

VIA ELECTRONIC MAIL ONLY

Date: December 31, 2015

To: Governance Committee (GC) of the Platte River Recovery Implementation Program (PRRIP)

From: Jeff Fassett State of Nebraska's Representative to the GC
Director, Nebraska Department of Natural Resources

Subject: Nebraska's Annual Report under Section IV, Bullet 3 of the Platte River Recovery Implementation Program, Nebraska New Depletion Plan for January 1, 2014, to December 31, 2014

This report fulfills the annual reporting requirement for Nebraska for the period of January 1, 2014, to December 31, 2014, for the Platte River Recovery Implementation Program (PRRIP) Attachment 5, Section 8, Nebraska New Depletion Plan (NNDP), Section IV, Bullet 3.

Based upon the data contained in this report and the depletion analysis, the net effect on the Platte River from all 2014 permitted water related activities is positive. This means that the mitigations have an accretive effect to the river that is greater than the depletive effect of the new permitted uses.

This report contains information on the following activities in Nebraska as required by Section IV, Bullet 3 of the NNDP:

- (1) Permitted new and expanded uses of surface water;
- (2) Permitted new and expanded uses of groundwater;
- (3) Collective depletion of these new and expanded permitted uses;
- (4) Collective mitigation of these new and expanded permitted uses; and
- (5) Additional measures to be implemented by Nebraska to satisfy all mitigation elements required because of new depletions to target flows.

Data in this report are from the Nebraska Department of Natural Resources (Department) and the five Natural Resources Districts (NRDs) with land in the 28/40 area: Central Platte NRD (CPNRD), North Platte NRD (NPNRD), South Platte NRD (SPNRD), Tri-Basin NRD (TBNRD), and Twin Platte NRD (TPNRD).

All tables, maps, and definitions of terms can be found in Appendix 1 at the end of this document.

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**Items (1) and (2) from Section IV, Bullet 3 of the NNDP:
Permitted and Expanded Uses of Surface and Groundwater**

In 2014, the NRDs and the Department issued the following permits:

- 87 groundwater transfer permits (Table 1);
- 91 groundwater well permits (Table 2);
- 6 groundwater variance permits (Table 3); and
- 7 new surface water permits (Table 4).

Tables 1–4 in Appendix 1 summarize the water use permits issued upstream of and within the PRRIP critical habitat reach in 2014, (map 1 in Appendix 1). Tables 5–8 in Appendix 1 provide a detailed list of these permitted uses and any required mitigation of these uses.

**Items (3) and (4) from Section IV, Bullet 3 of the NNDP:
Collective Depletion and Mitigation for New and Expanded Permitted Uses**

Based upon the data contained in this report and the depletion analysis, the resulting net effect of all 2014 permitted activities located within the 28/40 area is positive. This means that the mitigations have an accretive effect to the river that is greater than the depletive effect of the new permitted uses.

Table 9 in Appendix 1 shows the total estimated stream depletions (new or expanded uses), total stream accretions (mitigations), and the net effect by stream reach through 2019 for all activities permitted in 2014. Values in Table 9 were derived from the information for the permits listed in Tables 5–8. Effects to the river were estimated for each permitted action representing a new consumptive use of water and its corresponding mitigation action.

Due to the nature of the permitted actions, only the groundwater transfers listed in Table 5 required further evaluation of the timing of impacts to streamflow.

For each groundwater transfer, there was a new use initiated and an existing use retired. For transfers where the new and retired uses were a change in agricultural land use, the difference in consumptive use was estimated based on land use data provided with the permit information, or on land use conversions typical of the area (i.e. irrigated corn to dryland corn, or vice versa) if specific data were not available. The change in consumptive use for other types of uses, such as new industrial uses, was estimated based upon available data. The yearly effect to the river from each individual portion of a permitted groundwater transfer (new/expanded uses or mitigations) was estimated using an annual depletion percentage series developed using the analytical

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groundwater equations (Hunt, 1999)¹ and average hydraulic characteristics taken from the Cooperative Hydrologic Study (COHYST) data.

The groundwater well permits listed in Table 6 did not require evaluation of impacts to streamflow because there is no resulting new use. The well permits were issued for: 1) replacement wells and the old wells decommissioned or modified to pump less than 50 gpm; 2) a new well with a corresponding transfer permit (Table 5) that included mitigating action; 3) supplemental wells to supplement existing groundwater or surface water irrigation with no associated increase in irrigated acres; 4) wells to convert surface water irrigation to groundwater irrigation and retire the surface water use; or 5) industrial or commercial wells that will be evaluated as part of the five year review of all Nebraska activities.

The groundwater variance permits, described in Table 7, did not result in any new or expanded uses. The variances issued were for the purpose of correcting certified acres records (with proof of irrigation prior to 2004), modification of wells to pump less than 50 gpm rather than abandoning the well, allowing exceptions to NRD spacing requirements, or extending the timeframe to establish a baseline for industrial use.

The surface water permits issued, listed in Table 8, were for unappropriated, excess streamflows and are temporary one-year permits. These permits do not constitute a new use and therefore will not result in any depletion to streamflow.

Figure 1 illustrates the net effect to streamflow upstream of and within the PRRIP Critical Habitat Reach (CHR) and the aggregate net effect to both reaches for all activities permitted in 2014. Nebraska's mitigation efforts within the 28/40 area result in a net increase to streamflow both upstream of and within the CHR and a net increase to streamflow overall.

¹ Hunt, B. (1999), Unsteady Stream Depletion from Ground Water Pumping. *Ground Water*, 37: 98–102.

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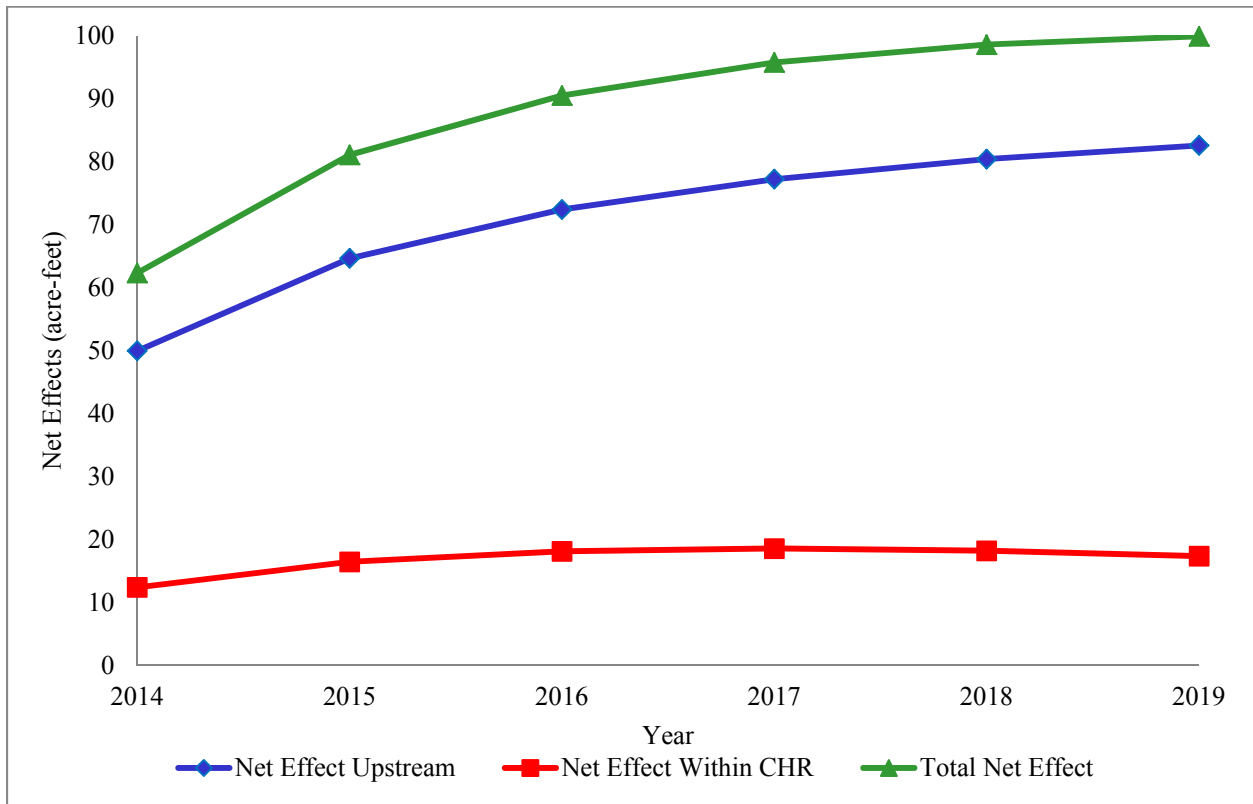


Figure 1: Aggregate net effect to streamflow resulting from all activities permitted in 2014, through the first 10-year increment, 2014-2019.

Item (5) from Section IV, Bullet 3 of the NNDP: Implementation of additional measures to satisfy all mitigations required because of new depletions to target flows

Based upon the analysis of all activities permitted in 2014, and their cumulative depletions and mitigation accretions, no additional mitigation measures for 2014 permitted activities are required at this time.

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Questions about information provided in this report should be directed to:

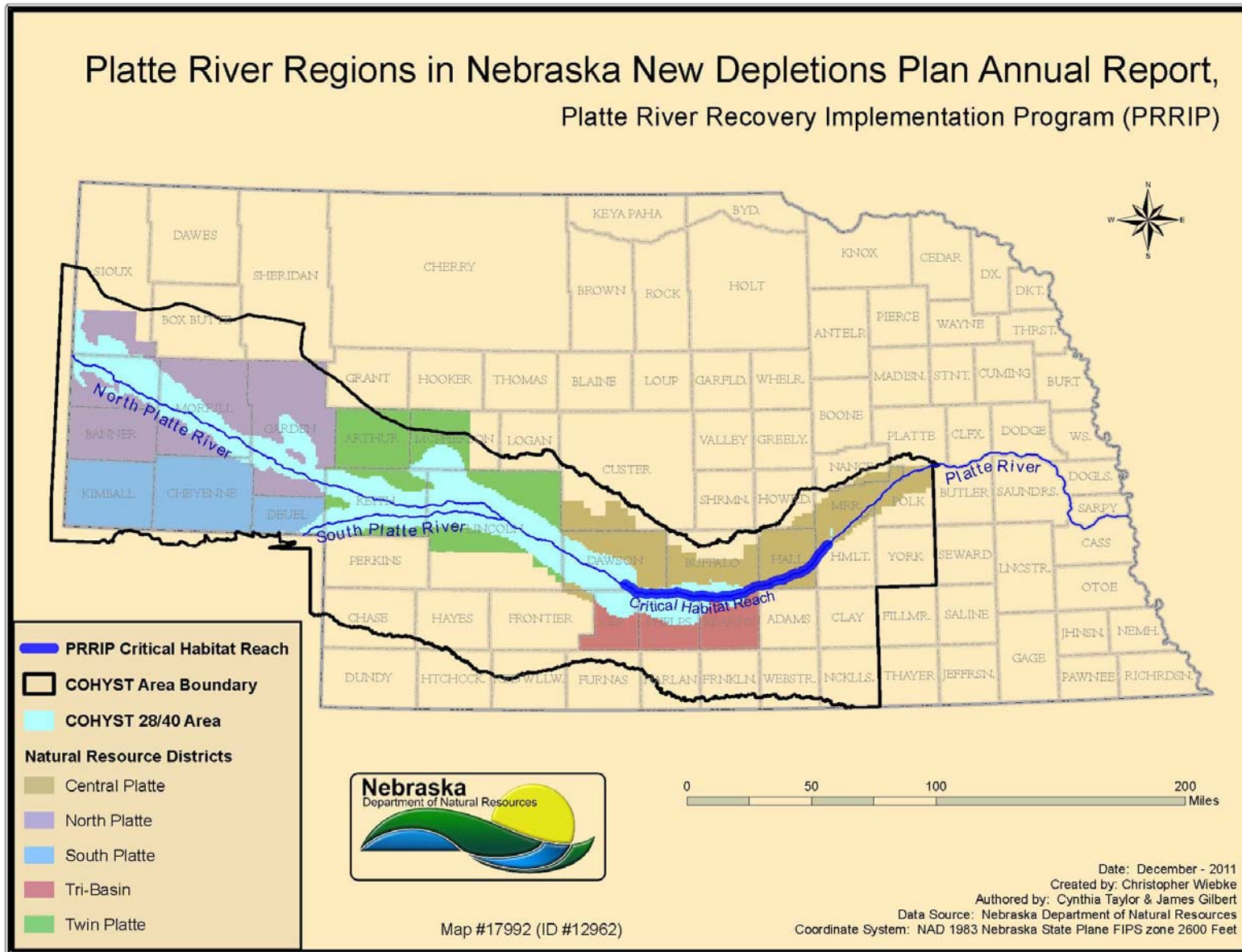
Central Platte NRD (CPNRD)	308-385-6282	Lyndon Vogt
North Platte NRD (NPNRD)	308-632-2749	John Berge
South Platte NRD (SPNRD)	308-254-2377	Rod Horn
Tri-Basin NRD (TBNRD)	308-995-6688	John Thorburn
Twin Platte NRD (TPNRD)	308-535-8080	Kent Miller
NDNR	402-471-2899	Jennifer Schellpeper

Supporting information can be found at:

<http://dnr.nebraska.gov/iwm/upper-platte>

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Appendix 1



Map 1: COHYST 28/40 modeled area and PRRIP Critical Habitat Reach.

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Table 1: Groundwater (GW) Transfer Permits in the 28/40 area upstream of and within the PRRIP Critical Habitat Reach.

Use	# Upstream	# Within	Total
GW Transfers	48	39	87

Table 2: Groundwater Well Permits in the 28/40 area upstream of and within the PRRIP Critical Habitat Reach.

Use	# Upstream	# Within	Total
Industrial	2	0	2
Supplemental (SW or GW)	11	6	17
Replacement	35	21	56
Transfer/New Well	12	3	14
Conversion (SW to GW)	1	0	1
Total	61	30	91

Table 3: Groundwater Variance Permits in the 28/40 area upstream of and within the PRRIP Critical Habitat Reach.

Use	# Upstream	# Within	Total
Acre Correction	0	2	2
Industrial Baseline	1	0	1
Well Modification	0	2	2
Well Spacing	1	0	1
Total	2	4	6

Table 4: Surface water permits in the surface water basin upstream of and within the PRRIP Critical Habitat Reach.

Use	# Upstream	# Within	Total
Recharge (Temporary)	7	0	7

Table 5: Groundwater Transfer Permits

NRD	Type	NRD Permit	Permit Date	Section	Township	Range	E/W	Acres	Notes	Year Implemented ⁺
CPNRD	Mitigation	1135	1/2/2014	10	8	17	W	5.85	N/A	2014
CPNRD	New Use	1135	1/2/2014	10	8	17	W	5.80	N/A	2014
CPNRD	Mitigation	1146*	1/6/2014	29	14	4	W	3.54	N/A	2014
CPNRD	New Use	1146	1/6/2014	29	14	29	W	3.56	N/A	2014
CPNRD	Mitigation	1153	1/7/2014	32	12	25	W	26.63	N/A	2014
CPNRD	Mitigation	1153	1/7/2014	32	12	25	W	4.39	N/A	2014
CPNRD	New Use	1153*	1/7/2014	32	12	32	W	4.39	N/A	2014
CPNRD	New Use	1153*	1/7/2014	32	12	32	W	26.14	N/A	2014
CPNRD	New Use	1153*	1/7/2014	32	12	32	W	0.51	N/A	2014
CPNRD	Mitigation	1166	1/24/2014	28	11	25	W	5.88	N/A	2014
CPNRD	New Use	1166*	1/24/2014	13	12	13	W	18.47	N/A	2014
CPNRD	Mitigation	1175	2/19/2014	26	9	15	W	9.00	N/A	2014
CPNRD	New Use	1175*	2/19/2014	10	9	10	W	16.36	N/A	2014
CPNRD	Mitigation	1179	2/20/2014	22	9	23	W	2.9	N/A	2014
CPNRD	Mitigation	1179	2/20/2014	22	9	23	W	1.16	N/A	2014
CPNRD	Mitigation	1179	2/20/2014	21	9	23	W	0.34	N/A	2014
CPNRD	Mitigation	1179	2/20/2014	21	9	23	W	1.04	N/A	2014
CPNRD	Mitigation	1179	2/20/2014	21	9	23	W	3.82	N/A	2014
CPNRD	New Use	1179	2/20/2014	22	9	22	W	9.044	N/A	2014
CPNRD	Mitigation	1183	2/20/2014	3	9	21	W	4.09	N/A	2014
CPNRD	New Use	1183*	2/20/2014	3	9	3	W	4.12	N/A	2014
CPNRD	Mitigation	1184	2/20/2014	11	11	25	W	3.33	N/A	2014
CPNRD	New Use	1184*	2/20/2014	11	11	11	W	3.32	N/A	2014
CPNRD	Mitigation	1185*	2/20/2014	27	9	20	W	1.44	N/A	2014
CPNRD	New Use	1185	2/20/2014	22	9	22	W	0.96	N/A	2014
CPNRD	New Use	1185	2/20/2014	23	9	23	W	1.01	N/A	2014
CPNRD	New Use	1185	2/20/2014	23	9	23	W	0.70	N/A	2014
CPNRD	Mitigation	1188*	2/20/2014	21	10	10	W	0.54	N/A	2014
CPNRD	Mitigation	1188*	2/20/2014	21	10	10	W	0.56	N/A	2014
CPNRD	Mitigation	1188*	2/20/2014	21	10	10	W	1.87	N/A	2014
CPNRD	New Use	1188	2/20/2014	21	10	21	W	2.97	N/A	2014
CPNRD	Mitigation	1196*	4/2/2014	32	14	6	W	1.51	N/A	2014
CPNRD	New Use	1196	4/2/2014	32	14	32	W	1.51	N/A	2014
CPNRD	Mitigation	1215*	4/28/2014	14	8	24	W	2.29	N/A	2014
CPNRD	New Use	1215	4/28/2014	14	8	14	W	1.15	N/A	2014
CPNRD	New Use	1215	4/28/2014	14	8	14	W	1.14	N/A	2014
CPNRD	Mitigation	1216	4/28/2014	27	10	22	W	2.96	N/A	2014

Table 5: Groundwater Transfer Permits, continued

NRD	Type	NRD Permit	Permit Date	Section	Township	Range	E/W	Acres	Notes	Year Implemented ⁺
CPNRD	New Use	1216*	4/28/2014	27	10	27	W	1.71	N/A	2014
CPNRD	New Use	1216*	4/28/2014	27	10	27	W	1.25	N/A	2014
CPNRD	Mitigation	1218	4/28/2014	7	12	7	W	0.38	N/A	2014
CPNRD	Mitigation	1218	4/28/2014	7	12	7	W	0.78	N/A	2014
CPNRD	New Use	1218	4/28/2014	7	12	7	W	1.14	N/A	2014
CPNRD	Mitigation	1219	4/28/2014	17	9	22	W	20.99	N/A	2014
CPNRD	New Use	1219*	4/28/2014	17	9	17	W	21.01	N/A	2014
CPNRD	Mitigation	1220	4/28/2014	17	9	22	W	2.01	N/A	2014
CPNRD	New Use	1220*	4/28/2014	27	9	27	W	3.00	N/A	2014
CPNRD	Mitigation	1222	4/28/2014	14	11	24	W	2.44	N/A	2014
CPNRD	New Use	1222*	4/28/2014	14	11	14	W	2.44	N/A	2014
CPNRD	Mitigation	1224	4/28/2014	30	12	7	W	3.99	N/A	2014
CPNRD	New Use	1224*	4/28/2014	30	12	30	W	3.96	N/A	2014
CPNRD	Mitigation	1226	6/2/2014	21	10	22	W	24.95	N/A	2014
CPNRD	New Use	1226	6/2/2014	22	10	22	W	4.75	N/A	2014
CPNRD	New Use	1226	6/2/2014	22	10	22	W	5.68	N/A	2014
CPNRD	New Use	1226	6/2/2014	22	10	22	W	2.92	N/A	2014
CPNRD	New Use	1226	6/2/2014	22	10	22	W	5.86	N/A	2014
CPNRD	New Use	1226	6/2/2014	22	10	22	W	6.34	N/A	2014
CPNRD	Mitigation	1227	6/2/2014	27	10	22	W	1.00	N/A	2014
CPNRD	New Use	1227	6/2/2014	22	10	22	W	1.09	N/A	2014
CPNRD	Mitigation	1229	6/5/2014	8	10	21	W	1.04	N/A	2014
CPNRD	New Use	1229*	6/5/2014	8	10	8	W	0.76	N/A	2014
CPNRD	New Use	1229*	6/5/2014	8	10	8	W	0.28	N/A	2014
CPNRD	Mitigation	1238	6/11/2014	25	9	23	W	12.07	N/A	2014
CPNRD	New Use	1238*	6/11/2014	25	9	25	W	0.75	N/A	2014
CPNRD	New Use	1238*	6/11/2014	25	9	25	W	11.32	N/A	2014
CPNRD	Mitigation	1239	6/11/2014	32	9	18	W	4.22	N/A	2014
CPNRD	New Use	1239*	6/11/2014	32	9	32	W	4.34	N/A	2014
CPNRD	Mitigation	1244	7/1/2014	9	9	23	W	1.62	N/A	2014
CPNRD	New Use	1244*	7/1/2014	9	9	9	W	1.57	N/A	2014
CPNRD	Mitigation	1249	7/1/2014	12	9	24	W	9.16	N/A	2014
CPNRD	New Use	1249*	7/1/2014	11	9	11	W	9.65	N/A	2014
CPNRD	Mitigation	1252	7/8/2014	28	12	25	W	1.91	N/A	2014
CPNRD	New Use	1252	7/8/2014	28	12	28	W	1.92	N/A	2014
CPNRD	Mitigation	1255*	7/8/2014	24	9	14	W	2.17	N/A	2014
CPNRD	New Use	1255	7/8/2014	24	9	24	W	2.17	N/A	2014
CPNRD	Mitigation	1264*	7/14/2014	36	14	6	W	39.94	N/A	2014
CPNRD	New Use	1264	7/14/2014	36	14	36	W	39.97	N/A	2014
CPNRD	Mitigation	1265	7/14/2014	34	9	23	W	2.98	N/A	2014

Table 5: Groundwater Transfer Permits, continued

NRD	Type	NRD Permit	Permit Date	Section	Township	Range	E/W	Acres	Notes	Year Implemented ⁺
CPNRD	Mitigation	1265	7/14/2014	34	9	23	W	5.86	N/A	2014
CPNRD	Mitigation	1265	7/14/2014	34	9	23	W	3.14	N/A	2014
CPNRD	New Use	1265*	7/14/2014	34	9	34	W	7.61	N/A	2014
CPNRD	New Use	1265*	7/14/2014	34	9	34	W	4.37	N/A	2014
CPNRD	Mitigation	1267	7/14/2014	14	10	22	W	6.04	No associated new use	2014
CPNRD	Mitigation	1269*	7/14/2014	36	14	6	W	1.60	N/A	2014
CPNRD	Mitigation	1269*	7/14/2014	36	14	6	W	0.52	N/A	2014
CPNRD	Mitigation	1269*	7/14/2014	36	14	6	W	0.71	N/A	2014
CPNRD	New Use	1269	7/14/2014	36	14	36	W	0.15	N/A	2014
CPNRD	New Use	1269	7/14/2014	36	14	36	W	0.38	N/A	2014
CPNRD	New Use	1269	7/14/2014	36	14	36	W	2.26	N/A	2014
CPNRD	Mitigation	1270	7/15/2014	5	8	14	W	0.37	N/A	2014
CPNRD	Mitigation	1270	7/15/2014	5	8	14	W	1.10	N/A	2014
CPNRD	Mitigation	1270	7/15/2014	6	8	14	W	0.28	N/A	2014
CPNRD	Mitigation	1270	7/15/2014	6	8	14	W	1.64	N/A	2014
CPNRD	Mitigation	1270	7/15/2014	6	8	14	W	2.26	N/A	2014
CPNRD	New Use	1270*	7/15/2014	6	8	6	W	3.47	N/A	2014
CPNRD	New Use	1270*	7/15/2014	5	8	5	W	0.76	N/A	2014
CPNRD	New Use	1270*	7/15/2014	5	8	5	W	1.27	N/A	2014
CPNRD	New Use	1270*	7/15/2014	5	8	5	W	0.16	N/A	2014
CPNRD	Mitigation	1275	7/15/2014	14	9	11	W	0.85	N/A	2014
CPNRD	Mitigation	1275	7/15/2014	14	9	11	W	0.35	N/A	2014
CPNRD	Mitigation	1275	7/15/2014	14	9	11	W	0.51	N/A	2014
CPNRD	Mitigation	1275*	7/15/2014	23	9	11	W	0.49	N/A	2014
CPNRD	New Use	1275*	7/15/2014	14	9	14	W	1.10	N/A	2014
CPNRD	New Use	1275*	7/15/2014	14	9	14	W	0.67	N/A	2014
CPNRD	New Use	1275*	7/15/2014	14	9	14	W	0.42	N/A	2014
CPNRD	Mitigation	1294*	7/28/2014	36	12	9	W	5.90	N/A	2014
CPNRD	New Use	1294	7/28/2014	26	12	26	W	4.06	N/A	2014
CPNRD	New Use	1294	7/28/2014	26	12	26	W	3.83	N/A	2014
CPNRD	Mitigation	1295*	7/28/2014	36	12	9	W	3.33	N/A	2014
CPNRD	Mitigation	1295*	7/28/2014	36	12	9	W	0.81	N/A	2014
CPNRD	Mitigation	1295*	7/28/2014	35	12	9	W	5.49	N/A	2014
CPNRD	Mitigation	1295*	7/28/2014	26	12	9	W	20.85	N/A	2014
CPNRD	New Use	1295	7/28/2014	27	12	27	W	6.50	N/A	2014
CPNRD	New Use	1295*	7/28/2014	34	12	34	W	34.84	N/A	2014
CPNRD	Mitigation	1302	7/29/2014	14	9	11	W	3.93	N/A	2014
CPNRD	New Use	1302*	7/29/2014	14	9	14	W	3.92	N/A	2014
CPNRD	Mitigation	1303	7/29/2014	34	9	19	W	2.96	N/A	2014
CPNRD	New Use	1303*	7/29/2014	34	9	34	W	1.65	N/A	2014

Table 5: Groundwater Transfer Permits, continued

NRD	Type	NRD Permit	Permit Date	Section	Township	Range	E/W	Acres	Notes	Year Implemented ⁺
CPNRD	New Use	1303*	7/29/2014	34	9	34	W	1.30	N/A	2014
CPNRD	Mitigation	1309	7/30/2014	6	8	18	W	1.83	N/A	2014
CPNRD	New Use	1309*	7/30/2014	20	9	20	W	8.71	N/A	2014
CPNRD	New Use	1309*	7/30/2014	20	9	20	W	0.65	N/A	2014
CPNRD	New Use	1309*	7/30/2014	20	9	20	W	0.83	N/A	2014
CPNRD	Mitigation	1313	8/14/2014	11	9	21	W	5.08	N/A	2014
CPNRD	New Use	1313*	8/14/2014	11	9	11	W	5.05	N/A	2014
CPNRD	New Use	1313*	8/14/2014	11	9	11	W	3.10	N/A	2014
CPNRD	Mitigation	1318	8/18/2014	23	9	23	W	1.09	N/A	2014
CPNRD	Mitigation	1318	8/18/2014	23	9	23	W	5.81	N/A	2014
CPNRD	New Use	1318	8/18/2014	23	9	23	W	4.05	N/A	2014
CPNRD	New Use	1318	8/18/2014	23	9	23	W	2.32	N/A	2014
CPNRD	Mitigation	1323*	8/26/2014	3	9	11	W	2.20	N/A	2014
CPNRD	Mitigation	1323	8/26/2014	20	9	11	W	2.37	N/A	2014
CPNRD	New Use	1323*	8/26/2014	4	11	10	W	58.30	N/A	2014
CPNRD	Mitigation	1325	8/26/2014	20	9	11	W	5.08	N/A	2014
CPNRD	New Use	1325*	8/26/2014	18	11	10	W	29.62	N/A	2014
CPNRD	Mitigation	1326	9/2/2014	28	10	24	W	1.38	N/A	2014
CPNRD	New Use	1326*	9/2/2014	28	10	28	W	1.55	N/A	2014
CPNRD	Mitigation	1327	9/9/2014	9	8	14	W	4.12	N/A	2014
CPNRD	New Use	1327*	9/9/2014	18	11	10	W	84.64	N/A	2014
CPNRD	Mitigation	1336	11/3/2014	12	8	17	W	0.21	N/A	2014
CPNRD	Mitigation	1336	11/3/2014	12	8	17	W	0.54	N/A	2014
CPNRD	Mitigation	1336	11/3/2014	12	8	17	W	3.21	N/A	2014
CPNRD	New Use	1336*	11/3/2014	12	8	12	W	1.54	N/A	2014
CPNRD	New Use	1336*	11/3/2014	12	8	12	W	2.41	N/A	2014
CPNRD	Mitigation	1337	11/3/2014	7	8	17	W	1.59	N/A	2014
CPNRD	Mitigation	1337*	11/3/2014	18	9	17	W	0.67	N/A	2014
CPNRD	Mitigation	1337*	11/3/2014	18	9	17	W	3.51	N/A	2014
CPNRD	Mitigation	1337*	11/3/2014	16	9	17	W	1.08	N/A	2014
CPNRD	Mitigation	1337*	11/3/2014	16	9	17	W	4.55	N/A	2014
CPNRD	New Use	1337*	11/3/2014	16	9	16	W	2.92	N/A	2014
CPNRD	New Use	1337*	11/3/2014	16	9	16	W	5.65	N/A	2014
CPNRD	New Use	1337*	11/3/2014	16	9	16	W	4.13	N/A	2014
CPNRD	New Use	1337*	11/3/2014	17	9	17	W	4.03	N/A	2014
CPNRD	New Use	1337*	11/3/2014	18	9	18	W	2.58	N/A	2014
CPNRD	New Use	1337*	11/3/2014	18	9	18	W	0.12	N/A	2014
CPNRD	New Use	1337*	11/3/2014	18	9	18	W	0.68	N/A	2014
CPNRD	Mitigation	1338	11/4/2014	12	8	15	W	19.63	N/A	2014
CPNRD	New Use	1338*	11/4/2014	12	8	12	W	1.15	N/A	2014

Table 5: Groundwater Transfer Permits, continued

NRD	Type	NRD Permit	Permit Date	Section	Township	Range	E/W	Acres	Notes	Year Implemented ⁺
CPNRD	New Use	1338*	11/4/2014	12	8	12	W	18.41	N/A	2014
CPNRD	Mitigation	1341	11/4/2014	10	9	24	W	1.93	N/A	2014
CPNRD	Mitigation	1341	11/4/2014	10	9	24	W	0.25	N/A	2014
CPNRD	Mitigation	1341	11/4/2014	10	9	24	W	1.94	N/A	2014
CPNRD	New Use	1341*	11/4/2014	10	9	10	W	4.11	N/A	2014
CPNRD	Mitigation	1346	11/10/2014	10	8	14	W	0.99	N/A	2014
CPNRD	New Use	1346*	11/10/2014	7	11	10	W	10.04	N/A	2014
CPNRD	New Use	1346*	11/10/2014	12	11	11	W	5.71	N/A	2014
CPNRD	New Use	1346*	11/10/2014	12	11	11	W	2.12	N/A	2014
CPNRD	New Use	1346*	11/10/2014	18	11	10	W	5.73	N/A	2014
CPNRD	New Use	1346*	11/10/2014	18	11	10	W	4.71	N/A	2014
CPNRD	Mitigation	1352	11/14/2014	10	8	14	W	1.52	N/A	2014
CPNRD	New Use	1352*	11/14/2014	13	11	11	W	1.65	N/A	2014
CPNRD	New Use	1352*	11/14/2014	13	11	11	W	33.02	N/A	2014
CPNRD	Mitigation	1356	11/14/2014	34	11	24	W	1.81	N/A	2014
CPNRD	New Use	1356	11/14/2014	26	12	26	W	7.80	N/A	2014
CPNRD	Mitigation	1361*	11/14/2014	27	12	8	W	0.25	N/A	2014
CPNRD	Mitigation	1361*	11/14/2014	27	12	8	W	4.71	N/A	2014
CPNRD	New Use	1361	11/14/2014	27	12	27	W	5.24	N/A	2014
CPNRD	Mitigation	1363	11/21/2014	7	8	17	W	7.15	N/A	2014
CPNRD	Mitigation	1363	11/21/2014	7	8	17	W	1.85	N/A	2014
CPNRD	New Use	1363*	11/21/2014	18	9	18	W	6.78	N/A	2014
CPNRD	New Use	1363*	11/21/2014	18	9	18	W	51.93	N/A	2014
CPNRD	New Use	1363*	11/21/2014	18	9	18	W	2.01	N/A	2014
CPNRD	New Use	1363*	11/21/2014	18	9	18	W	4.41	N/A	2014
NPNRD	Mitigation	TA-14-001	7/10/2014	11	20	53	W	115.00	N/A	2014
NPNRD	New Use	TA-14-001	7/10/2014	12	20	53	W	69.00	N/A	2014
TBNRD	Mitigation	TBAT-0214	1/14/2014	25	8	20	W	19.00	N/A	2014
TBNRD	New Use	TBAT-0214	1/14/2014	35	8	20	W	19.00	N/A	2014
TBNRD	Mitigation	TBAT-0217	1/14/2014	18	8	20	W	7.00	N/A	2014
TBNRD	New Use	TBAT-0217	1/14/2014	32	8	20	W	7.00	N/A	2014
TBNRD	Mitigation	TBAT-0218	1/14/2014	18	8	20	W	3.00	N/A	2014
TBNRD	New Use	TBAT-0218	1/14/2014	32	8	20	W	3.00	N/A	2014
TBNRD	Mitigation	TBAT-0221	3/11/2014	17	8	19	W	44.18	N/A	2014
TBNRD	New Use	TBAT-0221	3/11/2014	21	8	18	W	44.18	N/A	2014
TBNRD	Mitigation	TBAT-0232	4/8/2014	27	8	23	W	3.00	N/A	2014
TBNRD	New Use	TBAT-0232	4/8/2014	22	8	23	W	3.00	N/A	2014
TBNRD	Mitigation	TBAT-0242	8/13/2014	15	8	19	W	10.00	N/A	2014
TBNRD	New Use	TBAT-0242	8/12/2014	18	7	17	W	10.00	N/A	2014
TBNRD	Mitigation	TBAT-0243	8/15/2014	15	8	19	W	16.00	N/A	2014

Table 5: Groundwater Transfer Permits, continued

NRD	Type	NRD Permit	Permit Date	Section	Township	Range	E/W	Acres	Notes	Year Implemented ⁺
TBNRD	New Use	TBAT-0243	8/14/2014	18	8	23	W	16.00	N/A	2014
TBNRD	Mitigation	TBAT-0244	8/16/2014	15	8	19	W	14.77	N/A	2014
TBNRD	New Use	TBAT-0244	8/16/2014	21	8	18	W	14.77	N/A	2014
TBNRD	Mitigation	TBAT-0253	12/9/2014	20	7	19	W	5.84	N/A	2014
TBNRD	New Use	TBAT-0253*	12/9/2014	34	7	20	W	5.84	N/A	2014
TPNRD	Mitigation	TP-TRANS-14.03	2/24/2014	33	13	26	W	22.00	N/A	2014
TPNRD	New Use	TP-TRANS-14.03*	2/24/2014	28	14	26	W	22.00	N/A	2014
TPNRD	Mitigation	TP-TRANS-14.05	1/9/2014	23	12	29	W	169.16	N/A	2014
TPNRD	New Use	TP-TRANS-14.05*	1/9/2014	12	16	28	W	133.00	N/A	2014
TPNRD	Mitigation	TP-TRANS-14.07	3/19/2014	3	13	38	W	44.08	N/A	2014
TPNRD	Mitigation	TP-TRANS-14.07*	3/19/2014	31	13	37	W	27.40	N/A	2014
TPNRD	New Use	TP-TRANS-14.07	3/19/2014	19	13	37	W	66.28	N/A	2014
TPNRD	Mitigation	TP-TRANS-14.10	5/12/2014	12	12	41	W	3.45	N/A	2014
TPNRD	New Use	TP-TRANS-14.10	5/12/2014	12	12	41	W	3.45	N/A	2014
TPNRD	Mitigation	TP-TRANS-14.11	2/19/2014	13	13	32	W	7.00	N/A	2014
TPNRD	New Use	TP-TRANS-14.11	2/19/2014	13	13	32	W	7.00	N/A	2014
TPNRD	Mitigation	TP-TRANS-14.14	3/28/2014	17	14	31	W	16.36	Conversion to feedlot; no associated new use	2014
TPNRD	Mitigation	TP-TRANS-14.15	3/28/2014	17	14	31	W	19.19	N/A	2014
TPNRD	Mitigation	TP-TRANS-14.15	3/28/2014	18	14	31	W	6.16	N/A	2014
TPNRD	Mitigation	TP-TRANS-14.15	3/28/2014	18	14	31	W	29.81	N/A	2014
TPNRD	New Use	TP-TRANS-14.15	3/28/2014	7	14	31	W	6.16	N/A	2014
TPNRD	New Use	TP-TRANS-14.15	3/28/2014	18	14	31	W	49.00	N/A	2014
TPNRD	Mitigation	TP-TRANS-14.22	3/20/2014	35	14	33	W	2.80	N/A	2014
TPNRD	Mitigation	TP-TRANS-14.22	3/20/2014	2	13	33	W	17.20	N/A	2014
TPNRD	New Use	TP-TRANS-14.22	3/20/2014	35	14	33	W	3.50	N/A	2014
TPNRD	New Use	TP-TRANS-14.22	3/20/2014	2	13	33	W	16.50	N/A	2014
TPNRD	Mitigation	TP-TRANS-14.23	4/17/2014	16	13	31	W	10.74	N/A	2014
TPNRD	Mitigation	TP-TRANS-14.23*	4/17/2014	36	13	33	W	8.70	N/A	2014
TPNRD	Mitigation	TP-TRANS-14.23	4/17/2014	36	12	26	W	10.16	N/A	2014
TPNRD	New Use	TP-TRANS-14.23*	4/17/2014	36	13	26	W	29.60	N/A	2014
TPNRD	Mitigation	TP-TRANS-14.25	3/25/2014	36	14	33	W	82.00	N/A	2014
TPNRD	New Use	TP-TRANS-14.25	3/25/2014	1	13	33	W	82.00	N/A	2014
TPNRD	Mitigation	TP-TRANS-14.29	4/28/2014	10	13	37	W	2.44	N/A	2014
TPNRD	New Use	TP-TRANS-14.29	4/28/2014	10	13	37	W	2.44	N/A	2014
TPNRD	Mitigation	TP-TRANS-14.30	4/10/2014	33	13	41	W	33.00	N/A	2014
TPNRD	New Use	TP-TRANS-14.30	4/10/2014	16	13	32	W	33.95	N/A	2014
TPNRD	Mitigation	TP-TRANS-14.32	5/12/2014	14	12	41	W	17.30	N/A	2014
TPNRD	New Use	TP-TRANS-14.32	5/12/2014	1	12	41	W	8.00	N/A	2014
TPNRD	Mitigation	TP-TRANS-14.34	12/3/2014	22	14	34	W	20.45	N/A	2014
TPNRD	New Use	TP-TRANS-14.34	12/3/2014	22	14	34	W	20.45	N/A	2014

Table 5: Groundwater Transfer Permits, continued

NRD	Type	NRD Permit	Permit Date	Section	Township	Range	E/W	Acres	Notes	Year Implemented ⁺
TPNRD	Mitigation	TP-TRANS-14.36	5/14/2014	14	12	28	W	3.55	N/A	2014
TPNRD	New Use	TP-TRANS-14.36	5/14/2014	14	12	28	W	3.55	N/A	2014
TPNRD	Mitigation	TP-TRANS-14.37	6/30/2014	20	13	41	W	9.00	N/A	2014
TPNRD	New Use	TP-TRANS-14.37	6/30/2014	17	13	31	W	16.13	N/A	2014
TPNRD	Mitigation	TP-TRANS-14.42	7/2/2014	21	12	27	W	13.30	N/A	2014
TPNRD	New Use	TP-TRANS-14.42	7/2/2014	21	12	27	W	13.30	N/A	2014
TPNRD	Mitigation	TP-TRANS-14.43	6/12/2014	7	13	38	W	7.50	N/A	2014
TPNRD	New Use	TP-TRANS-14.43	6/12/2014	7	13	38	W	7.50	N/A	2014
TPNRD	Mitigation	TP-TRANS-14.45	7/24/2014	27	11	26	W	2.63	N/A	2014
TPNRD	New Use	TP-TRANS-14.45	7/24/2014	26	11	26	W	2.63	N/A	2014
TPNRD	Mitigation	TP-TRANS-14.46	9/2/2014	23	15	38	W	124.40	N/A	2014
TPNRD	New Use	TP-TRANS-14.46	9/2/2014	12	17	35	W	124.40	N/A	2014
TPNRD	Mitigation	TP-TRANS-14.48	9/30/2014	20	13	39	W	2.00	N/A	2014
TPNRD	New Use	TP-TRANS-14.48	9/30/2014	20	13	39	W	2.00	N/A	2014
TPNRD	Mitigation	TP-TRANS-14.49	9/24/2014	34	15	33	W	5.00	N/A	2014
TPNRD	New Use	TP-TRANS-14.49	9/24/2014	2	14	33	W	5.00	N/A	2014
TPNRD	Mitigation	TP-TRANS-14.55	12/3/2014	26	13	41	W	17.06	N/A	2014
TPNRD	New Use	TP-TRANS-14.55	12/3/2014	3	13	37	W	4.08	N/A	2014
TPNRD	New Use	TP-TRANS-14.55	12/3/2014	4	13	37	W	12.99	N/A	2014
TPNRD	Mitigation	TP-TRANS-14.58	11/25/2014	35	14	34	W	25.07	N/A	2014
TPNRD	New Use	TP-TRANS-14.58	11/25/2014	16	13	32	W	14.10	N/A	2014
TPNRD	New Use	TP-TRANS-14.59	N/A	12	12	41	W	6.50	NRD will mitigate new use	2014

*Indicates this part of the transfer was not in the 28/40 area. These transfers are still included in the totals in Table 1 and the analysis for Table 9.

⁺All permits in the table were issued in the 2014 calendar year. The year implemented field reflects when the permit takes effect.

Table 6: Groundwater Well Permits

NRD	Permit Type	NRD Permit	DNR Well Registration #	Permit Date	Section	Township	Range	E/W	Mitigation	Year Implemented ⁺
CPNRD	Conversion to GW Irrigation	CPCG24-14-041	G0174392	6/26/2014	2	9	24	W	N/A, SW irrigation retired	2014
CPNRD	Industrial/Commercial	CPIN24-14-023	VOIDED	3/6/2014	15	11	25	W	N/A, well not drilled	N/A
CPNRD	New Well	CPNP10-14-040	G-176091	12/22/2014	10	8	16	W	N/A, heat pump well	2016
CPNRD	New Well	CPNP10-14-041	G-176075	12/22/2014	10	8	16	W	N/A, heat pump well	2016
CPNRD	New Well	CPNP10-14-042	G-176090	12/22/2014	10	8	16	W	N/A, heat pump well	2016
CPNRD	Replacement	CPRP10-14-002	G-006174	1/22/2014	26	9	15	W	N/A	2014
CPNRD	Replacement	CPRP10-14-009	G-016397	3/27/2014	12	8	15	W	N/A	2014
CPNRD	Replacement	CPRP10-14-012	G-014226	4/3/2014	11	8	15	W	N/A	2014
CPNRD	Replacement	CPRP10-14-013	G-017915	4/3/2014	4	8	15	W	N/A	2014
CPNRD	Replacement	CPRP10-14-016	G-009833	4/3/2014	30	9	14	W	N/A	2014
CPNRD	Replacement	CPRP10-14-024	G-002801	6/11/2014	4	8	15	W	N/A	2014
CPNRD	Replacement	CPRP10-14-028	G-007868	6/24/2014	29	9	15	W	N/A	2014
CPNRD	Replacement	CPRP10-14-029	G-142048	6/24/2014	29	9	15	W	N/A	2014
CPNRD	Replacement	CPRP10-14-030	G-021691	7/9/2014	9	8	14	W	N/A	2014
CPNRD	Replacement	CPRP10-14-038	G-005962	11/21/2014	27	9	14	W	N/A	2015
CPNRD	Replacement	CPRP24-14-003	G-016549	1/10/2014	32	12	25	W	N/A	2014
CPNRD	Replacement	CPRP24-14-005	G-018623	1/17/2014	29	11	25	W	N/A	2014
CPNRD	Replacement	CPRP24-14-006	G-122692	2/3/2014	13	10	22	W	N/A	2014
CPNRD	Replacement	CPRP24-14-010	G-016746	2/7/2014	25	12	25	W	N/A	2014
CPNRD	Replacement	CPRP24-14-011	G022748	2/7/2014	1	11	25	W	N/A	2014
CPNRD	Replacement	CPRP24-14-012	G-096305	2/10/2014	20	11	24	W	N/A	2014
CPNRD	Replacement	CPRP24-14-016	G-004155	2/20/2014	17	10	24	W	N/A	2014
CPNRD	Replacement	CPRP24-14-018	G-018947	2/21/2014	17	9	21	W	N/A	2014
CPNRD	Replacement	CPRP24-14-019	G-009782	2/21/2014	23	11	24	W	N/A	2014
CPNRD	Replacement	CPRP24-14-024	G-009485	3/14/2014	18	9	21	W	N/A	2014
CPNRD	Replacement	CPRP24-14-032	G-005906	4/14/2014	18	9	22	W	N/A	2014
CPNRD	Replacement	CPRP24-14-035	G-066784	4/22/2014	7	11	24	W	N/A	2014
CPNRD	Replacement	CPRP24-14-037	G-010558	4/23/2014	22	9	21	W	N/A	2014
CPNRD	Replacement	CPRP24-14-039	A-005875	4/29/2014	16	11	24	W	N/A	2014
CPNRD	Replacement	CPRP24-14-042	G-070769	8/27/2014	6	9	22	W	N/A	2014
CPNRD	Replacement	CPRP24-14-044	G-010741	10/27/2014	29	10	24	W	N/A	2015
CPNRD	Replacement	CPRP24-14-045	A-006609	10/28/2014	3	9	21	W	N/A	2015
CPNRD	Replacement	CPRP24-14-046	G-159998	10/28/2014	27	11	25	W	N/A	2015
CPNRD	Replacement	CPRP24-14-047	G-009109	11/6/2014	9	10	21	W	N/A	2015
CPNRD	Replacement	CPRP24-14-048	G-041144	12/1/2014	32	10	23	W	N/A	2015

Table 6: Groundwater Well Permits, continued

NRD	Permit Type	NRD Permit	DNR Well Registration #	Permit Date	Section	Township	Range	E/W	Mitigation	Year Implemented ⁺
CPNRD	Replacement	CPRP24-14-049	G-114811	12/1/2014	25	10	21	W	N/A	2015
CPNRD	Supplemental GW	CPSG10-14-008	G-173539	3/27/2014	7	8	17	W	N/A	2014
CPNRD	Supplemental GW	CPSG10-14-014	G-174969	4/3/2014	10	8	16	W	N/A	2014
CPNRD	Supplemental GW	CPSG10-14-036	G-174393	8/8/2014	34	9	17	W	N/A	2015
CPNRD	Supplemental GW	CPSG24-14-004	G-172326	1/17/2014	6	10	22	W	N/A	2014
CPNRD	Supplemental GW	CPSG24-14-009	G-169566	2/7/2014	28	12	25	W	N/A	2014
CPNRD	Supplemental GW	CPSG24-14-017	G-173472	2/20/2014	3	8	19	W	N/A	2014
CPNRD	Supplemental GW	CPSG24-14-022	G-171404	3/5/2014	34	9	19	W	N/A	2014
CPNRD	Supplemental GW	CPSG24-14-038	G-172721	4/24/2014	30	11	22	W	N/A	2014
CPNRD	Supplemental GW	CPSG32-14-001	G-173276	4/15/2014	2	8	24	W	N/A	2014
CPNRD	Supplemental SW	CPSS24-14-020	G-172506	2/28/2014	1	9	24	W	N/A	2014
NPNRD	Replacement	NPRP14001	G-137197	3/13/2014	25	23	56	W	N/A	2014
NPNRD	Replacement	NPRP14003	G-018614	5/12/2014	29	22	54	W	N/A	2014
NPNRD	Replacement	NPRP14005	G-097263	7/1/2014	27	20	51	W	N/A	2014
NPNRD	Replacement	NPRP14009	G-019893	10/9/2014	24	22	56	W	N/A	2014
NPNRD	Supplemental GW	NPSG14002	G-172643	4/30/2014	26	16	42	W	N/A	2014
NPNRD	Supplemental GW	NPSG14007	G-175465	10/23/2014	9	18	45	W	N/A	2014
NPNRD	Supplemental GW	NPSG14008	G-175466	10/23/2014	9	18	45	W	N/A	2014
NPNRD	Supplemental GW	NPSG14011	WAITING	11/5/2014	12	20	53	W	N/A, well not drilled	N/A
SPNRD	Replacement	SP-RP-203-2014	G-015053	1/13/2014	12	12	42	W	N/A	2014
TBNRD	Replacement	TBRP-G021368-R1	G-021368	11/27/2014	20	8	16	W	N/A	2014
TBNRD	Replacement	TBRP-G042235-R1	G-042235	11/14/2014	31	8	18	W	N/A	2014
TBNRD	Replacement	TBRP-G042249-R1	G-042249	11/24/2014	7	7	17	W	N/A	2015
TBNRD	Replacement	TBRP-G043165-R2	G-043165	12/23/2014	12	7	19	W	N/A	2015
TBNRD	Replacement	TBRP-G069510-R1	G-069510	12/8/2014	8	7	18	W	N/A	2014
TBNRD	Supplemental GW	TBSG-1489	G-175830	12/8/2014	7	7	16	W	N/A	2015
TBNRD	Supplemental SW	TBSS-1490	G-176126	12/19/2014	25	8	22	W	N/A	2015
TPNRD	Industrial/Commercial	TP-IN-14.21	G-176219	3/13/2014	21	13	30	W	N/A	2014
TPNRD	New Well	TP-NP-14.02	EXPIRED	1/9/2014	8	13	38	W	N/A, well not drilled	N/A
TPNRD	New Well	TP-NP-14.06	G-171496	2/6/2014	19	13	37	W	N/A, transfer TP-TRANS-14.07	2014
TPNRD	New Well	TP-NP-14.08	EXPIRED	2/6/2014	27	13	36	W	N/A, well not drilled	N/A
TPNRD	New Well	TP-NP-14.09	G-174296	2/6/2014	8	13	34	W	N/A, no increase in irrigated acres	2014
TPNRD	New Well	TP-NP-14.12	EXPIRED	3/13/2014	6	13	33	W	N/A, well not drilled	N/A
TPNRD	New Well	TP-NP-14.26	G-172265	3/17/2014	1	13	33	W	N/A, transfer TP-TRANS-14.25	2014
TPNRD	New Well	TP-NP-14.28	G-175075	4/10/2014	29	13	27	W	N/A, transfer TP-TRANS-13.39	2014
TPNRD	New Well	TP-NP-14.33	G-171536	5/9/2014	8	14	36	W	N/A, no increase in irrigated acres	2014
TPNRD	New Well	TP-NP-14.47	G-174106	9/11/2014	12	17	35	W	N/A, transfer TP-TRANS-14.46	2014
TPNRD	New Well	TP-NP-14.51	EXPIRED	11/14/2014	21	13	30	W	N/A, well not drilled	N/A

Table 6: Groundwater Well Permits, continued

NRD	Permit Type	NRD Permit	DNR Well Registration #	Permit Date	Section	Township	Range	E/W	Mitigation	Year Implemented ⁺
TPNRD	New Well	TP-NP-14.52	G-174615	11/14/2014	33	14	30	W	N/A, heat pump well	2014
TPNRD	Replacement	TP-RP-14.01	G-152685	1/6/2014	30	14	33	W	N/A	2014
TPNRD	Replacement	TP-RP-14.02	G-024834	1/8/2014	15	14	33	W	N/A	2014
TPNRD	Replacement	TP-RP-14.03	G-005239	1/13/2014	13	13	32	W	N/A	2014
TPNRD	Replacement	TP-RP-14.04	G-033200	1/22/2014	22	14	34	W	N/A	2014
TPNRD	Replacement	TP-RP-14.05	G-005546	2/12/2014	13	13	31	W	N/A	2014
TPNRD	Replacement	TP-RP-14.06	G-032264	2/21/2014	10	11	26	W	N/A	2014
TPNRD	Replacement	TP-RP-14.07	G-051367	2/26/2014	16	13	39	W	N/A	2014
TPNRD	Replacement	TP-RP-14.08	G-016648	3/19/2014	24	13	40	W	N/A	2014
TPNRD	Replacement	TP-RP-14.09	G-149943	3/26/2014	18	14	31	W	N/A	2014
TPNRD	Replacement	TP-RP-14.11	G-004617	3/31/2014	25	12	26	W	N/A	2014
TPNRD	Replacement	TP-RP-14.12	G-042266	4/7/2014	31	13	30	W	N/A	2014
TPNRD	Replacement	TP-RP-14.13	G-041237	4/8/2014	32	15	37	W	N/A	2014
TPNRD	Replacement	TP-RP-14.14	G-065277	4/15/2014	5	11	26	W	N/A	2014
TPNRD	Replacement	TP-RP-14.15	A-005934	4/16/2014	7	12	29	W	N/A	2014
TPNRD	Replacement	TP-RP-14.16	G-005127	5/30/2014	24	12	26	W	N/A	2014
TPNRD	Replacement	TP-RP-14.17	G-068828	12/4/2014	16	12	27	W	N/A	2015
TPNRD	Supplemental GW	TP-SG-14.01	G-171047	1/9/2014	22	13	30	W	N/A	2014

⁺All permits in the table were issued in the 2014 calendar year. The year implemented field reflects the year in which the well was drilled.

Table 7: Variance Permits

NRD	NRD Permit	DNR Well Registration #	Permit Date	Section	Township	Range	E/W	Type of Variance	Notes	Year Implemented ⁺	Associated Well Permits
SPNRD	VAR-IND-14-SCGA	G-164175	5/13/2014	18	12	43	W	Variance to extend timeframe to set industrial baseline	N/A	2014	N/A
TBNRD	Correction PB-2-2014	G-132341	4/9/2013	17	7	19	W	Certified Acre Correction	Proof provided of 2004 or prior irrigation history	2014	N/A
TBNRD	Variance PB-2-2014	G-013425	1/15/2013	3	7	20	W	Variance to modify to stock well rather than abandon	No new depletion. Switched dryland and irrigated acres in same parcel	2014	N/A
TBNRD	Variance PB-1-014	G-018314	1/15/2013	17	8	19	W	Variance to modify to stock well rather than abandon	Proof provided of 2004 or prior irrigation history	2014	N/A
TBNRD	TBVP-2014_01	G-173880	1/15/2013	5	7	16	W	Variance regarding NRD spacing issues.	Acres transferred: dried up in another parcel to irrigate acres in this parcel	2014	N/A
TBNRD	Correction PB-1-2014	G-005107	2/12/2013	34	8	18	W	Certified Acre Correction	Proof provided of 2004 or prior irrigation history	2014	N/A

⁺All permits in the table were issued in the 2014 calendar year. The year implemented field reflects when the permit takes effect

Table 8: Surface Water Permits

Appropriation Number	Approval Date	Section	Township	Range	E/W	Acres	Grant in CFS	Grant in AF	Use	Mitigation	Associated Variance
A-19248	5/29/2014	7	14	32	W	N/A	45	N/A	Temporary (1 Year) Recharge	Variance granted pursuant to NAC 457 Ch 23, 001.03 and 001.05	VAR-3561
A-19246	5/29/2014	18	14	33	W	N/A	60	N/A	Temporary (1 Year) Recharge	Variance granted pursuant to NAC 457 Ch 23, 001.03 and 001.05	VAR-3562
A-19247	5/29/2014	18	14	36	W	N/A	60	N/A	Temporary (1 Year) Recharge	Variance granted pursuant to NAC 457 Ch 23, 001.03 and 001.05	VAR-3560
A-19245	5/29/2014	13	14	34	W	N/A	120	N/A	Temporary (1 Year) Recharge	Variance granted pursuant to NAC 457 Ch 23, 001.03 and 001.05	VAR-3559
A-19256	6/9/2014	8	13	29	W	N/A	350	N/A	Temporary (1 Year) Recharge	Variance granted pursuant to NAC 457 Ch 23, 001.03 and 001.05	VAR-4829
A-19254	11/26/2014	8	13	29	W	N/A	600	N/A	Temporary (1 Year) Recharge	Variance granted pursuant to NAC 457 Ch 23, 001.03 and 001.05	VAR-4828
A-19249	5/29/2014	14	12	43	W	N/A	150	N/A	Temporary (1 Year) Recharge	Variance granted pursuant to NAC 457 Ch 23, 001.03 and 001.05	VAR-4604

Note: Each permit is for use of excess flows, which are those flows in excess of U.S. Fish and Wildlife target flows and other state-protected appropriations when in priority.

Table 9: Effects to streamflow from 2014 to 2019 in the Platte River resulting from all groundwater and surface water permitting activities in 2014. A positive value for the net effect indicates that the permitted activities have an overall positive effect on streamflow. Values are given in acre-feet.

	Upstream of Critical Habitat Reach			Within Critical Habitat Reach			Aggregate Net Effect from Both Reaches
Year	Effect of New Uses	Effect of Mitigations	Net Effect	Effect of New Uses	Effect of Mitigations	Net Effect	Net Effect
2014	-27.32	77.28	49.96	-8.34	20.73	12.38	62.34
2015	-54.46	119.11	64.65	-16.91	33.36	16.45	81.10
2016	-77.39	149.82	72.43	-23.88	42.00	18.11	90.54
2017	-96.51	173.74	77.24	-29.82	48.37	18.55	95.79
2018	-112.65	193.07	80.42	-35.13	53.33	18.20	98.63
2019	-126.50	209.10	82.60	-39.99	57.33	17.34	99.94

Note: Some values do not sum properly in the table above due to rounding in the calculations.

Definition of terms

28/40 Area	The area within the North Platte, South Platte, or Platte River watershed in which groundwater intentionally withdrawn for 40 years will result in a cumulative stream depletion to the North Platte, South Platte, or Platte River or a baseflow tributary greater than or equal to 28 percent of the total groundwater consumed as a result of the withdrawals (see map 1).
Acre-Feet (AF)	A unit of volume, commonly used to measure quantities of water used or stored equivalent to the volume of water required to cover 1 acre to a depth of 1 foot and equivalent to 43,560 cubic feet, 325,851 gallons, or 1,233 cubic meters.
Application/Appropriation Number	Application Number (Docket and Application Numbers): Appropriations having docket numbers (D-) refer to claims covering rights which existed prior to April 4, 1895, or those rights that existed on the Missouri River that were covered by the law passed in 1980. Those appropriations having applications numbers (A-) were filed after April 4, 1895. Surface water appropriations can also be referred to as “permits” and “rights.”
Area Correction	The correction of the amount of certified irrigated acres because acres with history of irrigation between 1997 and 2005 had not previously been classified as irrigated cropland by county assessors.
Augmentation Well	A groundwater well drilled to pump water into a stream to augment streamflows.
Cubic Feet per Second (CFS)	The USGS defines cubic foot per second (cfs) as "the flow rate or discharge equal to one cubic foot of water per second or about 7.5 gallons per second."
CRP Reinstatement	Formerly irrigated land on which the water use had been temporarily retired under the federal Conservation Reserve Program that has since come out of retirement and may now be irrigated again.
Dewatering Well	A groundwater well drilled for the purpose of lowering the water table.
Feedlot Expansion	A type of variance to allow new wells for livestock use. New depletions are to be mitigated by applicant.
Grant in AF	The approved amount of acres per foot of water legally allowed to be pumped.
Grant in CFS	The approved amount of cubic feet per second of water legally allowed to be pumped.

Pooling	Any arrangement approved by the NRD board in which two or more certified irrigated tracts are combined. Additional information can be found in the SPNRD Rules and Regulations.
PRRIP Critical Habitat Reach	The reach of the Platte River from Lexington, NE, to Chapman, NE, which is of critical importance to the endangered target species (see map 1).
Replacement Well	A groundwater well drilled to replace an existing groundwater well which has become unusable. The replaced well must be decommissioned. No increase in irrigated acres is associated with a replacement well unless a variance is granted.
Section/Township/Range	The legal description of where a well or water appropriation is located.
Temporary Recharge	A temporary (for one year) surface water permit issued for the purpose of diverting excess streamflow (unappropriated water) to recharge groundwater, intended to supply baseflow accretions back to the river.
Supplemental Well	A groundwater well drilled to either supplement an existing groundwater well or to augment surface water irrigation when surface water is not available. No increase in irrigated acres is associated with a supplemental well unless a variance is granted.
Transfer	To allow for the historic consumptive use of water to be changed, in location and/or purpose without causing an increase in depletions to the river or an impact to existing surface water or groundwater uses.
Use	The legally accepted use of the well or water appropriation.
Variance	To allow an exception to the stay on new irrigated acres and new consumptive uses while providing adequate mitigations or transfers to assure that there is no net increase in depletions to the river or impacts to existing surface water or groundwater uses; any request that is contrary to existing rules or regulations will require a variance.