



2012 Annual Report of Integrated Water Management Activities in the Republican Basin Within Tri-Basin NRD



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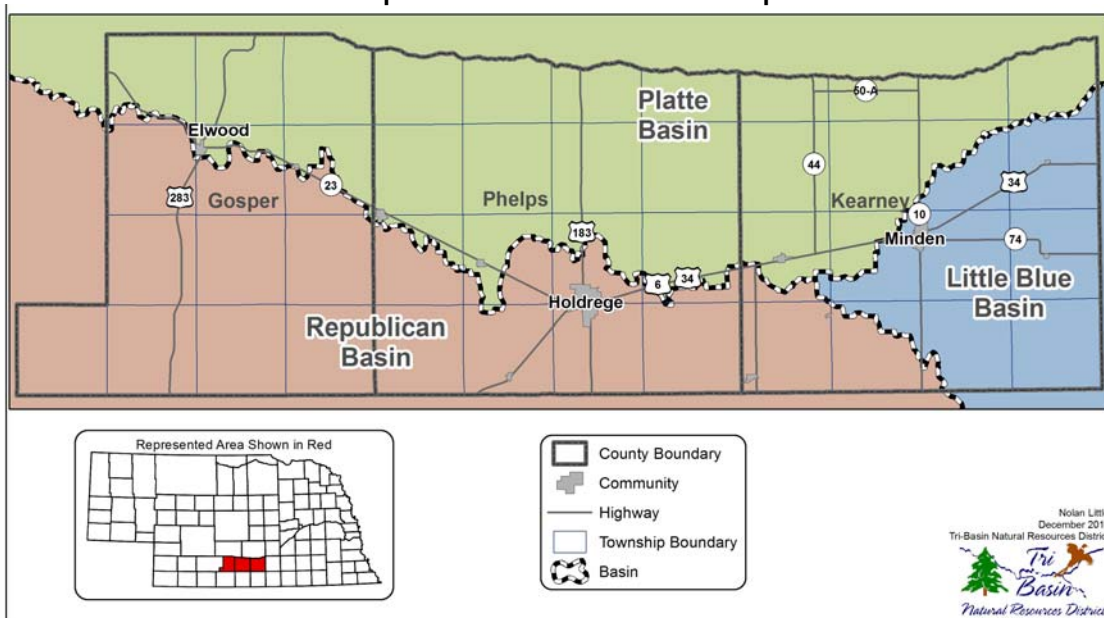
July 2013

**ANNUAL REPORT OF WATER USE ACTIVITIES
IN THE REPUBLICAN BASIN WITHIN TRI-BASIN NRD
TO MEET THE REQUIREMENTS OF THE JOINT INTEGRATED MANAGEMENT PLAN
FOR THE 2013 JOINT 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 Integrated Management Plan for the Republican River Basin.

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 higher than historic “pre-development” 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.

III. CERTIFIED IRRIGATED ACRES

The district began certifying irrigated acres in the Republican Basin in 2004. The initial certification process in the Republican Basin ended on September 15,

2004. Since that time, corrections and revisions to the certified acre database have occurred with a net result as of June 30, 2013, of 189,376.42 certified acres. Commingled acres are acres that may be watered with groundwater or surface water, often times a combination of both. Data regarding certified irrigated acres can be found in TABLE 1: Certified Acres, below. 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	CoMingled Acres	Surface Water	
Gosper County	2012	56,489.90	1057.16	173	
Kearney County	2012	40,955.11	427.59		
Phelps County	2012	85,504.59	4532.56	236.51	
Total	2012	182,949.60	6,017.31	409.51	189,376.42

IV. APPROVED CERTIFIED ACRE AND GROUNDWATER TRANSFERS

A. TBNRD allows certified irrigated acres to be transferred from one parcel to another within the Republican Basin portion of the district, with some limitations. 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. Between January 1, 2012 and December 31, 2012 the district approved 21 certified irrigated acre transfers in the Republican Basin. A total of 422.67 certified irrigated acres were involved in these transfers. Data regarding the location, amount and conditions associated with each transfer can be found in TABLE 2A: Republican Basin Transfers-Acres of Origin (page 4) and TABLE 2B: Republican Basin Transfers-Acres at New Location (page 5).

TABLE 2A: Republican Basin Transfers- Acres Original Locations		
NRD Permit Number	Legal Description	Acres Dried Up
TBAT-0104	Section 25 - 5 - 15W	22.78
TBAT-0110	Section 30 - 6 - 22W	12
TBAT-0114	Section 16 - 5 - 22W	15.3
TBAT-0115	Section 19 - 5 - 22W	32.36
TBAT-0116	Section 24 - 6 - 22W	3.53
TBAT-0117	Section 7 - 6 - 21W	8
TBAT-0123	Section 31 - 6 - 23W	14
TBAT-0124	Section 32 - 6 - 17W	7
TBAT-0125	Section 2 - 5 - 23W	9
TBAT-0128	Section 9 - 5 - 21W	10.87
TBAT-0132	Section 34 - 5 - 23W	20
TBAT-0133	Section 34 - 5 - 23W	45
TBAT-0134	Section 34 - 5 - 23W	79.84
TBAT-0136	Section 33 - 5 - 19W	4.5
TBAT-0142	Section 11 - 5 - 18W	28.71
TBAT-0143	Section 17 - 5 - 17W	19
TBAT-0147	Section 10 - 5 - 18W	18.31
TBAT-0148	Section 35 - 5 - 19W	12
TBAT-0150	Section 5 - 5 - 19W	16
TBAT-0151	Section 31 - 6 - 18W	17
TBAT-0152	Section 21 - 5 - 20W	27.47

**TABLE 2B: Republican Basin Transfers -
Destinations for Transferred acres**

NRD Permit Number	Section	New Irrigated
TBAT-0104	Section 26 - 5 - 15W	22.78
TBAT-0110	Section 25 - 6 - 23W	12
TBAT-0114	Section 28 - 5 - 22W	15.3
TBAT-0115	Section 28 - 5 - 22W	32.36
TBAT-0116	Section 28 - 7- 21W	3.53
TBAT-0117	Section 28 - 7- 21W	8
TBAT-0123	Section 30 - 6 - 23W	14
TBAT-0124	Section 3 - 5 - 17W	7
TBAT-0125	Section 11 - 5 - 23W	9
TBAT-0128	Section 4 - 5 - 21W	10.87
TBAT-0132	Section 28 - 5 - 18W	20
TBAT-0133	Section 19 - 7 - 23W	45
TBAT-0134	Section 11 - 5 - 23W	79.84
TBAT-0136	Section 33 - 5 - 19W	4.5
TBAT-0142	Section 12 - 5 - 18W	28.71
TBAT-0143	Section 12 - 5 - 18W	19
TBAT-0147	Section 12 - 5 - 18W	18.31
TBAT-0148	Section 31 - 5 - 18W	12
TBAT-0150	Section 9 - 5 - 19W	16
TBAT-0151	Section 31 - 6 - 18W	17
TBAT-0152	Section 21 - 5 - 20W	27.47

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 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 the TBNRD. TBNRD issued 14 groundwater transfer permits in the Republican Basin between January 1, 2012 and December 31, 2012. Data regarding groundwater transfers can be found in TABLE 3: Groundwater Transfers, below.

TABLE 3: Groundwater Transfers			
NRD Permit Number	Section	Well	Neighboring Certified Acres to be watered with well
GWT-0254	Section 2 - 5- 19W	G-029643	7
GWT-0255	Section 2 - 5- 19W	G-029643	7
GWT-0256	Section 2 - 5- 19W	G-029643	7
GWT-0257	Section 3 - 5- 17W	G-044542	7
GWT-0258	Section 3 - 5- 17W	G-044542	7
GWT-0259	Section 3 - 5- 17W	G-044542	7
GWT-0262	Section 32 - 6- 17W	G-035277-R1	7
GWT-0263	Section 32 - 6- 17W	G-035277-R1	7
GWT-0264	Section 34 - 6 - 18W	G-050480	22.86
GWT-0265	Section 25 - 6 - 20W	G-074444	61
GWT-0266	Section 11 - 5 - 23W	G-121734	80
GWT-0270	Section 6 - 5 - 21W	G-042685	200
GWT-0271	Section 7 - 5 -16W	G-023686	20
GWT-0272	Section 7 - 5 -16W	G-034924	50

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.

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.

B. TABLE 4: TBNRD Well Permits (below) is a breakdown of well permits that TBNRD issued in the Republican Basin between January 1, 2012 and December 31, 2012. A detailed listing of well permits issued by TBNRD in 2012 is found in TABLE 5: Well Permit Summary (below).

TABLE 4: TBNRD Well Permits	
Well Permit Type	Permits
New (variance) irrigation [Acre transfer involved]	1
Replacement irrigation	18
Conditional replacement irrigation - supplemental to groundwater	6
Dewatering	0
New commercial/industrial	

TABLE 5: Well Permit Summary			
Permit Number	Well Permit Type	Legal Description	NDNR Reg. Number
TBSG-1406	Supplemental to Groudwater	Section 30 - 5 - 21W	G-162378
TBSG-1415	Supplemental to Groudwater	Section 33 - 5 - 22W	G-164781
TBTF-1416	New Well [Variance]	Section 12 - 5 - 18W	G-165018
TBSG-1417	Supplemental to Groudwater	Section 21 - 5 - 17W	G-165675
TBSG-1419	Supplemental to Groudwater	Section 28 - 6 - 20W	
TBSG-1423	Supplemental to Groudwater	Section 25 - 5 - 21W	G-167445
TBSG-1421	Supplemental to Groudwater	Section 31 - 5 - 21W	

VI. VARIANCES

TBNRD issues new well permits to landowners of parcels that don't have a prior irrigation history only after they have transferred sufficient certified irrigated acres 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. One new industrial well construction permit variances were issued in the Republican Basin between January 1, 2012 and December 31, 2012 (see Table 5).

Tri-Basin NRD corrected the district's certified acre database by certifying 77.48 acres in five parcels that had a history of irrigation between 1997 and 2005. These acres weren't previously included in the district's database, because they hadn't been classified as irrigated cropland by county assessors. Tri-Basin NRD's Republican Basin Corrections data is in TABLE 6: Republican Basin Variances (page 8).

TABLE 6: Republican Basin Certified Irrigated Variances			
Type of Variance	Legal Description	Affected Acres	
New Well Permit	Section 12 - 5 - 18W	19	# of acres at time of request
Restored Irrigated Acres to 1997 Status	Section 34 - 5 - 18W	20.71	
Restored Irrigated Acres to 1997 Status	Section 5 - 5 - 19W	16.97	
Restored Irrigated Acres to 1997 Status	Section 6 - 5 - 17W	26.49	
Restored Irrigated Acres to 1997 Status	Section 30 - 5 - 15W	8.19	
Restored Irrigated Acres to 1997 Status	Section 33 - 5 - 19W	5.12	

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 Republican Basin reported to TBNRD in 2012 is shown in the next two tables. A summary of Municipal Water Use may be found in TABLE 7: Republican Basin Municipal Water Use Data (below). TABLE 8 (page 9) shows Industrial and Commercial Water Use Data.

TABLE 7: Republican Basin Municipal Water Use Data (in gallons)	
Municipality	2012
Atlanta	33,219,000
Arapahoe	138,279,000
Holdrege	512,347,700
Wilcox	27,905,000

TABLE 8: Republican Basin Industrial and Commercial Water Use Data				
NDNR Reg. Number	Owner	Legal Description	Gallons Used	
G-070393	NE Game & Parks, Sac-Wilcox WMA	Section 27 - 5 - 17W	0	Well not Used in 2012
G-030619	City of Holdrege	Section 9 - 5 - 18W	0	
G-025572	City of Holdrege	Section 9 - 5 - 18W		
G-079833	Cargill Ag Horizons Inc	Section 31 - 6 - 17W	121600	
G-135221	Geer Utility	Section 27 - 6 - 18W	41296400	
G-135220-R1	Geer Utility	Section 27 - 6 - 18W		2 Wells & 1 Meter See G-135221
G-069908	Holdrege County Club	Section 29 - 6 - 18W	38806700	
G-009687	Holdrege County Club	Section 29 - 6 - 18W	41424200	
G-096786	City of Holdrege	Section 34 - 6 - 18W	496000	
G-071934	Sargent Irrigation Company Inc	Section 34 - 6 - 18W	221100	
G-070168	Holdrege Irrigation	Section 34 - 6 - 18W	268980	

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 2012 landowners reported data from 1,559 metered wells in the Republican Basin. The metered wells reported irrigating 177,056.53 certified irrigated acres. There are 33 wells in the Republican Basin that have exemptions from having flowmeters. All District flowmeter data is reported annually to the Department of Natural Resources (DNR) for purposes of Republican River Basin Compact Administration accounting. A summary of Republican Basin water use data is included in this report as Appendix B. Detailed Republican Basin flowmeter data is available from the Tri-Basin NRD office.

IX. OTHER WATER BANKING ACTIVITIES

TBNRD is considering establishing a water bank of some sort, but no policy has yet been agreed upon by the TBNRD Board of Directors.

X. RETIRED ACRES AND OTHER STREAMFLOW ACCRETION ACTIVITIES

Tri-Basin NRD paid CNPPID to divert 5400 acre-feet of water from the Platte River into Elwood Reservoir in Gosper County in 2008 and 2906 acre-feet in 2009. These diversions were made from the Platte when streamflows exceeded target flows, or when irrigation deliveries were suspended due to heavy rainfall in the CNP-

PID irrigated area. They were above and beyond normal diversions into the reservoir for irrigation deliveries. According to calculations by DNR staff (TBNRD_offset_summary_update_7_19_10.xls), these diversions should provide 1191 acre-feet of offset credit for the Republican Basin in 2012.

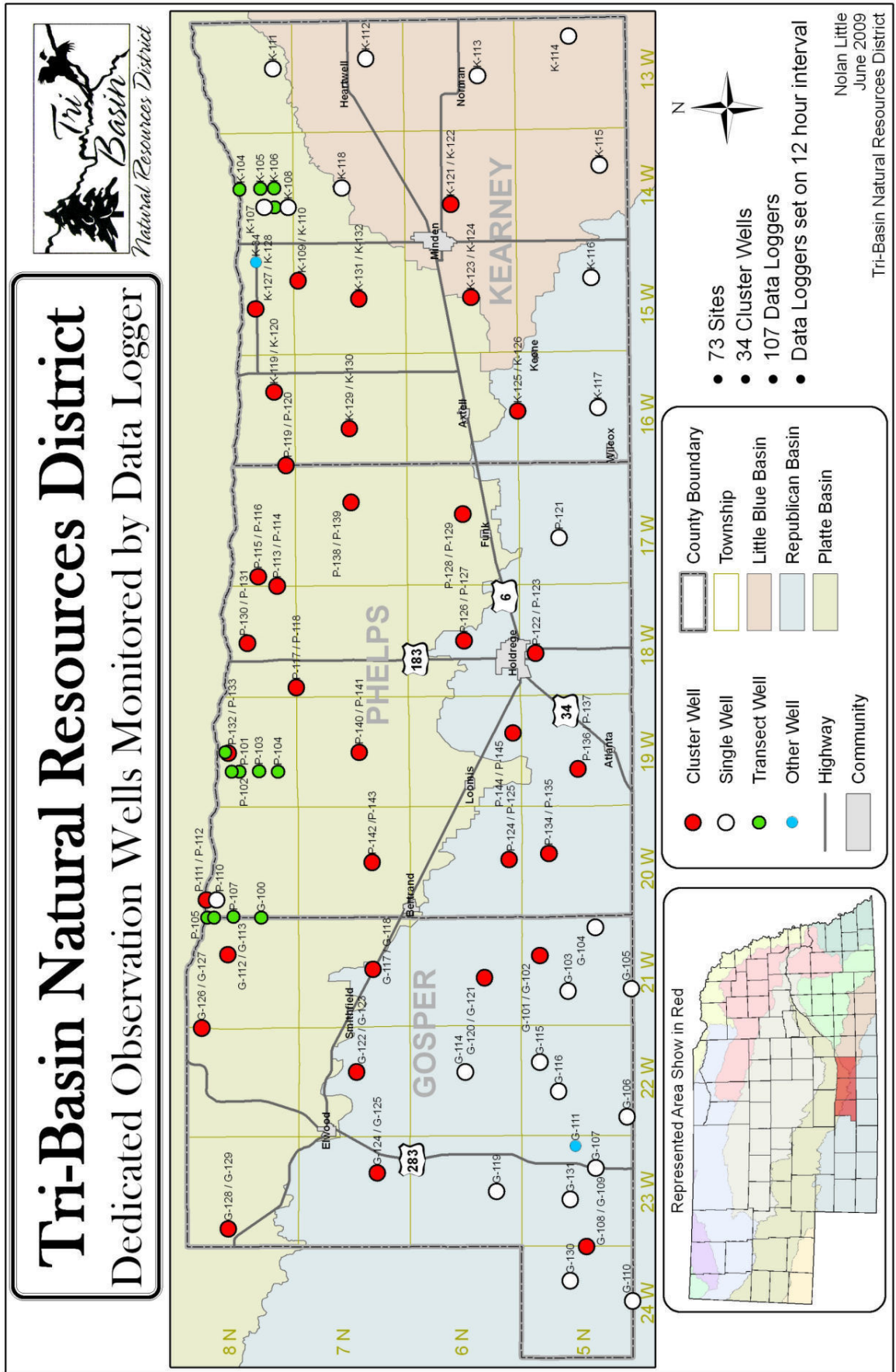
Irrigated land was temporarily retired in TBNRD during 2012 through seven contracts totaling 82.4 irrigated acres were signed up for USDA-EQIP Dry land Corners. Tri-Basin NRD records indicate that 1776.6 irrigated acres are enrolled in USDA Conservation Reserve Enhancement Program (CREP) in the Republican Basin portion of the district. Most of these contracts are set to expire by 2019.

Landowners reported to TBNRD on district water use reports that conservation tillage practices have been adopted or continue to be utilized on 115,608.88 certified irrigated acres in the Republican Basin portion of the district during 2012 (no-till data is available from the Tri-Basin NRD office). 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, so if the estimates of no-till acres are accurate, as much as 28,902 acre-feet of water was conserved in the Republican Basin in TBNRD in 2012 through this conservation practice.

XI. GROUNDWATER LEVELS

TBNRD has an extensive network of 109 dedicated groundwater observation wells (42 in the Republican Basin) and 90 irrigation wells (59 in the Republican Basin) that are used to measure groundwater levels (see Map #2, page 11). TBNRD also works cooperatively with CNPPID to gather groundwater level data. Data from 20 wells measured by CNPPID are included in TBNRD's groundwater observation well database. District water level data is reported bi-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 NRD – Platte Basin Annual Report
Appendix A**

**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 1.12, 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:

_____ $\frac{1}{4}$ 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 (conditional replacement wells only).

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 (conditional replacement wells only).

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.

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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

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Tri-Basin NRD 2012 Flowmeter Data

Meters are required for all Republican basin wells, new wells permitted after Sept. 15, 2004, wells where cost share has been paid for an irrigation improvement practice, and wells used for groundwater transfers.

Acres

- “Actual Reported Irrigated Acres” for the purpose of this report are the acres reported to the NRD on water use reports as actual irrigated acres
- Certified Irrigated Acres increase and decrease due to corrections in basin boundaries, assessor updates, producer requests to the board etc....
- We have 117 certified acres for Harlan County

Meters

- Meter Exemptions (board approved permits to exempt meters for wells watering less than 15 acres)
 - We have 31 meter exemptions, 20 of these reported no use
- Metered wells reporting no use (some of these consist of supplemental to surface water wells, 3 are part of EQIP, 16 part of CREP, some series wells are not used, some are due to groundwater transfers, & some are situations where there are more than 1 well on a parcel & not all are used.)
 - Ninety-two reported not being used this year
- CREP acres
 - Twenty-six contracts, approx. 1806.55 acres
 - Some wells on parcels where CREP contracts have wells used to irrigate other certified irrigated acres.
- Series Wells
 - # of Series Wells
 - Republican Basin = 117
 - Platte Basin = 2
 - Little Blue Basin = 2
 - Total of series wells = 121
 - Types of series wells
 - Some series wells each have their own meter and all water the very same acres. Readings and gallons used from these wells are reported separately with each well.
 - Some series wells are tied together with only one meter associated with all wells in the series. Under these circumstances water usage and acres are tied to one well only. The other wells simply are identified as part of a series.

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Appendix B

- Some series wells are used only if needed, therefore, a well marked as part of a series may not have any use on it if the main well was able to supply enough water for the year, or if conditions do not allow the use of one or more of the wells.

➤ Estimate of Use

- A few wells in our district estimate use because the well is located outside the Republican basin and the landowner chose not to put on a meter. If such a well waters any Republican basin acres they are required to estimate pumping from their wells. We also require the producer to estimate use when their meter has not functioned properly.
- Approximately 62 wells estimated use this past year

➤ Municipal & Commercial Water Use

- 74 reports sent out to owners of Commercial & Municipal wells.

Meter Inspections for 2012		
Kearney Co	2012 Completed	2012 Pending
Republican Basin	0	0
Platte Basin	1	0
Little Blue Basin	32	6
Phelps Co		
Republican Basin	197	10
Platte Basin	47	3
Gosper Co		
Republican Basin	290	13
Platte Basin	18	0
Harlan Co		
Republican Basin		
TOTAL	585	32

Inspections for 2012 were conducted primarily in Ranges 13, 17, 21 and Union 5-22.

**Tri-Basin NRD – Platte Basin Annual Report
Appendix B**

Tri-Basin NRD Republican Basin Water Use

Updated February 7, 2013		2007	2008	2009	2010	2011	2012
Kearney Co							
Certified Irrigated Acres		41,644.42	41,424.32	41,424.04	41,347.80	41,348.06	41,351.41
Pivots							
Actual Reported Acres		22,385.64	23,654.85	23,989.45	23,420.07	19,638.94	20,353.60
Gallons Used		3,541,381,170	3,818,925,847	4,076,847,096	2,488,373,015	3,068,789,295	6,888,349,787
Average acre Inches		5.83	5.95	6.26	3.91	5.75	12.46
Gravity							
Actual Reported Acres		8,713.63	7,884.45	6,782.76	6,336.83	6,379.60	6,331.91
Gallons Used		2,104,139,800	2,053,285,966	1,861,506,618	1,061,531,125	1,661,542,627	3,198,184,631
Average acre Inches		8.89	9.59	10.11	6.2	9.59	18.60
Combination							
Actual Reported Irrigated Acres		5,951.20	6,311.51	7,081.61	6,762.61	11,616.34	11,607.68
Gallons Used		1,045,863,800	1,029,295,800	1,216,909,854	738,619,900	2,194,067,314	4,146,802,562
Average acre Inches		6.47	6.01	6.33	4.0	6.96	13.16

Phelps Co		2007	2008	2009	2010	2011	2012
Certified Irrigated Acres		90,034.35	90,056.49	90,074.28	90,122.96	90,327.49	90,253.97
Pivots							
Actual Reported Acres		43,456.40	44,661.74	47,177.54	47,644.47	47,521.53	47,981.03
Gallons Used		7,514,412,579	9,230,092,637	9,961,041,554	5,979,452,137	7,841,490,355	18,803,353,405
Average acre Inches		6.37	7.61	7.78	4.6	6.08	14.43
Gravity							
Actual Reported Acres		21,777.69	20,956.49	17,813.10	17,294.97	16,438.95	16,632.09
Gallons Used		5,988,777,976	7,023,928,292	6,659,829,299	3,811,778,121.75	4,761,461,576	9,377,865,221
Average acre Inches		10.13	12.34	13.77	8.12	10.67	20.76
Combination							
Actual Reported Irrigated Acres		14,799.53	16,210.16	16,395.53	16,540.54	18,173.41	18,052.33
Gallons Used		2,797,496,400	3,884,727,743	3,834,900,501	2,340,349,155	3,563,491,797	7,338,795,255
Average acre Inches		6.96	8.83	8.61	5.2	7.22	14.97

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		Tri-Basin NRD Republican Basin Water Use					
		2007	2008	2009	2010	2011	2012
Updated February 7, 2013							
Gosper Co							
Certified Irrigated Acres	57,746.74	57,765.72	57,809.41	57,896.60	57,760.72	57,742.11	
Pivots							
Actual Reported Acres	29671.79	31756.88	32,729.99	33,488.46	34,753.39	36,082.66	
Gallons Used	4,571,094,694	5,640,850,350	6,022,172,888	5,874,547,547	7,451,121,723	13,656,214,745	
Average acre Inches	5.67	6.54	6.78	6.5	7.90	13.94	
Gravity							
Actual Reported Acres	13368.98	12164.20	11,677.00	10,885.50	10,258.10	9,784.30	
Gallons Used	3,292,907,800	4,052,542,200	3,708,816,337	3,203,004,797	3,327,536,001	6,393,890,714	
Average acre Inches	9.07	12.27	11.70	10.8	11.95	24.07	
Combination							
Actual Reported Irrigated Acres	8308.65	8434.50	8,456.40	8,294.00	8,603.37	8,571.25	
Gallons Used	1,736,490,000	1,858,770,700	1,706,652,900	1,472,894,300	1,747,329,785	3,336,512,330	
Average acre Inches	7.70	8.12	7.43	6.54	7.48	14.34	

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2012 Meter Data Results					
Tri-Basin NRD - February 5, 2013					
County	System	Certified Irrigated Acres	Actual Reported Irrigated Acres	Gallons Used	Average Acre Inches
		Republican Basin			
Kearney Co	Pivots		20,353.60	6,888,349,787	12.46
	Gravity		6,331.91	3,198,184,631	18.60
	Combination		11,607.68	4,146,802,562	13.16
Totals		41,351.41	38,293.19	14,233,336,980	13.69
Phelps Co	Pivots		47,981.03	18,803,353,405	14.43
	Gravity		16,632.09	9,377,865,221	20.76
	Combination		18,052.33	7,338,795,255	14.97
Totals		90,253.97	82,665.45	35,520,013,881	15.82
Gosper Co	Pivots		36,082.66	13,656,214,745	13.94
	Gravity		9,784.30	6,393,890,714	24.07
	Combination		8,571.25	3,336,512,330	14.34
Totals		57,742.11	54,438.21	23,386,617,789	15.82
Republican Basin Totals					
	Pivots		104,417.29	39,347,917,937	13.88
	Gravity		32,748.30	18,969,940,566	21.33
	Combination		38,231.26	14,822,110,147	14.28
	Totals	189,347.49	175,396.85	73,139,968,650	15.36
<p style="text-align: center;">Republican Basin Notes - Gosper County has 149 certified acres watered by wells in Furnas County. Phelps County has 250 acres watered with a combination of 3 wells in Phelps & 1 well in Harlan county; these same 4 wells water <u>117</u> acres in Harlan County.</p>					

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Tri-Basin NRD - 2012 Water Use [county breakdown]

February 6, 2013

	Rep. Basin	Platte Basin	Little Blue Basin	Total
Kearney				
Total Irr. wells	363	921	820	2104
metered wells	346	115	133	594
Exemptions	15			15
Reported Actual Irrigated Acres	38,509.19	12,858.11	16,373.81	67,741.11
Certified Acres	41,351.41	95,745.55	90,883.49	227,980.45
Phelps				
Total Irr. wells	752	1403		2155
metered wells	740	192		932
Exemptions	12			12
Reported Actual Irrigated Acres	83,540.13	23,544.32		107,084.45
Certified Acres	90,253.97	167,108.48		257,362.45
Gosper				
Total Irr. wells	481	262		743
metered wells	473	37		510
Exemptions	6			6
Reported Actual Irrigated Acres	55,007.21	4,379.39		59,386.60
Certified Acres	57,742.11	35,749.91		93,492.02
Basin Totals				
Total Irr. wells	1596	2586	820	5002
metered wells	1559	344	133	2036
Exemptions	33	0	0	33
Reported Actual Irrigated Acres	177,056.53	40,781.82	16,373.81	234,212.16
Certified Acres	189,347.49	298,603.94	90,883.49	578,834.92

NOTES

Republican Basin

- * Gosper County 2 wells belonging to Arapahoe Well Field {agreement not to use, no meter required}
- * Special Exemptions granted by the board on 4 wells in CREP ground no meter required
- * Kearney County, 1 well planning on abandoning, 1 well has to estimate only

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