

Nebraska Department of Natural Resources

2018 Annual Report

of 2016 and 2017 Data for the

Lower Platte River Basin Coalition's Lower Platte River Basin-Wide Water Management Plan



Prepared by the
Nebraska Department of Natural Resources
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1. INTRODUCTION

In April of 2013, The Nebraska Department of Natural Resources (NeDNR) and seven Natural Resources Districts (NRDs) entered into an Interlocal Cooperative Agreement to form the **Lower Platte River Basin Water Management Plan Coalition** (Coalition). The seven NRDs are:

- Lower Platte South NRD,
- Lower Platte North NRD,
- Papio-Missouri River NRD,
- Lower Loup NRD,
- Lower Elkhorn NRD,
- Upper Elkhorn NRD, and
- Upper Loup NRD.

The Nebraska Association of Resource Districts (NARD) serves as the coordinator on behalf of the Coalition.

The Lower Platte River Basin (Basin) is located in the central and eastern portion of the state, as shown in Figure 1. The Coalition recognizes the hydrologic connectivity of groundwater and surface water resources within the Basin, and desires to work together to manage the resources as one. The Coalition jointly developed and adopted the Lower Platte River Basin-Wide Water Management Plan (Plan) in early 2018. It is through this Plan that the Coalition will protect and sustain the long-term balance between the water uses and water supplies throughout the areas of the Basin that are within the seven represented NRDs. The Plan requires reporting on an annual basis, which this report serves to fulfill.

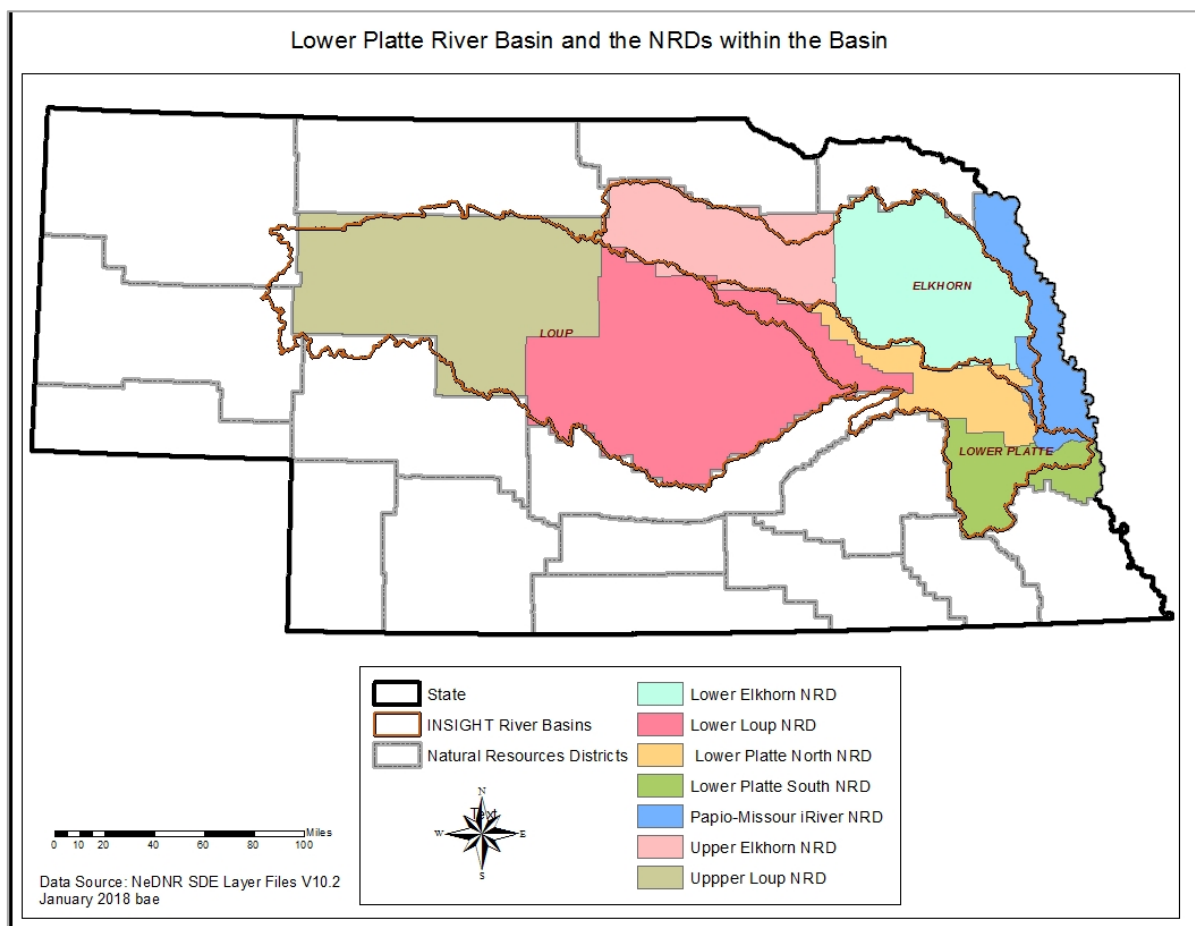


Figure 1. NRDs within the Lower Platte River Basin.

2. NeDNR SURFACE WATER AND GROUNDWATER MONITORING

A. Streamgages in the Lower Platte River Basin

NeDNR maintains 22 water-measuring structures within the Basin in order to measure various parameters of streams. The Plan requires NeDNR to list our maintained streamgages in this report. The list of NeDNR maintained streamgages is shown below, in Table 1. There are additional gages within the Basin that are maintained by U.S. Geological Service. The streamgage data (unless otherwise marked, all data is provisional and subject to revision) for both NeDNR and U.S. Geological Service maintained active gages in the Basin may be accessed at: <https://nednr.nebraska.gov/RealTime/>.

Table 1. NeDNR maintained streamgages within the Basin.

NeDNR Maintained Streamgages in the Basin			
Station Name	Station Number	River Basin	Type
Middle Loup River at Rockville	6780000	Loup	Stream
Mud Creek near Sweetwater	6783500	Loup	Stream
Turkey Creek near Dannebrog	6784800	Loup	Stream
Calamus River near Harrop	6787000	Loup	Stream
Calamus River near Burwell	6787500	Loup	Stream
North Loup River at Ord	6788500	Loup	Stream
Mira Creek near North Loup	6788988	Loup	Stream
Cedar River near Spalding	6791500	Loup	Stream
Cedar River near Fullerton	6792000	Loup	Stream
Loup River Power Canal Return at Columbus	82100	Loup	Stream
Beaver Creek at Loretto	6793500	Loup	Stream
Loup River at Columbus	6794500	Loup	Stream
Elkhorn River near Atkinson	6796973	Elkhorn	Stream
South Fork Elkhorn River near Ewing	6798000	Elkhorn	Stream
Elkhorn River at Neligh	6798500	Elkhorn	Stream
Elkhorn River near Tilden	6798780	Elkhorn	Stream
Willow Creek near Foster	6799080	Elkhorn	Stream
Willow Creek near Pierce	232500	Elkhorn	Stream
Union Creek at Madison	6799230	Elkhorn	Stream
Pebble Creek at Scribner	6799385	Elkhorn	Stream
Logan Creek at Pender	6799450	Elkhorn	Stream
Elkhorn River near Winslow	6799510	Elkhorn	Stream

NeDNR also measures diversions at 20 canals located within the Basin. The list of canals measured by NeDNR is shown below, in Table 2. The canal diversion data (unless otherwise marked, all data is provisional and subject to revision) may be accessed at: <https://nednr.nebraska.gov/RealTime/>.

Table 2. Canals measured by NeDNR within the Lower Platte River Basin.

Canals Measured by NeDNR in the Lower Platte River Basin			
Station Name	Station Number	River Basin	Type
Sargent Canal from Middle Loup River	130000	Loup	Canal
Middle Loup Canal No. 1 from Middle Loup	90000	Loup	Canal
Middle Loup Canal No. 1 Pump from Middle	90200	Loup	Canal
Middle Loup Canal No. 2 from Middle Loup	91000	Loup	Canal
Middle Loup Canal No. 3 from Middle Loup	92000	Loup	Canal
Middle Loup Canal No. 4 from Middle Loup	93000	Loup	Canal
Farwell (Sherman Feeder) Canal from Middle Loup River	47000	Loup	Canal
Middle Loup Canal No. 4 from Sherman Feeder Canal	93200	Loup	Canal
Farwell Main Canal from Sherman Reservoir	48000	Loup	Canal
Farwell South Canal from Sherman Reservoir	49000	Loup	Canal
Taylor-Ord Canal from North Loup River	107000	Loup	Canal
Taylor-Ord Canal inlet to Mirdan Canal	107100	Loup	Canal
Taylor-Ord Canal outlet from Mirdan Canal	107200	Loup	Canal
Kent Canal from North Loup River	76500	Loup	Canal
Calamus Fish Hatchery inlet from Calamus	19800	Loup	Canal
Mirdan Canal from Calamus Reservoir	100500	Loup	Canal
Inlet Canal to Davis Cr. Res. from Mirdan	88500	Loup	Canal
Fullerton Canal from Davis Creek Reservoir	54700	Loup	Canal
Burwell-Sumter Canal from North Loup River	108000	Loup	Canal
Ord-North Loup Canal from North Loup River	109000	Loup	Canal

B. NeDNR field office surface water pump inspections

The NeDNR field office staff regularly inspect each surface water appropriation's diversion points as time and staff allow. NeDNR field offices serving the Basin are located in Lincoln, Norfolk, and Ord. The inspections gather data including:

- Evidence of pumpsite;
- Pumps that are running,
- Crops in fields, and
- Irrigation type.

Figure 2 depicts pumpsite visits for the years 2016 and 2017. The data for the information shown in Figure 2 is summarized in Table 3.

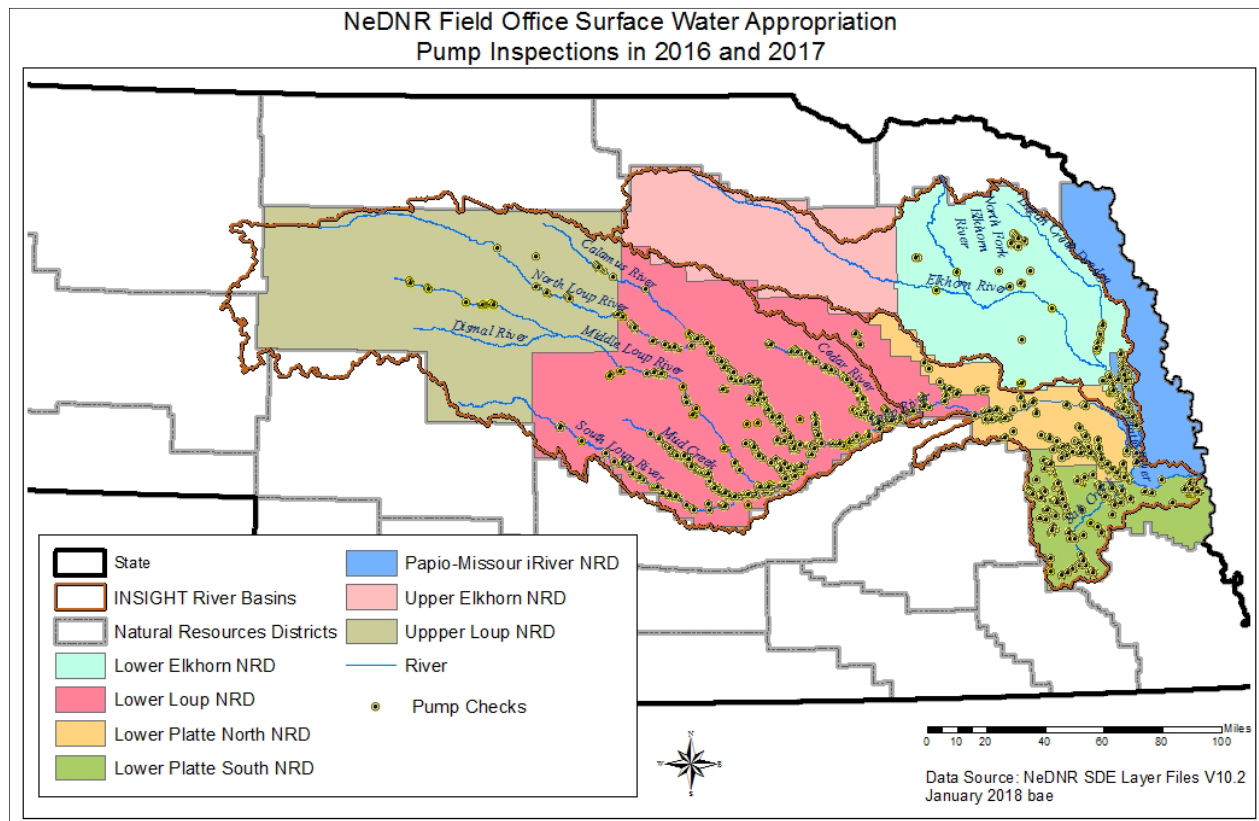


Figure 1. NeDNR surface water pumpsite inspections in the Lower Platte River Basin 2016-2017.

Table 3. Summary of NeDNR pumphouse inspections in the Lower Platte River Basin in 2016-2017.

Pumpsite Inspections						
NRD	2016			2017		
	Number of Inspections ¹	Pumps Running	Associated Permitted Acres ²	Number of Inspections ³	Pumps Running	Associated Permitted Acres ⁴
Lower Elkhorn	4	2	26	110	38	1,597
Lower Loup	222	158	8,195	875	237	12,631
Lower Platte North	3	1	0	248	5	149
Lower Platte South	11	5	289	301	2	85
Papio-Missouri River	5	3	375	55	0	0
Upper Elkhorn	2	0	0	0	0	0
Upper Loup	2	1	0	34	2	101
Totals	311	118	8,885	1,623	284	14,462

¹ Individual pumphouses may have more than one inspection per year

² Acres permitted under appropriation, actual irrigated acres may vary

³ Individual pumphouses may have more than one inspection per year

⁴ Acres permitted under appropriation, actual irrigated acres may vary

C. Water administration in water years 2016 and 2017

Water administration, or the closing upstream appropriations for benefit of a senior right when supplies are insufficient, was not needed in 2016, as water supplies were sufficient for all uses. However, in 2017, water administration was necessary to provide water for instream flow permits, A-17330 and A-17331. NeDNR field offices in Norfolk, Ord and Lincoln are responsible for water administration in separate portions of the Lower Platte River Basin, as summarized in Table 4.

Table 4. Water administration in 2017 in the Lower Platte River Basin by NeDNR field offices.

2017 Water Administration							
Appropriation for which Flow was Needed	Effective Date	Action Taken	Field Office	Type of Permits Administered	Number of Permits Impacted in the Loup River Basin	Number of Permits Impacted in the Elkhorn River Basin, the Lower Platte River Basin, continuing to the confluence of the Platte and Missouri Rivers	
A-17330	8-Jul	Close	Norfolk	Storage ⁵	5		
				NF ⁶	56		
			Lincoln	Storage	1		
				Storage	4		
A-17331	8-Jul	Close	Ord	Storage	21		
	9-Jul			NF	57		
	10-Jul	Open		Storage	21		
	11-Jul			NF	57		
	12-Jul	Close	Norfolk	Storage		19	
				NF		59	
	Lincoln		Storage		64		
			NF		11		
	13-Jul	Open	Ord	Storage	21		
	14-Jul			NF	58		
	15-Jul			Storage	21		
	21-Jul			NF	58		
	A-17330	26-Jul	Open	Norfolk	Storage		19
					NF		59
Lincoln				Storage		64	
				NF		11	
11-Sep		Close	Norfolk	NF	56		
				Storage	5		
			Lincoln	NF	3		
				Storage	5		
15-Sep	Open	Norfolk	NF	56			
			Storage	5			
		Lincoln	NF	3			
			Storage	5			

⁵ Storage = Permit to store water

⁶ NF = Designating types of permits that allow diversion from natural flow

D. Municipal and industrial surface water permit monitoring

No new municipal surface water permits or changes to this type of permit occurred in the years 2016 and 2017. Induced groundwater recharge permits have no reporting requirements as a condition of the permit. Currently, the two appropriators of induced groundwater recharge permits within the Basin are (1) the City of Lincoln and (2) Metropolitan Utilities District (MUD).

- The City of Lincoln has one induced groundwater recharge surface water permit and two municipal groundwater transfer permits for the Ashland wellfield. The monitoring of municipal groundwater transfer permits is discussed in Section E of this report.
- MUD has one induced groundwater recharge surface water permit and one municipal groundwater transfer permit for each of its two wellfields: A-17310 and A-10538 in the south wellfield: A-17318 and A-17356 in the west wellfield. The monitoring of municipal groundwater transfer permits is discussed in Section E of this report.

A summary of the induced groundwater recharge permits within the Basin can be found in Table 5.

Table 5. Surface water permits for induced groundwater recharge held by the City of Lincoln and MUD.

Surface Water Permits for Induced Groundwater Recharge						
Appropriator	Appropriation Number	Priority Date	Associated Groundwater Muni -Transfer Permit	Number of Wells	Cubic feet per second (cfs)	Reporting Required
City of Lincoln	A-17312	January 21, 1964	A-10367	31	704 (summer) ⁷	NO
					200 (all other seasons)	
	January 1, 1970	A-16917	7	No additional streamflow	NO	
	January 1, 1980		6	No additional streamflow		
	January 1, 1990		2	No additional streamflow		
January 1, 1993	2		No additional streamflow			
MUD	A-17310	January 1, 1970	A-10538	38	480	NO
		January 1, 1990		1	20	
	A-17318	October 6, 1993	A-17356	42	160	NO

⁷ Summer season = May 15 to September 15

E. NeDNR groundwater water permit monitoring

The data provided by permit holders of water pumped in 2017, for the applicable permits listed in Table 6 may be provided electronically, upon request. A list of the types of groundwater permits authorized by NeDNR can be found in Section 4.

The types of groundwater permits shown in Table 6 are authorized as follows:

- Municipal— (groundwater) Municipal Transfer Permit pursuant to *Neb. Rev. Stat.* §§ 46-613.01, 46-639 – 46-650
- Industrial Transfer—(groundwater) Industrial Transfer Permit pursuant to *Neb. Rev. Stat.* §§ 46-675 – 46-689
- Municipal Notice of Intent—A notice pursuant to *Neb. Rev. Stat.* § 46-655.01

Table 6. Active groundwater permits issued by NeDNR.

Groundwater Permits Issued by NeDNR within the Basin				
Permit Index Number	Permittee	Permit Number	Approval Date	Permit Type
3	Lincoln, City of	A-10367	5/28/1964	Municipal
4	Fremont, City of	A-10411	8/21/1964	Municipal
8	Wakefield, City of	A-10531	3/8/1965	Municipal
9	Plattsmouth, City of	A-10533	3/8/1965	Municipal
11	Metropolitan Utilities District	A-10538	6/9/1965	Municipal
17	Leigh, Village of	A-10578	5/10/1965	Municipal
18	Laurel, City of	A-10579	5/10/1965	Municipal
24	Ashland, City of	A-10589	5/10/1965	Municipal
26	Lincoln, City of	A-10595	5/10/1965	Municipal
27	Columbus, City of	A-10596	5/10/1965	Municipal
32	Fremont, City of	A-12171	4/29/1971	Municipal
33	Fremont, City of	A-13909	2/19/1976	Municipal
34	Columbus, City of	A-15704	10/17/1980	Municipal
41	Wayne, City of	A-16525	1/16/1987	Municipal
42	Laurel, City of	A-16530	1/16/1987	Municipal
49	Howells, Village of	A-16888	12/8/1989	Municipal
51	Howells, Village of	A-16911	4/6/1990	Municipal
52	Lincoln, City of	A-16917	8/31/1990	Municipal
53	Wayne, City of	A-16927	6/25/1990	Municipal
54	Bruno, Village of	A-16964	7/12/1990	Municipal
57	Howells, Village of	A-17082	9/16/1991	Municipal
58	Valparaiso, Village of	A-17086	9/16/1991	Municipal

Groundwater Permits Issued by NeDNR within the Basin				
Permit Index Number	Permittee	Permit Number	Approval Date	Permit Type
63	Valparaiso, Village of	A-17212	9/29/1992	Municipal
71	Columbus, City of	A-17325	12/11/1995	Municipal
72	Pleasant Dale, Village of	A-17351	4/11/1994	Municipal
73	Eagle, Village of	A-17352	10/27/1994	Municipal
74	Metropolitan Utilities District	A-17356	12/10/1998	Municipal
78	St. Paul, City of	A-17426	1/4/1996	Municipal
121	Clarkson, City of	A-17556	4/2/1998	Municipal
158	Humphrey, City of	A-17807	3/7/2001	Municipal
194	Palmer, Village of	A-17949	2/19/2002	Municipal
128	Ceresco, Village of	A-18018	8/27/2002	Municipal
199	Cuming County Rural Water District #1	A-18024	6/13/2005	Municipal
218	Weston, Village of	A-18070	6/13/2005	Municipal
212	Springfield, City of	A-18104	4/14/2006	Municipal
225	Cass County Rural Water District #2	A-18163	5/3/2006	Municipal
109	Tyson Fresh Meats, Inc.	I-4	10/22/1996	Industrial Transfer
110	Nebco, Inc.	I-5	9/27/1996	Industrial Transfer
270	Nebco, Inc.	I-5A	7/31/2006	Industrial Transfer
141	Hormel Foods Corp.	I-6	1/5/1999	Industrial Transfer
423	Coleridge, Village of	MNI-22	1/22/2014	Municipal Notice of Intent
261	Waverly, City of	MT-13	9/12/2007	Municipal
262	Cuming County Rural Water District #1	MT-14	6/7/2006	Municipal
263	Pierce, City of	MT-15	7/12/2007	Municipal
264	Madison, City of	MT-16	1/11/2007	Municipal
284	Louisville, City of	MT-23	9/29/2006	Municipal
332	Wayne, City of	MT-24	7/12/2007	Municipal
351	Palmer, Village of	MT-27	10/5/2007	Municipal
375	Broken Bow, City of	MT-35	11/30/2009	Municipal
391	Waverly, City of	MT-38	2/25/2011	Municipal

The annual report filed by the City of Lincoln and MUD regarding their Groundwater Municipal Transfer Permits can be provided upon request. A summary of their groundwater Municipal Transfer Permits can be found below in Table 7.

Table 7. Groundwater municipal transfer permits for the City of Lincoln and MUD.

Groundwater Municipal Transfer Permits					
Permit Holder	Permit Number	Priority Date	Maximum Daily Withdrawal	Total Annual Withdrawal	Reporting Required?
City of Lincoln	A-10367	June 15, 1931	60 Million Gallons	NA	YES
	A-16917	January 25, 1990	50 Million Gallons	NA	YES
MUD	A-10538	February 19, 1965	60 Million Gallons	NA	YES
	A-17356	March 1, 1994	104 Million Gallons	19 Billion Gallons	YES

3. NeDNR SURFACE WATER PERMITTING ACTIVITY

A. New surface water appropriations granted

In 2017, NeDNR took action on several filings by Twin Loups Reclamation District. These filings included:

- Relinquishments in part (relinquishing storage use water for irrigation- acres remained the same),
- Applications for new permits (to irrigate new acres using water from a reservoir), and
- Petitions requesting to redistribute stored water for irrigation.

The Twin Loups Reclamation District’s filings requested to divert no additional surface water.

Surface water applications approved from July 1, 2016 to December 31, 2017 from within the Basin are summarized below in Table 8. The surface water applications approved from July 1, 2016 to December 31, 2017 not in the Basin, but in a partnering NRD, are shown in Table 9.

Permit use codes are as follows:

- IR– “Irrigation”, a permit to divert water from natural flow for irrigation
- DO– “Domestic”, a permit to divert water for domestic use
- MF – “Manufacturing”, a permit to divert water for manufacturing, construction, or industrial uses.
- SI– “Supplemental Irrigation”, a permit to divert water from a reservoir for irrigation on land with a permit to divert from natural flow for irrigation (IR).
- SO– “Store-only”, a permit to divert water from a reservoir for irrigation
- ST–“Storage”, a permit to store water
- WS– “Waste Storage”, a permit to store waste from a livestock facility (permitted prior to law change making waste storage exempt from this type of permit)
- WT– “Wetland”, a permit to divert water for a wetland

Table 8. Surface water applications approved from July 1, 2016 to December 31, 2017 within the Basin.

Surface Water Applications ⁸ (All Uses) Approved July 1, 2016 to December 31, 2017									
NRD	Appropriation Number	Approval Date	Source	Location of Diversion or Reservoir (S-T-R)	Subbasin	Use	Grant in cfs	Grant in af	Permitted Acres
Lower Elkhorn	A-18558	7/7/2016	Maple Creek, East Fork	22-19-4E	Elkhorn River Norfolk to Waterloo	IR	1.36	NA	95.0
Lower Elkhorn	A-18674	9/23/2016	Elkhorn River	1-23-1W	Elkhorn River Norfolk to Waterloo	IR	0.56	NA	39.1

⁸ Once an application has been approved, it is then called an appropriation.

Surface Water Applications ⁸ (All Uses) Approved July 1, 2016 to December 31, 2017									
NRD	Appropriation Number	Approval Date	Source	Location of Diversion or Reservoir (S-T-R)	Subbasin	Use	Grant in cfs	Grant in af	Permitted Acres
Lower Elkhorn	A-19514	9/20/2017	Union Creek	34-21-2W	Elkhorn River Norfolk to Waterloo	IR	1.55	NA	108.5
Lower Elkhorn	A-18612	12/8/2017	Union Creek, Trib. To	22-22-1W	Elkhorn River Norfolk to Waterloo	ST	NA	36.1	NA
Lower Loup	A-19425	3/15/2017	Calamus Reservoir	6-21-16W	North Loup River	SO	NA	431.7	143.9
Lower Loup	A-19426	3/15/2017	Davis Creek Reservoir	30-17-12W	North Loup River	SO	NA	115.2	38.4
Lower Loup	A-19472	3/15/2017	Calamus Reservoir	6-21-16W	North Loup River	SO	NA	399.0	133.0
Lower Loup	A-19473	3/15/2017	Davis Creek Reservoir	30-17-12W	North Loup River	SO	NA	57.9	19.3
Lower Loup	A-19501	6/5/2017	Dead Horse Creek	18-15-14W	Middle Loup River	DO	0.02	NA	0.1
Lower Loup	A-19535	8/24/2017	Davis Creek Reservoir	30-17-12-W	North Loup River	SO	NA	104.1	34.7
Lower Platte North	A-19525	6/15/2017	Gruenewald Reservoir	8-15-1E	Lower Platte River Above North Bend	SO	NA	47.5	128.8
Lower Platte North	A-19524	12/22/2017	Rawhide Creek, Trib. To	26-17-9E	Elkhorn River Norfolk to Waterloo	WT	3.44	NA	NA
Lower Platte South	A-18581	6/15/2017	Cedar Creek, Trib. To	9-11-12E	Lower Platte R. North Bend to Louisville	IR	1.99	NA	139.0
Lower Platte South	A-18582 ⁹	10/26/2016	Four Mile Creek	17-11-13E	Lower Platte R. North Bend to Louisville	IR	2.29	NA	160.0
Lower Platte South	A-18603	11/15/2017	Oak Creek	34-12-5E	Lower Platte R. North Bend to Louisville	IR	0.15	NA	10.2
Papio-Missouri River	A-18588	9/16/2016	Zwiebel Creek	30-13-13E	Lower Platte R. North Bend to Louisville	DO	0.05	NA	1.8
Papio-Missouri River	A-19102	5/2/2017	Buckeye Creek	26-19-9E	Elkhorn River Norfolk to Waterloo	ST	NA	58.2	NA
Papio-Missouri River	A-19103	9/25/2017	Stork Reservoir	26-19-9E	Elkhorn River Norfolk to Waterloo	SI	NA	58.2	136.8
Papio-Missouri River	A-19562	10/30/2017	Bell Creek	24-18-9E	Elkhorn River Norfolk to Waterloo	IR	2.02	NA	141.6
Upper Loup	A-19329	9/16/2016	Loup River, Middle	9-23-28W	Middle Loup River	IR	0.06	NA	4.0
Upper Loup	A-18548	10/28/2016	Loup River, North	9-23-23W	Middle Loup River	IR	1.83	NA	128.4
Upper Loup	A-19549	8/3/2017	Loup River, Middle, Trib. To	22-24-36W	North Loup River	MF	NA	10.0	NA

⁹ A-18582 is found on both the approved and canceled tables. Permit was approved, with the condition that a map be filed within 6 months of that date. No map was filed, therefore permit was then canceled.

Table 9. Surface water applications approved July 1, 2016 to December 31, 2017 not in the Basin.

Surface Water Applications ¹⁰ (All Uses) Approved July 1, 2016 to December 31, 2017, Not in the Lower Platte River Basin									
NRD	Appropriation Number	Approval Date	Source	Location of Diversion or Reservoir (S-T-R)	Water Division	Use	Grant in cfs	Grant in af	Permitted Acres
Papio-Missouri River	A-19504	7/17/2016	Thompson Creek	14-14-12E	Upper Missouri River and Tributaries	ST	NA	30.7	NA

¹⁰ Once an application has been approved, it is then called an appropriation

B. Cancellations of surface water appropriations

NeDNR must follow statutory requirements when proceeding with any cancellation, in full or in part, of a surface water appropriation. Each cancellation falls under one of the following:

Basis for NeDNR's Action:

- Application deficiencies.
 - Authority upon which the action was based: *Neb. Rev. Stat. §46-233(3)*. An application returned to the applicant for correction is not returned to the NeDNR within ninety days, the application shall stand dismissed.
- BU – (Beneficial Use)- A field investigation found the appropriator had not perfected their water right by beneficially applying the water, in the time allowed stated in the application approval order.
 - Authority upon which the action was based: *Neb. Rev. Stat. §46-229.02(7)* A water appropriation that has not been perfected pursuant to the terms of the permit may be canceled by the department without complying with sections 46-229.01 to 46-229.04 if the owner of such appropriation fails to comply with any of the conditions of approval in the permit, except that this subsection does not apply to appropriations to which subsection (2) of section 46-237 applies.
- Not constructed—The NeDNR received information that the appropriator had not constructed their water right within the time allowed, which had been stated in the application approval order.
 - Authority upon which the action was based: *Neb. Rev. Stat. §46-238 (1)*, which states that within twelve months after the approval of any application for water for irrigation, power, or other useful purpose by the department, the person making such application shall commence the excavation or construction of the works in which it is intended to divert the water and the actual construction of any water power plant and reservoir or reservoirs for storage in connection therewith and shall vigorously, diligently, and uninterruptedly prosecute such work to completion unless temporarily interrupted by some unavoidable and natural cause. A failure to comply with this section shall work a forfeiture of the appropriation and all rights under the appropriation.
- PDNU— (Preliminary Determination of Nonuse) —After a field investigation found the appropriation had not been used in the last five years, the owner did not successfully contest the preliminary determination of nonuse.
 - Authority upon which the action was based: *Neb. Rev. Stat. §§ 46-229.02(1) through 46-229.02(6)* which state that if the NeDNR makes a preliminary determination that an appropriation has not been used for more than five consecutive years, and the owner of said appropriation does not successfully contest the determination, then NeDNR may cancel said appropriation in whole or in part.
- REL—(Relinquishment) - Appropriator filed a voluntary relinquishment of water appropriation.

- Authority upon which the action was based: Department of Natural Resources *Rules for Surface Water, Neb. Admin. Code. Title 457*, Chapter 3, which specifies that any appropriation, or part of any appropriation, may be voluntarily relinquished.
- Requested by applicant.
 - An applicant has filed correspondence in the NeDNR indicating the surface water project proposed by the pending application will not be moving forward and their desire to withdrawal the application, followed by the dismissal of the application by NeDNR.

The appropriations that are canceled in full, canceled in part, or dismissed within the Basin are summarized below in Table 10. The appropriations that are canceled in full, canceled in part, or dismissed not in the Basin, but within a partnering NRD, are summarized in Table 11.

Permit use codes are as follows:

- IR– “Irrigation”, a permit to divert water from natural flow for irrigation
- DO– “Domestic”, a permit to divert water for domestic use
- SI– “Supplemental Irrigation”, a permit to divert water from a reservoir for irrigation on land with a permit to divert from natural flow for irrigation (IR).
- SO– “Store-only”, a permit to divert water from a reservoir for irrigation
- ST– “Storage”, a permit to store water
- WS– “Waste Storage”, a permit to store waste from a livestock facility (permitted prior to law change making waste storage exempt from this type of permit)
- WT– “Wetland”, a permit to divert water for a wetland

Table 10. Surface water appropriations canceled in full, in part, or dismissed from July 1, 2016 to December 31, 2017, in the Basin.

Surface Water Appropriations (All Uses) Canceled in Full, Canceled in Part, or Dismissed from July 1, 2016 to December 31, 2017											
NRD	App. Number	Canceled Date	Source	Status	Location of Diversion or Reservoir (S-T-R)	Use	Begin Acres	Canceled Acres	Canceled (cfs)	Canceled (af)	Basis for NeDNR's Action
Lower Elkhorn	A-18877	11/18/2016	Elkhorn River, North Fork, West Branch	Dismissed ¹¹	9-28-3W	IR	0	0	0	0	Applicant Request
Lower Elkhorn	A-15178	1/10/2017	Pebble Creek	Canceled in Full ¹²	28-20-6E	IR	72.9	72.9	1.04	NA	REL-6061
Lower Elkhorn	A-13284	1/27/2017	Dry Creek	Canceled in Full	11-18-3E	IR	129.9	129.9	1.86	NA	REL-6088
Lower Elkhorn	A-14236	3/15/2017	Maple Creek, Middle Fork	Canceled in Full	13-18-4E	IR	61	61	0.87	NA	REL-6118
Lower Elkhorn	A-19075	9/20/2017	Maple Creek	Dismissed	5-18-8E	DO	0	0	0	0	Applicant Request
Lower Elkhorn	A-3135	11/15/2017	Logan Creek	Canceled in Full	25-26-5E	IR	68.8	68.8	0.49	NA	REL-6347

¹¹ A dismissed application is an application that had been filed in NeDNR but had not been approved prior to its dismissal.

¹² A canceled in full appropriation was once an active permit to appropriate surface water that is permanently terminated.

Surface Water Appropriations (All Uses) Canceled in Full, Canceled in Part, or Dismissed from July 1, 2016 to December 31, 2017

NRD	App. Number	Canceled Date	Source	Status	Location of Diversion or Reservoir (S-T-R)	Use	Begin Acres	Canceled Acres	Canceled (cfs)	Canceled (af)	Basis for NeDNR's Action
Lower Loup	A-10233	11/18/2016	Sand Creek	Canceled in Full	4-19-18W	IR	31	31	0.44	NA	PDNU
Lower Loup	A-17853	11/18/2016	Cedar Creek, Trib. To	Canceled in Full	32-17-10W	WS	NA	NA	NA	139	Not Constructed
Lower Loup	A-17854	11/18/2016	Cedar Creek, Trib. To	Canceled in Full	32-17-10W	WS	NA	NA	NA	217	Not Constructed
Lower Loup	A-17855	11/18/2016	Cady Creek, Trib. To	Canceled in Full	32-17-10W	WS	0	0	0	202	Not Constructed
Lower Loup	A-10515	12/20/2016	Mud (Beaver) Creek	Canceled in Full	29-14-16W	IR	28.6	28.6	0.41	NA	REL-6050
Lower Loup	A-11031	1/11/2017	Oak Creek	Canceled in Full	27-13-15W	IR	30	30	0.436	NA	PDNU
Lower Loup	A-14003	2/14/2017	Loup River	Active ¹³	6-16-4W	IR	76.1	0.5	0.01	NA	REL-6095
Lower Loup	A-15903	2/14/2017	Loup River	Active	6-16-4W	IR	72	0.5	0.01	NA	REL-6087
Lower Loup	A-5491	3/15/2017	Loup River, Middle	Active	3-18-17W	IR to DO	70	69	0.6	NA	REL-6052
Lower Loup	A-15972	3/24/2017	Grade Stabilization Reservoir 1-1	Active	23-15-11W	SI	119.4	93.4	0	0	PDNU
Lower Loup	A-14843	6/8/2017	Loup River	Canceled in Full	4-16-5W	IR	99.8	99.8	1.43	NA	REL-6195
Lower Loup	A-9371	7/25/2017	Mud (Beaver) Creek	Canceled in Full	7-12-14W	IR	139.08	139.08	1.99	NA	PDNU
Lower Loup	A-1920	8/9/2017	Mud (Beaver) Creek	Canceled in Full	8-12-14W	IR	63	63	0.9	NA	PDNU
Lower Loup	A-3205	8/9/2017	Mud (Beaver) Creek	Active	7-12-14W	IR	122.9	85.7	0.71	NA	PDNU
Lower Loup	A-10635	8/24/2017	Mud (Beaver) Creek	Active	14-15-18W	IR	106	85.6	1.22	NA	PDNU
Lower Loup	A-17602	8/24/2017	Calamus Reservoir	Active	6-21-16W	SI	56,386	0	NA	569.2	Petition MIP-6102
Lower Loup	A-18290	8/24/2017	Calamus Reservoir	Active	6-21-16W	SI	42,141	0	NA	425.5	Petition MIP-6103
Lower Loup	A-18392	8/24/2017	Calamus Reservoir	Active	6-16-21W	SI	395.7	0	NA	0	Petition MIP-6104

¹³ An active appropriation is a permit to appropriate water for which a portion of the appropriation has been canceled (thus, included on this table), but a portion remains active and water may be beneficially used according to the permit's terms and conditions.

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NRD	App. Number	Canceled Date	Source	Status	Location of Diversion or Reservoir (S-T-R)	Use	Begin Acres	Canceled Acres	Canceled (cfs)	Canceled (af)	Basis for NeDNR's Action
Lower Loup	A-13354	9/8/2017	Loup River	Canceled in Full	6-16-4W	IR	17.4	17.4	0.25	NA	REL-6286
Lower Platte North	A-6523	7/7/2016	Shell Creek	Canceled in Full	34-18-3E	IR	70	70	0.5	NA	REL-5709
Lower Platte North	A-6637	1/27/2017	Elkhorn River, Trib. To	Canceled in Full	31-18-9E	IR	268	268	1.91	NA	REL-6637
Lower Platte South	A-18568	7/29/2016	Callahan Creek	Dismissed	36-12-9E	IR	0	0	0	0	Applicant Request
Lower Platte South	A-16540	11/18/2016	Haines Branch	Canceled in Full	3-9-6E	FW	NA	NA	NA	0.04	REL-6000
Lower Platte South	A-18580	12/20/2016	Four Mile Creek	Dismissed	8-11-13E	IR	0	0	0	0	Application Deficiencies
Lower Platte South	A-2225	1/10/2017	Rock Creek	Canceled in Full	31-13-7E	IR	75.6	75.6	1.08	NA	REL-6070
Lower Platte South	A-18582	6/8/2017	Four Mile Creek	Canceled in Full	17-11-13E	IR	160	160	2.29	NA	Application Deficiencies
Lower Platte South	A-17485	6/26/2017	Salt Creek, Trib. To	Canceled in Full	21-11-7E	ST	NA	NA	NA	37	REL-6238
Lower Platte South	A-14455	7/28/2017	Four Mile Creek, West Branch	Canceled in Full	33-12-13E	IR	285.7	285.7	4.08	NA	REL-6268
Lower Platte South	A-7790A	7/28/2017	Four Mile Creek, West Branch	Canceled in Full	34-12-13E	IR	23	23	0.16	NA	REL-6267
Lower Platte South	A-7789	7/28/2017	Four Mile Creek	Canceled in Full	34-12-13E	IR	18	18	0.13	NA	REL-6266
Papio-Missouri River	A-18864	9/16/2016	Elkhorn River	Dismissed	29-18-9E	IR	0	0	0	0	Request by Applicant
Papio-Missouri River	A-19204	9/27/2016	Bell Creek	Dismissed	12-18-9E	IR	0	0	0	0	Request by Applicant
Papio-Missouri River	A-13680	1/27/2017	Papillion Creek, Big	Canceled in Full	6-8-11E	IR	109	109	1.56	NA	REL-6091
Papio-Missouri River	A-13681	1/27/2017	Bell Creek, Little, Trib. To	Canceled in Full	9-18-10E	IR	94	94	1.34	NA	REL-6092
Upper Elkhorn	A-18746	9/16/2016	Blacks0ke Creek	Dismissed	33-24-6W	IR	0	0	0	0	Request by Applicant

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Table 11. Surface water appropriations canceled in full, in part, or dismissed July 1, 2016 to December 31, 2017, not in the Basin.

Surface Water Appropriations (All Uses) Canceled in Full, Canceled in Part, or Dismissed July 1, 2016 to December 31, 2017, Not in the Lower Platte River Basin											
NRD	App. Number	Canceled Date	Water Division	Status	Location of Diversion or Reservoir (S-T-R)	Use	Begin Acres	Canceled Acres	Canceled cfs	Canceled af	Basis for NeDNR's Action
Papio-Missouri River	A-18962	11/15/2016	Upper Missouri River and Tributaries	Canceled In Full	24-13-13E	IR	156.1	156.1	2.23	NA	Appropriation Not Perfected in Time BU
Papio-Missouri River	A-19469	1/20/2017	Upper Missouri River and Tributaries	Dismissed	5-15-13E	ST	NA	NA	NA	0	Project Does Not Require a Permit
Papio-Missouri River	A-13680	1/27/2017	Upper Missouri River and Tributaries	Canceled In Full	6-18-11E	IR	109.0	109.0	1.56	NA	REL-6091
Lower Platte South	A-13589	8/8/2016	Nemaha and Lower Missouri River and Tributaries	Canceled In Full	1-9-12E	IR	133.7	133.7	1.91	NA	PDNU
Lower Platte South	A-19143	9/27/2016	Nemaha and Lower Missouri River and Tributaries	Canceled In Full	16-10-10E	IR	94.7	94.7	1.35	NA	BU
Lower Platte South	A-19037	1/10/2017	Nemaha and Lower Missouri River and Tributaries	Canceled In Full	36-10-12E	ST	NA	NA	NA	100	Failure to File Plans
Lower Platte South	A-19038	1/10/2017	Nemaha and Lower Missouri River and Tributaries	Canceled In Full	36-10-12E	SS	NA	NA	NA	200	Failure to File Plans
Lower Platte South	A-19039	1/10/2017	Nemaha and Lower Missouri River and Tributaries	Canceled In Full	36-10-12E	ST	NA	NA	NA	100	Failure to File Plans
Lower Platte South	A-19040	1/10/2017	Nemaha and Lower Missouri River and Tributaries	Canceled In Full	36-10-12E	SI	375.0	375.0	NA	300	Failure to File Map
Lower Platte South	A-19041	1/10/2017	Nemaha and Lower Missouri River and Tributaries	Canceled In Full	36-10-12E	SI	375.0	375.0	NA	100	Failure to File Map
Lower Platte South	A-14626	3/15/2017	Nemaha and Lower Missouri River and Tributaries	Canceled In Full	14-10-13E	ST	NA	NA	NA	9.8	Dam Removed
Lower Platte South	A-14627	3/15/2017	Nemaha and Lower Missouri River and Tributaries	Canceled In Full	14-10-13E	SI	92.9	92.9	9.8	NA	PDNU

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Surface Water Appropriations (All Uses) Canceled in Full, Canceled in Part, or Dismissed July 1, 2016 to December 31, 2017,
 Not in the Lower Platte River Basin

NRD	App. Number	Canceled Date	Water Division	Status	Location of Diversion or Reservoir (S-T-R)	Use	Begin Acres	Canceled Acres	Canceled cfs	Canceled af	Basis for NeDNR's Action
Lower Platte South	A-14105	7/25/2017	Nemaha and Lower Missouri River and Tributaries	Canceled In Full	31-11-13E	IR	12.9	12.9	0.18	NA	PDNU
Lower Platte South	A-19267	11/15/2017	Nemaha and Lower Missouri River and Tributaries	Canceled In Full	22-10-13E	IR	104.7	104.7	1.50	NA	PDNU

C. Municipal and Industrial Surface Water Permitting Activity

In the reporting period NeDNR had no surface water permitting activity within the Basin for the following uses:

- Induced Groundwater Recharge Permits—No cancellations or new permits issued.
- Manufacturing Permits—No cancellations or new permits issued.
- Municipal Permits—No cancellations or new permits issued.

4. NeDNR GROUNDWATER PERMITTING ACTIVITY

In the reporting period NeDNR had groundwater permitting activity within the Basin for the following uses:

- Application to Drill Without Regard to Spacing—No cancellations or new permits issued
- Industrial Groundwater Transfers—No cancellations or new permits issued
- Industrial Transfer Notice—No cancellations or new permits issued
- Municipal Groundwater Transfers – No cancellations or new permits issued
- Municipal Notice of Intent—No cancellations or new permits issued.
- Permit to Violate Well Spacing—No cancellations or new permits issued.
- Transfer to Adjoining State permit—No cancellations or new permits issued.

5. ESTIMATED STREAM DEPLETIONS BY NRD

Calculations were done using the methodology that was outlined in the Plan. NeDNR estimated NCCIR and acre-feet of stream depletions and accretions resulting from surface water permitting as summarized in Tables 12 and 13. Net stream depletion or accretion by NRD found in Table 14.

Permit use codes are as follows:

- IR—“Irrigation”, a permit to divert from natural flow for irrigation
- DO—“Domestic”, a permit to divert water for domestic use
- SI— “Supplemental Irrigation”, a permit to divert water from a reservoir for irrigation on land with a permit to divert from natural flow for irrigation (IR).
- SO—“Store-Only”, a permit to divert water from a reservoir for irrigation

Table 12. Computed depletion by NRD for applications to irrigate using surface water approved from July 1, 2016 through December 31, 2017.

Computed Stream Depletion by NRD for Newly Permitted Acres to Use Surface Water					
NRD	Number of Applications Approved		Purpose of Use	Newly Permitted Acres	Stream Depletion in Acre-Feet
	2016	2017			
Lower Elkhorn	2	0	IR	134.1	117
	0	1	IR	108.5	
Lower Loup	0	5	SO	369.3	0 ¹⁴
	0	1	DO	0.1	
Lower Platte North	0	1	SO	128.8	0
Lower Platte South	0	2	IR	149.2	65
Papio-Missouri River	1	0	DO	1.8	0
	0	1	IR	141.6	67
	0	1	SI	136.8	0
Upper Elkhorn	0	0	0	0	0
Upper Loup	2	0	IR	132.4	118
Total IR Basin-Wide				665.8¹⁵	367

¹⁴Depletions for acres irrigated using stored water from a reservoir are considered zero due to the reservoirs being filled during non-irrigation season. Domestic use permits' depletion amounts round to less than one acre-foot.

¹⁵Total acres for irrigation from natural flow (IR). Acres irrigated using stored water or for domestic use are not in this total.