	Gallons Used	Meter Comments
G-149618	192106	132.00	46,011,638	
G-149663	191521	74.00	20,462,710	
G-149890	191025	60.00	4,285,715	
G-150891	187697	128.60	13,574,900	
G-151663	191248	62.00	23,967,206	
G-152478	197495	130.00	6,571,811	
G-152676	191017	125.00	28,295,825	
G-152707	197427	183.00	12,886,300	
G-153081	197627	68.00	11,391,374	
G-153624	199985	95.00	27,377,477	
G-157641	202660	115.00	1,739,213	
G-158114	208108	120.00	38,671,097	
G-159284	208463	162.80	52,248,369	
G-161020	213049	128.00	73,573,000	
G-161031	214156	30.00	20,295,171	
G-161519	208462	67.00	12,370,700	
G-162926	216452	74.50	244,417,419	
G-164032	219279	155.00	50,880,893	
G-164644	218534	160.00	44,000,613	
G-164765	217905	139.00	90,715,268	
G-165055	220042	143.00	14,928,726	
G-165537	215283	48.00	24,076,365	
G-165597	218166	75.00	21,218,407	
G-166011	221015	130.00	35,213,306	
G-166108	222272	67.00	15,394,417	
G-166557	217687	124.00	53,442,330	
G-166720	222354	148.00	30,608,803	
G-167012	221958	31.80	7,665,574	
G-167286	223104	144.00	37,282,442	
G-167416	222557	77.00	30,004,083	
G-167483	224220	108.00	2,457,980	
G-167695	221189	133.00	1,974,910	Supplemental Well - Surface water mostly used.
G-167696	221856	130.00	11,378,340	
G-167697	222232	78.00	19,039,570	Supplemental Well
G-167700	222753		0	Supplemental Well Not Used in 2023
G-167889	222616	76.00	17,432,868	
G-167954	223105	76.00	79,561	Well Used to water Cattle
G-168005	223141	57.00	18,985,805	
G-168610	217989	143.00	35,521,505	
G-169763	225845		0	

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Well Reg	Well ID	Certified Acres	Gallons Used	Meter Comments
G-169866	224583	88.00	9,458,824	
G-170249	228482	122.00	47,274,570	
G-170384	228390	155.00	54,545,325	
G-170397	222559	79.39	5,808,240	Supplemental Well
G-170400	226797	67.00	27,126,846	
G-171454	229850	81.40	7,486,357	
G-171471	229476	65.00	14,027,700	
G-171948	228629	143.00	36,793,670	
G-172064	227073		0	
G-172337	230621	130.50	588,616	
G-172642	226828	137.00	21,779,408	
G-172798	230409	145.00	14,291,693	
G-173699	230989	171.00	50,737,520	
G-174251	230397	100.00	6,342,902	
G-174557	230623	130.00	53,121,367	
G-174591	234579	82.00	5,676,543	Supplemental Well
G-174932	232741	108.00	8,053,604	
G-175697	235514	75.00	14,798,930	
G-175830	235770	35.00	6,512,343	
G-175946	231156	140.00	7,148,833	
G-175949	236660	108.00	2,604,340	
G-176126	235952		0	Supplemental Well Not Used in 2023
G-176401	236745	15.00	13,304,916	
G-177578	239253	21.40	15,351,785	
G-178033	240120	130.00	7,410,055	
G-178903	240974	132.00	30,158,318	
G-186194	254285	30.00	75,887,900	Well used to fill Pond
G-186486	254490	20.00	44,022,336	
G-187210	256486	77.00	21,340,871	
G-187945	257218	16.00	6,558,749	
G-188663	257035	115.00	39,469,153	
G-189345	259680	97.00	54,725,600	
G-189407	247403	18.00	17,053,790	
G-194313	268259	76.50	22,768,400	
G-194826	269694	125.00	24,825,272	
G-197276	272202	130.00	40,288,932	
G-197292	272201	100.00	42,931,831	

57,449.52 15,638,500,609

10.02 IPA

47,992.796 Acre Foot

New data system uses certified acres vs actual acres * Therefore no county breakdown or summary.

Appendix C: CNPPID Groundwater Recharge Diversions Summary 2022 Platte Basin

2020						
Dates of Recharge Diversion	1-1-20 to 2-14-20	1-1-20 to 2-14-20	1-1-20 to 2-23-20	3-19-20 to 4-14-20	3-26-20 to 4-14-20	
Elwood Reservoir Diversions						
AF, in						
\$/af						
\$/other						
Notes						
Elwood Releases						
AF, in						
\$/af						
\$/other						
Notes						
E65 Canal						
AF, in	465.5	698.3			253.9	380.8
\$/af	46.26	46.26			46.26	46.26
\$/other						
Notes	E65 Canal re-charge down to MP 23.7-0.3-TBNRD under contract #1150, 60/40 split TBNRD/DNR	E65 Canal re-charge down to MP 23.7-0.3 -DNR under contract #1150, 60/40 split TBNRD/DNR			E65 Canal re-charge down to MP 23.7-0.3-TBNRD under contract #1150, 60/40 split TBNRD/DNR	E65 Canal re-charge down to MP 23.7-0.3 -DNR under contract #1150, 60/40 split TBNRD/DNR
Phelps Canal						
AF, in				910.40		
\$/af				32.87		
\$/other						
Notes				9-25-19 WSA w/ PRRIP, Diversions down to MP 13.3		
Funk Lagoon						
AF, in						
\$/af						
Notes						
Funds						
Total \$	\$21,534.03	\$32,303.36	\$30,766.20	\$29,924.85	\$11,745.41	\$17,615.81
PRRIP				\$29,924.85		
NDNR		\$32,303.36				\$17,615.81
TBNRD	\$21,534.03		\$30,766.20		\$11,745.41	
NGPC						

Appendix C: CNPPID Groundwater Recharge Diversions Summary 2022 Platte Basin

2020			
(Cont.)			
Dates of Recharge Diversion	7-20-20 to 9-22-20	9-21-20 to 9-22-20	11-17-20 to 12-3-20
Elwood Reservoir Diversions			
AF, in			
\$/af			
\$/other			
Notes			
Elwood Releases			
AF, in			
\$/af			
\$/other			
Notes			
E65 Canal			
AF, in			
\$/af			
\$/other			
Notes			
Phelps Canal			
AF, in		20.90	1054.40
\$/af		32.87	32.87
\$/other			
Notes		9-25-19 WSA w/PRRIP, Diversions down to MP 13.3	9-25-19 WSA w/ PRRIP, Diversions down to MP 13.3
Funk Lagoon			
AF, in			
\$/af			
Notes			
Funds			
Total \$	NA	\$686.98	\$34,658.13
PRRIP		\$686.98	\$34,658.13
NDNR			
TBNRD			
NGPC			

Appendix C: CNPPID Groundwater Recharge Diversions Summary 2022 Platte Basin

2021 Dates of Recharge Diversions	1-7-21 to 1-15-21	3-15-21 to 3-24-21	3-15-21 to 3-24-21	3-15-21 to 3-24-21	3-15-21 to 3-24-21
Elwood Reservoir Diversions					
AF, in		2114.3	845.7	1268.6	
\$/af		51.41	51.41	51.41	
\$/other					
Notes		For PRRIP. 6-24-19 WSA (30,000 af limit annually)	For TBNRD, Contract #1190	For NDNR, Contract #1190	
Elwood Releases					
AF, in					
\$/af					
\$/other					
Notes					
E65 Canal					
AF, in					332.7
\$/af					47.64
\$/other					
Notes					For TBNRD, Contract #1190, Down to MP 23.7-0.3
Phelps Canal					
AF, in	626.30				
\$/af	33.86				
\$/other					
Notes	9-25-19 WSA w/PRRIP, Diversions down to MP 13.3				
Cottonwood Ranch					
AF, in					
\$/af					
Notes					
Funk Lagoon					
AF, in					
\$/af					
Notes					
Funds					
Total \$	\$ 21,206.52	\$ 108,696.16	\$ 43,477.44	\$ 65,218.73	\$ 15,849.83
PRRIP	\$ 21,206.518	\$ 108,696.163			
NDNR				\$ 65,218.73	
TBNRD			\$ 43,477.44		\$ 15,849.83
NGPC					

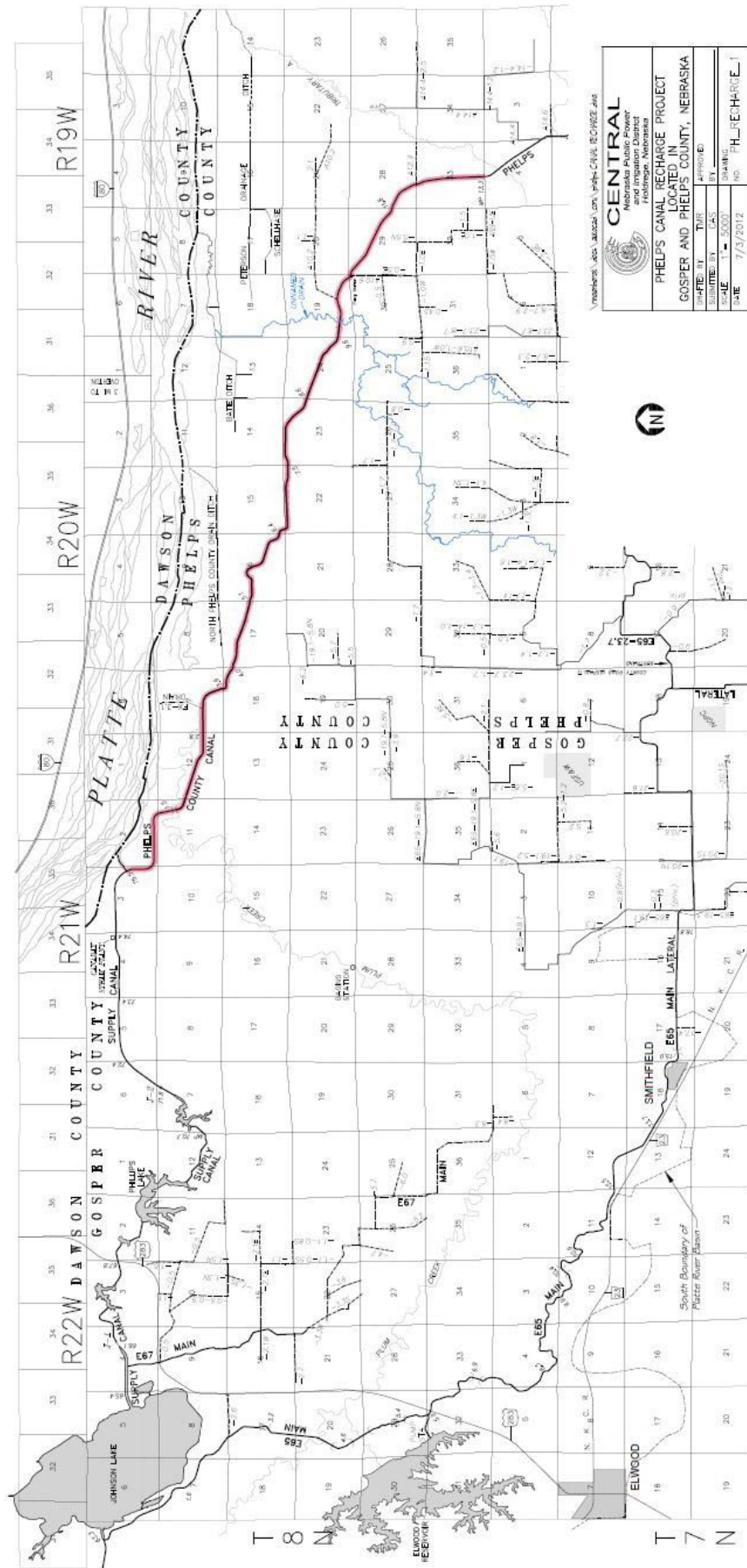
Appendix C: CNPPID Groundwater Recharge Diversions Summary 2022 Platte Basin				
2021 (cont.) Dates of Recharge Diversions	3-15-21 to 3-24-21	3-15-21 to 3-24-21	3-15-21 to 3-24-21	3-15-21 to 3-24-21
Elwood Reservoir Diversions				
AF, in				
\$/af				
\$/other				
Notes				
Elwood Releases				
AF, in				
\$/af				
\$/other				
Notes				
E65 Canal				
AF, in	499			
\$/af	47.64			
\$/other				
Notes	For NDNR, Contract #1190, Down to MP23.7-0.3			
Phelps Canal				
AF, in		1168.30	307.80	461.80
\$/af		33.86	33.86	33.86
\$/other				
Notes		9-25-19 WSA w/PRRIP, Diversions down to MP 13.3	For TBNRD, Contract #1190, From MP 13.3 to 34.2	For NDNR, Contract #1190, From MP 13.3 to 34.2
Cottonwood Ranch				
AF, in				
\$/af				
Notes				
Funk Lagoon				
AF, in				
\$/af				
Notes				
Funds				
Total \$	\$ 23,772.36	\$ 39,558.64	\$ 10,422.11	\$15,636.55
PRRIP		\$ 39,558.638		
NDNR	\$ 23,772.36			\$15,636.55
TBNRD			\$ 10,422.11	
NGPC				

Appendix C: CNPPID Groundwater Recharge Diversions Summary 2022 Platte Basin

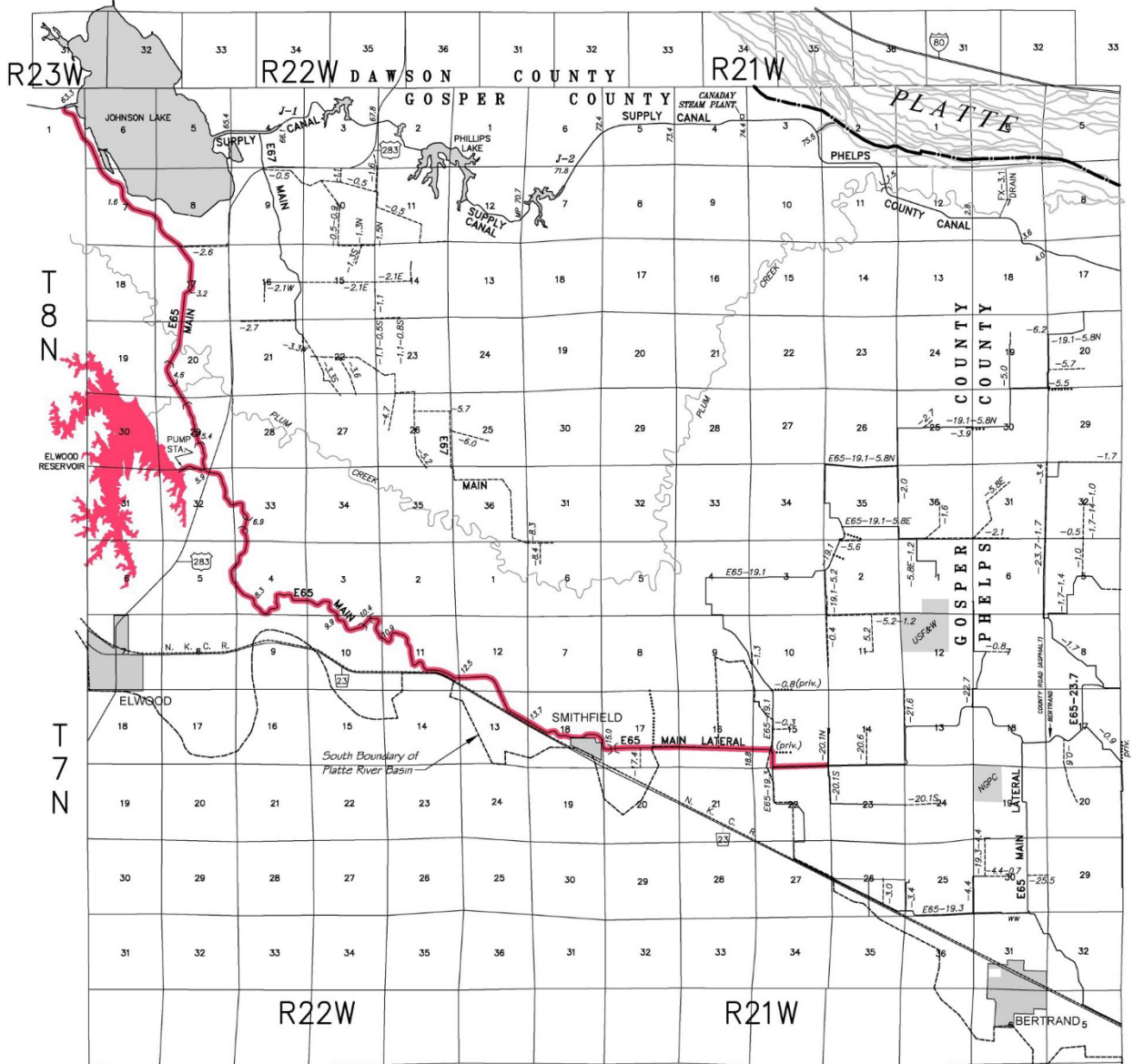
2021 (cont.) Dates of Recharge Diversions	5/19/21- 5/30/21	5/19/21-5/30/21	5/19/21-5/30/21	5/19/21-5/30/21	5/19/21-5/30/21	Total
Elwood Reservoir Diversions						
AF, in	1649.4	659.7	989.6			7527.3
\$/af	51.41	51.41	51.41			
\$/other						
Notes	For PRRIP. 6-24-19 WSA (30,000 af limit annually)	For TBNRD, Contract #1190	For NDNR, Contract #1190			
Elwood Releases						
AF, in						0
\$/af						
\$/other						
Notes						
E65 Canal						
AF, in						831.7
\$/af						
\$/other						
Notes						
Phelps Canal						
AF, in						2564.20
\$/af						
\$/other						
Notes						
Cottonwood Ranch						
AF, in						0
\$/af						
Notes						
Funk Lagoon						
AF, in				176.9	265.4	0
\$/af				27.06	27.06	
Notes				For TBNRD, Contract #1190	For NDNR, Contract #1190	
Funds						
Total \$	\$ 84,795.654	\$ 33,915.177	\$ 50,875.336	\$ 4,786.914	\$ 7,181.724	\$ 557,027.14
PRRIP	\$ 84,795.654					\$ 254,256.97
NDNR			\$ 50,875.34		\$ 7,181.72	\$ 181,666.45
TBNRD		\$ 33,915.18		\$ 4,786.91		\$ 121,103.72
NGPC						\$ -

Appendix C: CNPPID Groundwater Recharge Diversions Summary 2022 Platte Basin		
2022		2023
Dates of Recharge Diversions	Total	Total
Elwood Reservoir Diversions		
AF, in	0	Not Provided
\$/af		
\$/other		
Notes		
Elwood Releases		
AF, in	0	Not Provided
\$/af		
\$/other		
Notes		
E65 Canal		
AF, in	0	Not Provided
\$/af		
\$/other		
Notes		
Phelps Canal		
AF, in	0	Not Provided
\$/af		
\$/other		
Notes		
Cottonwood Ranch		
AF, in	0	Not Provided
\$/af		
Notes		
Funk Lagoon		
AF, in	0	Not Provided
\$/af		
Notes		
Funds		
Total \$	\$ 557,027.14	\$ 557,027.14
PRRIP	\$ 254,256.97	\$ 254,256.97
NDNR	\$ 181,666.45	\$ 181,666.45
TBNRD	\$ 121,103.72	\$ 121,103.72
NGPC	\$ -	\$ -

Appendix C: Phelps Canal Recharge Map - 2023 Platte Basin



Appendix C: Elwood Reservoir & E65 Canal Recharge Map - 2022 Platte Basin



LEGEND

— EXCESS FLOWS RECHARGE

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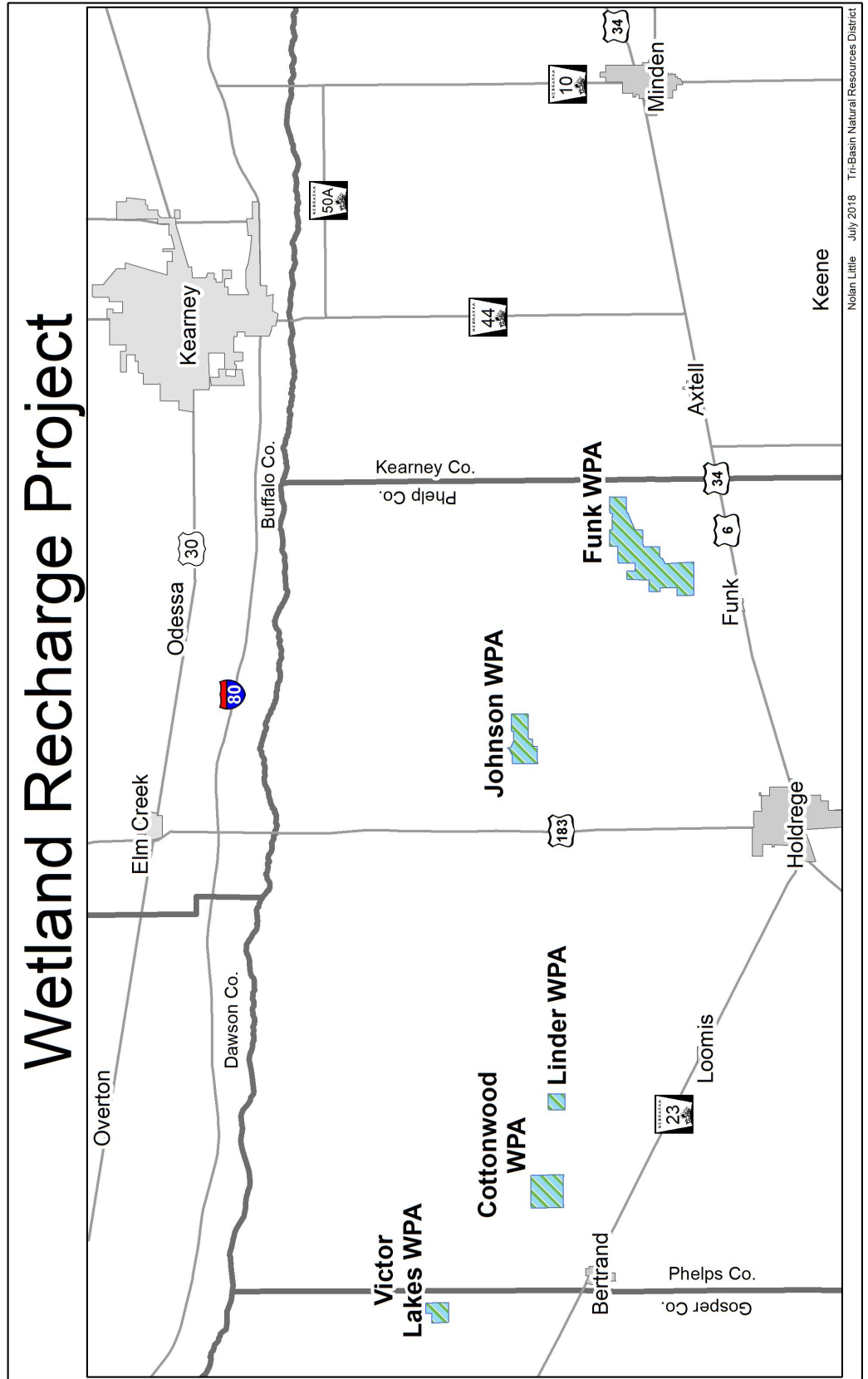


CENTRAL
Nebraska Public Power
and Irrigation District
Holdrege, Nebraska

**PLATTE RIVER EXCESS FLOWS FOR RECHARGE
IN E65 CANAL & ELWOOD RESERVOIR,
GOPHER COUNTY, NEBRASKA**

DRAFTED BY TMR	APPROVED BY _____
SUBMITTED BY DRF	DRAWING NO. RCHG_E65_DEC14
SCALE 1" = 1.4 Mi.	
DATE 12/3/2014	

Appendix D: Wetland Recharge Project Map - 2022 Platte Basin



Appendix E: 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 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).

Appendix E: Tri-Basin NRD Water Conservation Incentive Program

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.

Introduction: Tri-Basin NRD launched the Water Conservation Incentive Program (WCIP) in March 2019. 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 CNPPID customers from the WCIP because the incentives set up for groundwater irrigators don't encourage conservation on commingled fields. We want 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.

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 will be offered five-year contracts that pay the equivalent of the cost per acre of CNPPID water delivery, with the understanding that payments will be reduced by \$5 per acre inch of groundwater used 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 \$34.61 to deliver nine inches of water to their irrigation customers (2019). 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. We won't adjust our payments if CNPPID raises prices.

Tri-Basin NRD irrigated acre certification data indicates that there are 114,016 acres in commingled irrigated fields in the Platte Basin portion of Tri-Basin NRD. This is an exaggeration of truly commingled acres because it includes all irrigated acres in fields that have both an irrigation well and a CNPPID delivery point or individual surface water right. According to CNPPID, they deliver water by contract to 103,068 acres within Tri-Basin NRD (109,000 acres total). Their estimate of truly commingled acres associated with CNPPID deliveries is 82,508 acres. WCIP incentives will be paid on all CNPPID contracted acres that are also NRD-certified for groundwater irrigation ("commingled acres"). Because NRD funds are limited, we will initially approve contracts for 8000 acres. If applications exceed the number of acres allowed for enrollment, applications will be selected for approval using a ranking system.

The WCIP 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 will be favored in the ranking system.

Parcels in which CNPPID water service contracts are in the process of cancellation will not be eligible for enrollment. Landowners will be allowed to enroll additional acres on existing CNPPID water service contracts. Individual landowners will be 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.

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.

Appendix E: Tri-Basin NRD Water Conservation Incentive Program

Platte Basin WCIP Contracts			
Program Years	Program	Contract Acres	Legal Location
2020 - 2024	WCIP_Commingle	255	SE 1/4 Section 2-6- 16
2020 - 2024	WCIP_Commingle		Pt NW 1/4 Section 36-7- 16
2020 - 2024	WCIP_Commingle		Pt SW of NW 1/4 Section 36-7- 16
2020 - 2024	WCIP_Commingle	130.00	NW 1/4 Section 11-6- 16
2020 - 2024	WCIP_Commingle	149.00	Pt NW 1/4 Section 27-7- 15
2020 - 2024	WCIP_Commingle	150.00	SW1/4 & S 1/2 NW 1/4 Section 33-7- 15
2020 - 2024	WCIP_Commingle	142.00	NE 1/4 Section 16-7- 20
2020 - 2024	WCIP_Commingle	140.00	NE 1/4 Section 30-7- 20
2020 - 2024	WCIP_Commingle	147.00	SE 1/4 Section 16-6- 19
2020 - 2024	WCIP_Commingle	148.38	SW 1/4 Section 20-6- 19
2020 - 2024	WCIP_Commingle	287.10	NW 1/4 Section 34-7- 20
2020 - 2024	WCIP_Commingle		SE 1/4 Section 17-7- 19
2020 - 2024	WCIP_Commingle	149.00	Pt SE 1/4 Section 13-6- 20
2020 - 2024	WCIP_Commingle	123.86	SW 1/4 Section 14-7- 20
2020 - 2024	WCIP_Commingle	123.00	SE 1/4 Section 30-8- 19
2020 - 2024	WCIP_Commingle	135.00	SE 1/4 Section 13-6- 18
2020 - 2024	WCIP_Commingle	150.00	pt NE 1/4 Section 13-6- 18
2020 - 2024	WCIP_Commingle	300.86	NW 1/4 Section 13-6- 18
2020 - 2024	WCIP_Commingle		Pt SW 1/4 Section 13-6- 18
		2530.2	
2021 - 2025	WCIP_Groundwater	125.2	SW 1/4 Section 6-8- 23
2021 - 2025	WCIP_Groundwater	132.43	NE 1/4 Section 16-7- 17
		257.63	
2021 - 2025	WCIP_Commingle	142.00	E 1/2 SE 1/4 Section 25-7- 17
2021 - 2025	WCIP_Commingle		W 1/2 SE 1/4 Section 25-7- 17
2021 - 2025	WCIP_Commingle	144.00	NW 1/4 Section 30-7- 16
2021 - 2025	WCIP_Commingle	128.00	Lots 9, 10, 15, 16 Section 31-7- 17
2021 - 2025	WCIP_Commingle	127.00	Pt NW 1/4 Section 14-6- 18
		541.00	
2022 - 2026	WCIP_Groundwater	136.36	NW 1/4 Section 21-7- 17
		136.36	
2023 - 2027	WCIP_Groundwater	136.16	SE ¼ Section 24-7-17W
		136.16	

