LOWER ELKHORN

Natural Resources District

Lower Platte River Basin Coalition Plan – Annual Report (March 2, 2026)

Table of Contents

1.0 Introduction

The Lower Elkhorn Natural Resource District (LENRD) covers approximately 2,591,300 acres; with predominant land uses divided among agriculture (76%), pasture/grassland (20%), and small areas of forests, open water, wetlands, and urbanized areas (<4%).

The District's Board of Directors approved the interlocal agreement which agreed to the adoption of the Lower Platte River Basin Water Management Plan on November 21st, 2017. This action, along with the six other Natural Resource Districts and the Nebraska Department of Natural Resources (now the Department of Water, Energy, and Environment (DWEE)), set forth a collective effort to work cooperatively towards the management and development of the water resources within the Lower Platte Basin.

For future reference, the Board of Directors for the Lower Elkhorn NRD approved acceptance of the terms of the Interlocal Cooperative Agreement #3 for the Lower Platte River Basin Water Management Plan Coalition on March 24, 2022, which also sets forth the amounts of available depletions as part of the second increment.

Since 2009, the Lower Elkhorn NRD has utilized a managed-growth philosophy when considering the decision to allow new groundwater uses for agricultural irrigation purposes. Prior to December of 2008, no restrictions were in place that limited property owners regarding the development of agricultural land for irrigation purposes. Current policy requires an approved variance from the District before expanding groundwater use for irrigation purposes. This requirement has been in place since April of 2009 within the LENRD. No limitations have been enacted on the approval of permits for high-capacity groundwater wells for other uses, such as commercial, industrial, livestock, or municipal wells, however, any request to construct a new well for any of those purposes is reviewed for any potential impacts to existing groundwater supplies and/or impacts to groundwater quality prior to approval.

The Lower Platte River Basin Water Management Plan provides guidance to the partners in respect to the amount of (excess) available water that can be allotted for new uses (depletions). Coalition partners have, in return, agreed to adhere to the suggested limits for the second five-year increment of the plan. Table 1 lists the allowable depletions for each sub-basin of the Lower Platte Basin and Table 2 breaks it down into the available amount for each Natural Resource District. As listed in Table 2, the number of depletions available during the second increment, to be shared between the Lower Elkhorn Natural Resource District and the Nebraska Department of Natural Resources is ***8,347*** Acre-Feet of allowable new depletions.

Table 1. – Second 5-year Increment Allowable New Depletions by Basin

Basin	Average Peak Season Excess Supply (acre-feet)	Second 5-year increment Allowable Development (acre-feet)
Full Lower Platte Basin	228,894	22,889
Loup Basin (46% BSW)	105,291	10,529
Elkhorn Basin (32% BWS)	73,246	7,325
Lower Platte Subbasins (22% BWS)	50,357	5,036

Table 2. – Second 5-Year Increment Allowable New Depletions by NRD

NRD	Allowable Depletions by NRD - 2nd Increment	1st Increment Carryover	Total
Upper Loup NRD	3,369	2,065	5,435
Lower Loup NRD	7,160	4,749	11,908
Upper Elkhorn NRD	1,831	1,134	2,965
Lower Elkhorn NRD	5,493	2,853	8,347
Papio-Missouri NRD	1,057	768	1,825
Lower Platte South NRD	1,209	890	2,098
Lower Platte North NRD	2,770	966	3,736
TOTAL	22,889	13,425	36,315

This report and its content will serve to fulfill the annual data collection and reporting requirement of the Lower Platte River Basin Management Plan for the LENRD for the year 2025, as required in *Section 5.0 – Plan Review and Monitoring, Lower Platte River Basin Management Plan.*

2.0 Certified Irrigated Acres

The District initiated the process of certifying irrigated acres in January of 2013, and conducts public hearings to certify new irrigated acres, or modifications to existing certified acres on an annual, or as needed basis.

Rule 14 of the Lower Elkhorn Districts Rules & Regulations for the Enforcement of the Nebraska Groundwater Management and Protection Act indicates that the District will certify, as irrigated, any tract of land greater than two acres that (1) has been irrigated any one out of ten years, from 1999 to 2008, (2) is currently enrolled in a federal, state, or local conservation program and was classified as irrigated land by the local County Assessor within one year prior to being enrolled in such a program, (3) has otherwise been allowed to develop under an approval granted by the District's Board of Directors since 2007, (4) has otherwise been allowed to develop under an approval granted by the NeDNR or DWEE since 2007, or (5) is irrigated by wastewater effluent from a livestock operation or municipality that is operating in compliance with a Clean Water Act permit.

Table 3. – LENRD Certified Irrigated Acres – 2/24/2026

LENRD CERTIFIED IRRIGATED ACRES BY SOURCE				
	GROUNDWATER	***SURFACE WATER***	***WASTEWATER***	***TOTAL ACRES BY COUNTY***
ANTELOPE	*435.94*	*-*	*-*	*435.94*
BURT	*16,450.19*	*1,077.36*	*1,505.06*	*19,032.61*
CEDAR	*48,933.97*	*529.80*	*432.94*	*49,896.71*
COLFAX	*24,864.53*	*407.87*	*2,249.11*	*27,521.51*
CUMING	*59,801.61*	*2,040.74*	*14,258.59*	*76,100.94*
DAKOTA	*-*	*-*	*-*	*-*
DIXON	*15,412.82*	*422.12*	*191.79*	*16,026.73*
DODGE	*67,777.23*	*3,954.06*	*2,428.12*	*74,159.41*
KNOX	*11,451.90*	*70.00*	*-*	*11,521.90*
MADISON	*125,017.34*	*2,067.67*	*3,585.54*	*130,670.55*
PIERCE	*156,529.67*	*1,338.15*	*476.94*	*158,344.76*
PLATTE	*24,323.06*	*-*	*2,220.71*	*26,543.77*
STANTON	*39,723.80*	*1,216.11*	*1,940.44*	*42,880.35*
THURSTON	*12,098.81*	*373.87*	*634.80*	*13,107.48*
WAYNE	*50,345.70*	*913.42*	*1,761.00*	*53,020.12*
TOTAL IRRIGATED ACRES BY SOURCE	*653,166.57*	*14,411.17*	*31,685.04*	
Net change from previous report	***0***	***0***	***0***	
TOTAL IRRIGATED ACRES	*699,262.78*			

As indicated by the data in Table 3, groundwater is the primary water source for agricultural irrigation in the Lower Elkhorn NRD with current inventory totaling ***653,166.57*** acres irrigated by this source. ***Note: This current inventory only includes a portion of the total new irrigated acres approved in conjunction with the Lower Platte River Basin Management Plan, since only a portion of the new irrigated acres have been formally certified as irrigated by the District. No additional acres have been certified since the March 2025 Lower Platte River Basin Coalition Plan – Annual Report.***

The LENRD is also home to many livestock operations and species include: beef cattle (feedlot and cow/calf), dairy, swine, and poultry operations (both egg and meat-bird production). Current production trends for livestock and poultry operations indicate that large numbers of animals are situated on individual farms, which will require large volumes of water necessary for production. Many of these operations are also required to have operating permits to comply with the Clean Water Act requirements. Some of these locations will apply groundwater, as necessary, alongside animal waste/lagoon effluent for irrigation of growing crops. To date, records indicate that ***31,685.04*** acres utilize wastewater as a source of irrigation water. ***Note: No additional acres have been added to this category since the March 2025 Lower Platte River Basin Coalition Plan – Annual Report.***

To date, certification records show that surface water irrigation comprises the smallest increment of the total irrigated acreage in the District, estimated at ***14,411.17***. ***Note: No additional acres have been added to this category since the March 2025 Lower Platte River Basin Coalition Plan – Annual Report.***

3.0 Municipal, Water-Use Data

Table 4 (below) contains the 2020 population and the per-capita water use from 2024. The [2025 Usage/Gal.] data generated for this 2025 report are significantly divergent from previous years, so we hope to complete additional QA/QC of the database calculations to ensure we report accurate results.

Table 4: LENRD_Municipal Water-Use Data_2025

System Name	2020 Pop.	2025 Usage/Gal.	Gal/Capita/Day
City of Battle Creek	1,397		150.00
City of Clarkson	641		131.00
City of Hooper	857		100.00
City of Humphrey	857		174.00
City of Laurel	972		198.00
City of Lyons	824		165.00
City of Madison	2,561		115.00
City of Norfolk	24,955		179.00
City of Oakland	1,571		178.00
City of Osmond	873		184.00
City of Pierce	2,013		138.00
City of Plainview	1,398		194.00
City of Randolph	1,035		160.00
City of Scribner	754		161.00
City of Stanton	1,814		124.00
City of Tilden	1,105		171.00
City of Wakefield	1,545		184.00
City of Wayne	5,973		161.00
City of West Point	3,481		150.00
City of Wisner	1,323		102.00
Village of Beemer	610		167.00
Village of Belden	127	Served by WauColRWS	NA
Village of Bancroft	458		142.00
Village of Carroll	237		182.00
Village of Concord	162		96.00
Village of Craig	202		198.00
Village of Creston	206		105.00
Village of Dixon	125		106.00
Village of Dodge	550		144.00
Village of Emerson	902		145.00

Village of Hoskins	281		100.00
Village of Howells	657		206.00
Village of Leigh	396		203.00
Village of Magnet	54	Served by WauColRWS	NA
Village of McLean	25	Served by WauColRWS	NA
Village of Meadow Grove	249		130.00
Village of Nickerson	334		96.00
Village of Pender	1,204		125.00
Village of Pilger	305		159.00
Village of Snyder	327		162.00
Village of Tilden	1,105		151.00
Village of Uehling	271		144.00
Village of Wausa	562		91.00
Village of Winside	574		94.00
Woodland Park CDP	1,621		129.00
Logan East Rural Water District	NA		NA
Cardinal Health	NA		NA
Henningsen Foods Inc	NA		NA

4.0 New Groundwater Allocations and Depletion Impact

Prior to participation in the Lower Platte River Basin Management Plan, the only accounting for new groundwater consumptive uses by the Lower Elkhorn Natural Resource District would be the new irrigated acres located within the hydrologically connected areas authorized by an approved Variance from the District, and most importantly those acres approved under the prior requirements of LB 483. The LENRD has required an approved variance to expand irrigated acres districtwide since early 2009. A variance is required for both the Hydrologically Connected and Non-Hydrologically Connected portions of the District, which under the current boundaries (as recognized by the District and the Nebraska Department of Natural Resources) equals approximately a 1/3rd (Hydrologically Connected) and 2/3rd (Non-Hydrologically Connected) split.

In October of 2025, the Lower Elkhorn NRD Board of Directors approved a motion that instructed staff to schedule a sign-up period for Standard Variances to be facilitated from October 15 to November 17, 2025 and to allow up to 400 Acre Feet of new peak season depletions in the Hydrologically Connected Area, and up to 3,750 new groundwater irrigated acres in the Non Hydrologically Connected Area. In addition, the Conditions for Approval Policy was reauthorized which allocates 14 inches per irrigated acre/annually for any new irrigation well that is constructed under an approved variance.

In January and February 2026, the Lower Elkhorn NRD Board of Directors approved 398.34 Acre Feet of new peak-season depletions, or 3,598.38 new acres, in the Hydrologically Connected Area, and 3,830.13 new acres in the Non-Hydrologically Connected Portion of the District. Site-specific information regarding the locations associated with the approved peak-season depletions is contained within Appendix A, which is attached to this report.

5.0 Transfers

The Lower Elkhorn Natural Resource District did not process any groundwater use transfer requests from within the hydrologically connected boundary area (in the LENRD) during this reporting period, and therefore no data is provided for this section.

6.0 Permits for High-Capacity Wells

Permits are only required to construct a high capacity well (any well constructed or equipped to pump greater than 50 gallons per minute) in the Lower Elkhorn NRD. Table 5 lists the well permits issued for construction of high-capacity wells in the Lower Elkhorn NRD between January 1, 2025 through December 31, 2025. A breakdown of this inventory includes permits for: irrigation (98) (26 replacement well permits, 72 new), commercial/industrial (3), livestock (4), public water supply (1), and other (1).

Table 5. 2025 Well Permits in the LENRD

High Capacity Well Permit Type	Number of Approved Permits	Average Capacity (GPM)
Irrigation (new wells)	72	1011 (estimated)
Irrigation (replacement)	26	739
Livestock	4	not reported
Public Water Supply	1	not reported
Commercial/Industrial	3	450
Other	1	500
Total:	**107**	**563**

7.0 Retirement of Groundwater Consumptive Uses

During the 2025 reporting period, there were no new requests for retirements of groundwater uses inventoried or reviewed within the Lower Elkhorn NRD.

8.0 Flow Meter Data

As of January 1, 2019, all active high-capacity wells are required to be equipped with a flow meter to measure the total annual groundwater withdrawal, and to report water-use readings to the LENRD by December 1 of each calendar year.

The water use information was inventoried into a central data management system that was developed for the LENRD by Phoenix Webgroup (PWG) of Waverly, NE. This data management system, which housed information from over 5,000 flow meters, also contained a user interface that allowed owners or operators of wells to submit their information using a web-based interface.

In 2025, the water use information was inventoried and relocated into a central data management system that was developed for the LENRD by Longitude 103 of Scottsbluff, NE. This data management system, which houses information from over 5,000 flow meters, also contains a user interface that allowed owners or operators of wells to submit their information using a web-based interface.

The LENRD has been working with producers to populate the data management system and has few remaining records to be added to the database. We have not yet generated data summaries of our 2025 irrigation season meter records.

9.0 Water Banking Activities

The Lower Elkhorn NRD does not currently participate in any water banking activities and therefore no data exists for this reporting requirement.

10.0 Stream-flow Accretion Activities

Within the Lower Elkhorn NRD there are currently no operating projects that would create reporting data associated with stream flow augmentation or to compensate for any conjunctive management requirements.

11.0 Groundwater Elevation Observations

Groundwater level observations are collected annually from a network of 237 privately owned irrigation wells. Periods of record will date back to the mid 1970's for most of these locations.

Spring 2025

Groundwater elevations were measured at 234 locations in the spring of 2025 and rose at most observation locations within the District between Spring 2024 to Spring 2025. The average rise was 0.65 feet, representing the first year-to-year rise since 2019-2020. Water levels remain 2.7-6.5 feet below the spring water levels recorded in 2021.

2025 Spring Water Levels

- 234 Wells measured in spring 2025, many wells measured since the mid-1970s
- Wells measured .65' higher on average across the district. The first increase from year to year since 2019-2020.
- 82 wells decreased, 152 increased
- Wells ranged from a decrease of 3.85' to an increase of 7.04'

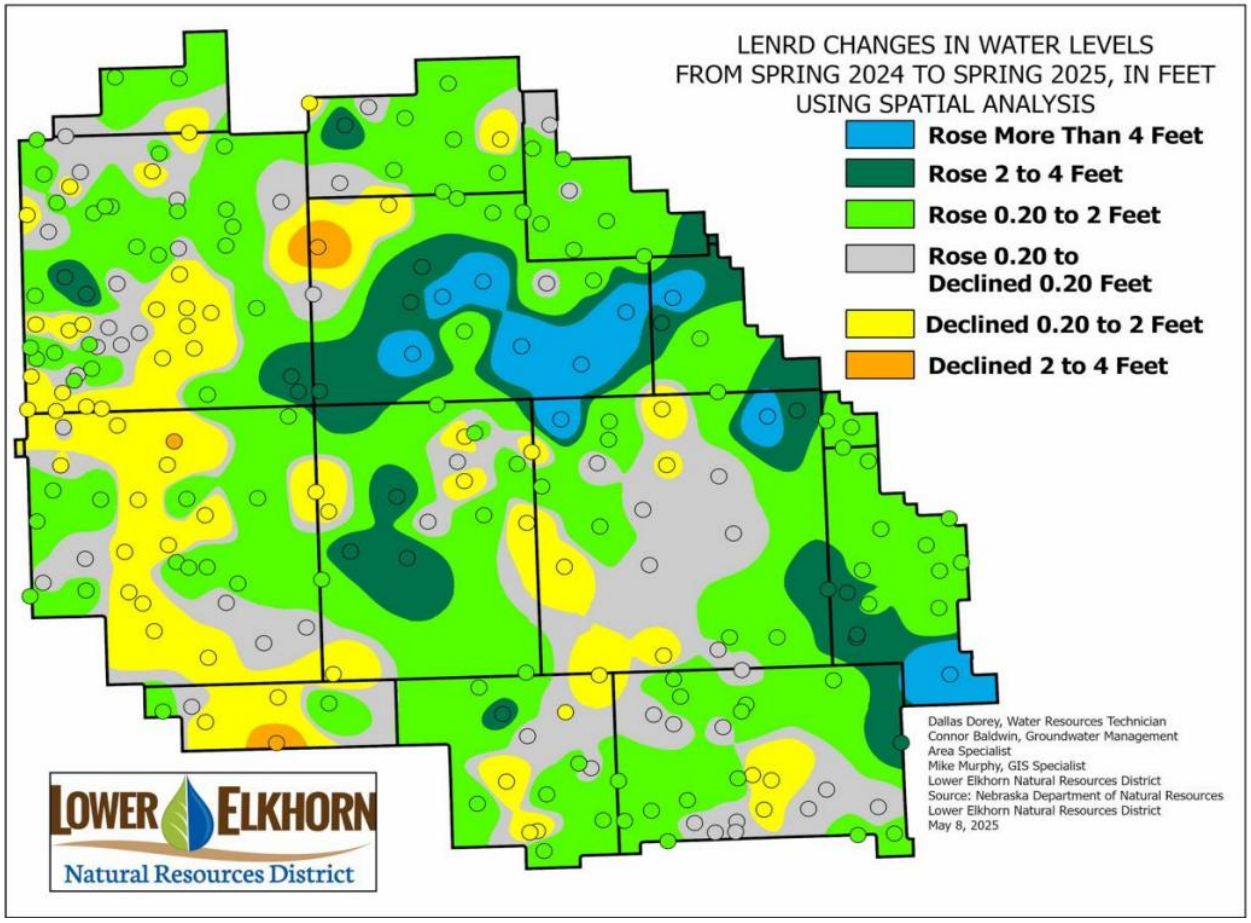


Figure 2. Map depicting interpolation of the differences between depths to groundwater for the LENRD Observation Well Network for measurements collected in the Spring of 2025 compared to measurements collected in the Spring of 2024.

Fall 2025

Static water levels were collected at 218 locations in the Fall of 2025 starting on November 20. Some locations were inaccessible because the producers had not run their wells and thus had no available paths to access their wells. As is typical for any groundwater elevation data which is collected at the end of the pumping season, site specific variables can create a wide range of measurements. In the Fall of 2025, our observations showed 134 locations that *increased* from the Spring of 2025 with an average 0.76' increase District-wide, while the greatest decline from spring to fall 2025 was 5.3'.

Geological variability within LENRD presents a situation where the year-to-year water level data can vary significantly at the local level, while generally, groundwater levels have been resilient in the Lower Elkhorn NRD and have (in the past) recovered from periods when precipitation coupled with increased groundwater demand depressed water levels. However, groundwater inventories could become stressed if acute drought persists into subsequent pumping seasons, especially since the Lower Elkhorn has allowed for the development of more than 30,000 new groundwater irrigated acres since 2016.

- Connor and Dallas conducted measurements starting on November 20, 2025
- 218 Wells were measured. Some were unable to be measured due to no paths to wells
- Fall measurements provide insight into summer drawdowns
- Drawdowns may vary due to cropping, local weather conditions, last pumping date, hydrogeologic connectivity, and other factors

- Generally, water levels in the fall are lower than in the spring due to summer irrigation season
- 2022 & 2023 each had 1 fall reading that was higher than the spring reading
- 2024 had 38 fall readings higher than the spring reading
- 2025: 134 fall readings higher than the spring reading
- District wide, water levels were 0.76' higher than spring 2025
- Greatest 2025 drawdown was 5.3'. (2022 – 38.23', 2023 – 27.64', 2024 – 22.22')

12.0 Stream-gage Measurements

The Lower Elkhorn NRD does not maintain any stream gages within the District that are independent of gage-data collected by the United States Geological Survey (USGS) or the Nebraska Department of Natural Resources (NeDNR). However, a Joint Funding Agreement is in place with USGS to assist in the expenses associated with the operation and maintenance of gages located on the North Fork of the Elkhorn River near Pierce, and on the Elkhorn River near Pilger.

13.0 NRD Regulations and Management Activities

Modifications to Rules and Regulations

The LENRD did not make any changes to its rules and regulations in 2025.

Enforcement Activities

2025 presented many of the same challenges that require the District to engage in additional activities when enforcing its policies, as occurred in previous reporting years. It is not uncommon for the District to issue Notices of Violation for failure to submit flow meter readings, management area reports, or for non-compliance with other groundwater related matters. Typically, farm operators will come into compliance after receiving a Notice of Violation, yet some will push the limits before eventually coming into compliance.

14.0 New Depletions Accounting Report

Inventoried in the table below are the new peak season depletions that have been allowed in the Lower Elkhorn NRD from 2016 through 2025. As stated by the table, the Lower Elkhorn NRD is reporting 398.34 Acre Feet of New Peak Season Depletions for this reporting cycle, even though these depletions weren't given official Board approval until January/February 2026.

Depletion Description	Peak Season Depletion (AF)	Balance (AF)
LENRD 2016/2021 Allowable Dep.		4514.00
2016/2017 LENRD	223.10	4290.90
2016/2017 NeDNR	117.00	4173.90
2017/2018 LENRD	292.00	3881.90
2017/2018 NeDNR	97.00	3784.90
2018/2019 LENRD	292.20	3492.70
2018/2019 NeDNR	70.00	3422.70
2019/2020 LENRD	286.40	3136.30
2019/2020 NeDNR	-103.60	3239.90
2020/2021 LENRD	292.00	2947.90
2020/2021 NeDNR	94.65	2853.25
LENRD_1st Increment Carryover		2853.25
LENRD_2nd Increment_Allowable Depletions		5493.00
Total		8346.25
2021/2022 LENRD	0.00	8346.25
2021/2022 NeDNR	0.00	8346.25
2022/2023 LENRD	305.93	8040.32
2022/2023 NeDNR	-38.00	8078.32
2023/2024 LENRD	433.67	7644.65
2023/2024 NeDNR	122.00	7522.65
2024/2025 LENRD	398.34	7124.31
2024/2025 DWEE		

Table 7. Accounting table for new depletions allowed in the Lower Elkhorn Natural Resources District from 2016 through 2025.

15.0 New Data Collected Through Models or Studies

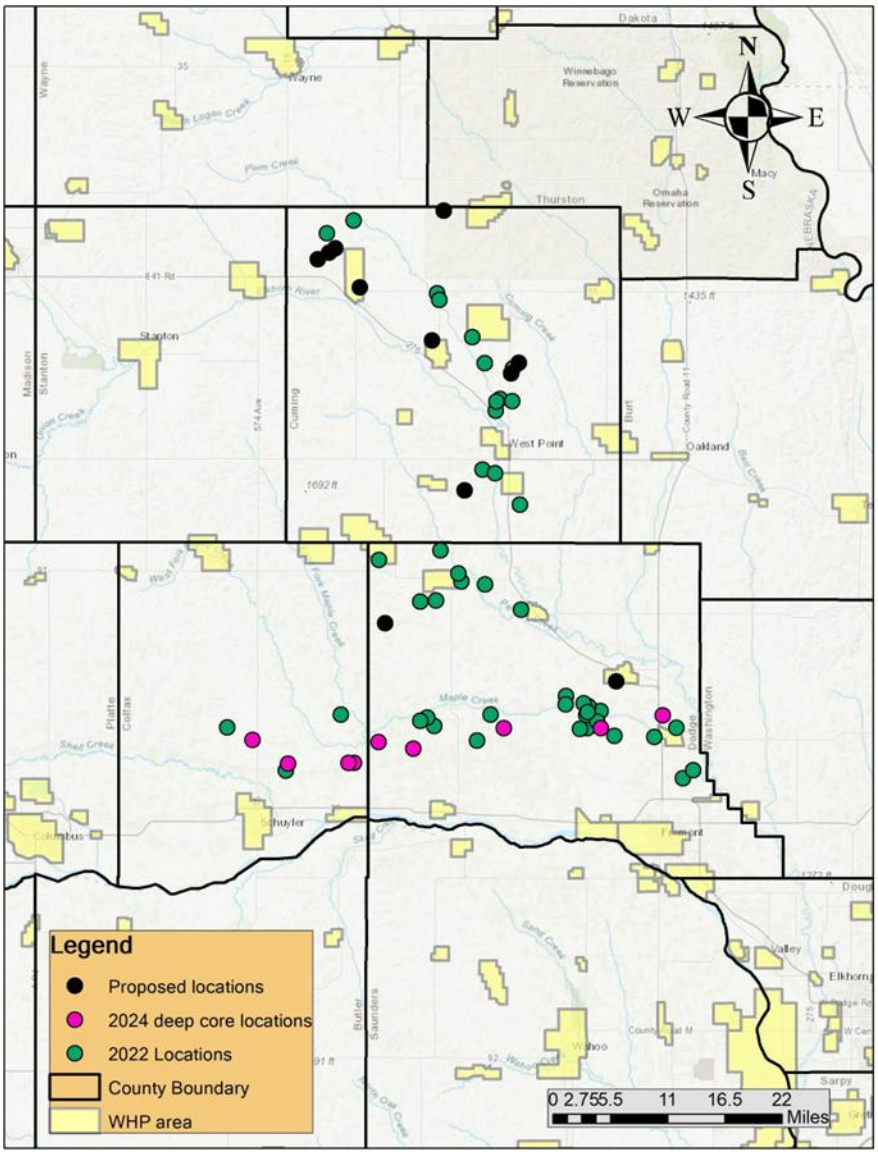
Groundwater Quality

In 2025, the Lower Elkhorn NRD collected water samples from wells located within the District in support of the Nebraska Environmental Trust project entitled Groundwater Monitoring for Public Health. According to the Nebraska Department of Natural Resources Registered Wells Inventory, the LENRD has 11,075 active, registered wells. The goal of this project is to test 5% of the wells (561) for nitrate, nitrite, acetamide degredates, Glyphosate, Glufosinate, AMPA, and a suite of 21 herbicides/insecticides. To date, 307 wells have been sampled, including 190 domestic, 74 municipal, 40 monitoring, and 3 livestock wells. The LENRD leveraged the project to expand the testing of 49 domestic wells to include the EPA-503 suite of analytes from wells with discrete screened intervals in known/named strata with well documented well construction reports.

LENRD Vadose Sampling and Proposed Groundwater Management Area in Portions of Cuming, Colfax, and Dodge Counties

Approximately 50 locations were identified for vadose coring in the proposed management area. At least 25 of the locations are center-pivot irrigated row crop, 6 are gravity-irrigated row crop, with the balance of the locations represented by dryland row crop and CRP practices. The map below shows the locations that had been cored by the Spring of 2024, with the remaining sites being completed during the fall of 2024.

Results from the UNL Water Sciences Laboratory are still being curated, and a published fact sheet indicates that vadose zone nitrate stock (other forms of N not considered) under gravity/furrow irrigated fields is 75 lbs-N/acre, under pivot/sprinkler irrigated fields is 3,911 lbs-N/acre, and under dryland is 4,331 lbs-N/acre.



The map at the left shows the locations identified in Cuming, Colfax, and Dodge Counties which are part of the recent vadose coring effort in the LENRD.

Unfortunately, the preliminary results show a substantial number of locations (~50%) with >200 lbs/acre Nitrate load

Final results will be presented in CY26.

LENRD Domestic Well Testing Program and Reverse Osmosis Treatment Systems

In the fall of 2022, the LENRD Board of Directors approved a Domestic Well Testing program for well owners with registered domestic wells in the District. Water samples are collected by District staff and are analyzed for agricultural herbicides and glyphosate/AMPA by the Nebraska Water Sciences Laboratory, nitrate by the Nebraska Department of Health and Human Services Public Health Laboratory, and for e coli and coliform by the Lower Elkhorn Natural Resources District.

The goal of this effort is to provide well owners with assistance in gaining the necessary information to 1) ensure that their drinking water is safe, and 2) to provide them with sample results that would allow them to utilize the grant program for in home reverse osmosis treatment put in place by the Nebraska Department of Environment and Energy (now the Department of Water, Energy, and Environment).

When the testing program was established, the LENRD established its Reverse Osmosis Treatments System Assistance Program, which provides up to $800 in financial assistance to qualified well owners. The District is requiring well owners to first utilize the resources put in place by NDEE if they are eligible, but if the nitrate levels in their drinking water do not exceed the MCL for nitrate, they may be able to utilize our program. As of February 27, 2026, 249 domestic wells have been sampled as part of this program.

Appendix A

Application ID #	HCA/non-HCA	Quantity Management Subarea (Yes/No)	ACRES - New Acres	Soil Score	SCORE - Depletion Factor	SCORE - Acres	SCORE - NIR	SCORE - min soil score? (x)	SCORE - soil score >100?	SCORE - 50% area >80?	SCORE - TH yield est/well	SCORE - transmissivity	SCORE - proven well yield	SCORE - well density	SCORE - previous denied application	SCORE - complete a circle	SCORE - chemigation	SCORE - new/existing well in QMA	SCORE - Cease and Desist	SCORE - WHPA Deduction	SCORE - 20 or more nonfarm acres in Phase 3 Area? (x)	Total Ranking Points	SDF	NIR Factor	Acre-Feet Depletion	Acre-Feet Depletion (cummulative	AF Peak Season depletion	AF Peak Season depletion (cummulative
25-065	HCA	Yes	12.56	195.3626	125	125.00	0	1	100	100	35	50	175	35	0	0	100	50	0	0	1	1090.3626	20	0.75	1.8837672	1.8837672	0.57	0.57
25-087	HCA	No	17.26	150.0233	125	125.00	0	1	100	100	35	75	175	35	0	0	100	0	0	0	1	1020.0233	26	0.75	3.3652591	5.2490263	1.01	1.57
25-058	HCA	Yes	13.60	125.6153	100	125.00	0	1	100	100	35	25	175	35	0	0	100	50	0	0	1	970.6153	37	0.75	3.7749004	9.0239268	1.13	2.71
25-074	HCA	No	7.06	195.3769	75	150.00	25	1	100	100	50	75	150	35	0	0	0	0	0	0	1	955.3769	68	0.67	3.214891	12.238818	0.96	3.67
25-021	HCA	No	18.26	182.0415	50	125.00	25	1	100	100	35	50	175	0	0	0	100	0	0	0	1	942.0415	81	0.67	9.9075884	22.146406	2.97	6.64
25-031	HCA	No	19.99	173.8680	125	125.00	0	1	100	100	50	25	150	75	0	0	0	0	0	0	1	923.868	25	0.75	3.7482293	25.894635	1.12	7.77
25-022	HCA	No	22.30	172.3082	50	100.00	25	1	100	100	50	50	175	0	0	0	100	0	0	0	1	922.3082	75	0.67	11.207242	37.101878	3.36	11.13
25-047	HCA	No	120.00	224.1759	50	20.00	25	1	100	100	50	25	150	75	0	0	100	0	0	0	1	919.1759	77	0.67	61.907633	99.009511	18.57	29.70
25-127	HCA	No	108.20	147.0510	125	20.00	0	1	100	100	50	50	175	35	0	0	100	0	0	0	1	902.051	12	0.75	9.7383041	108.74781	2.92	32.62
25-036	HCA	No	67.87	159.1679	50	40.00	25	1	100	100	50	25	125	75	1	50	100	0	0	0	1	900.1679	84	0.67	38.196689	146.9445	11.46	44.08
25-019	HCA	No	97.19	174.6176	50	30.00	25	1	100	100	35	75	175	35	0	0	100	0	0	0	1	899.6176	81	0.67	52.742515	199.68702	15.82	59.91
25-157	HCA	No	63.28	173.8680	125	40.00	0	1	100	100	50	25	150	35	0	0	100	0	0	0	1	898.868	21	0.75	9.9662739	209.65329	2.99	62.90
25-050	HCA	Yes	67.00	112.8598	100	40.00	0	1	100	100	35	50	175	35	1	0	100	50	0	0	1	898.8598	32	0.75	16.079382	225.73267	4.82	67.72
25-014	HCA	No	61.78	158.8490	125	40.00	0	1	100	100	50	50	150	75	0	50	0	0	0	0	1	898.849	29	0.75	13.436127	239.1688	4.03	71.75
25-012	HCA	No	67.35	188.9965	75	40.00	25	1	100	100	35	0	150	75	0	0	100	0	0	0	1	888.9965	67	0.67	30.234487	269.40329	9.07	80.82
25-051	HCA	No	43.00	157.0852	50	50.00	25	1	100	100	15	25	150	75	0	0	100	0	0	0	1	847.0852	96	0.67	27.660045	297.06333	8.30	89.12
25-090	HCA	No	128.44	174.0587	100	10.00	0	1	100	100	50	25	175	0	0	0	100	0	0	0	1	834.0587	33	0.75	31.790028	328.85336	9.54	98.66
25-054	HCA	No	112.32	151.5362	125	20.00	0	1	100	100	35	25	175	0	1	0	100	0	0	0	1	832.5362	11	0.75	9.2664075	338.11977	2.78	101.44
25-030	HCA	No	132.44	106.8561	125	10.00	0	1	100	100	50	25	175	35	0	0	100	0	0	0	1	826.8561	12	0.75	11.919524	350.03929	3.58	105.01
25-078	HCA	No	137.10	156.2330	50	10.00	0	1	100	100	50	25	150	75	1	0	100	0	0	0	1	817.233	83	0.75	85.342462	435.38176	25.60	130.61
25-114	HCA	No	119.90	95.0861	125	20.00	0	1	0	100	50	75	175	75	0	0	100	0	0	0	1	815.0861	18	0.75	16.186712	451.56847	4.86	135.47
25-107	HCA	No	25.55	138.5659	50	100.00	0	1	100	100	50	0	175	0	0	0	100	0	0	0	1	813.5659	72	0.75	13.797141	465.36561	4.14	139.61
25-046	HCA	No	217.62	162.7863	50	0.00	25	1	100	100	50	25	125	75	0	0	100	0	0	0	1	812.7863	89	0.67	129.76924	595.13485	38.93	178.54
25-068	HCA	Yes	56.98	88.2052	100	50.00	0	1	0	100	35	50	150	35	1	50	100	50	0	0	1	809.2052	48	0.75	20.514378	615.64923	6.15	184.69
25-079	HCA	No	132.60	128.4084	50	10.00	25	1	100	100	50	25	175	35	1	0	100	0	0	0	1	799.4084	73	0.67	64.854621	680.50385	19.46	204.15
25-015	HCA	No	119.27	159.0851	125	20.00	0	1	100	100	35	50	175	35	0	0	0	0	0	0	1	799.0851	22	0.75	19.680335	700.18418	5.90	210.06
25-123	HCA	No	25.60	157.8368	50	100.00	25	1	100	100	15	25	150	75	0	0	0	0	0	0	1	797.8368	82	0.67	14.063029	714.24721	4.22	214.27
25-150	HCA	No	99.93	141.4986	100	30.00	0	1	100	100	50	0	125	0	0	50	100	0	0	0	1	796.4986	43	0.75	32.229033	746.47625	9.67	223.94
25-023	HCA	No	211.15	167.5409	50	0.00	25	1	100	100	50	25	175	0	0	0	100	0	0	0	1	792.5409	77	0.67	108.93374	855.40999	32.68	256.62
25-125	HCA	No	119.74	103.3331	50	20.00	25	1	100	100	15	75	125	75	0	0	100	0	0	0	1	788.3331	80	0.67	64.181191	919.59118	19.25	275.88
25-037	HCA	No	133.17	117.0779	125	10.00	0	1	100	100	35	0	150	35	1	0	100	0	0	0	1	773.0779	17	0.75	16.978769	936.56995	5.09	280.97
25-118	HCA	No	29.95	134.9431	50	100.00	0	1	100	100	0	25	125	35	1	0	100	0	0	0	1	770.9431	89	0.75	19.993243	956.56319	6.00	286.97
25-086	HCA	No	1.33	79.8034	125	150.00	0	1	0	0	35	50	175	35	0	0	100	0	0	0	1	749.8034	20	0.75	0.1991786	956.76237	0.06	287.03
25-110	HCA	No	35.97	148.0913	50	75.00	25	1	100	100	50	25	175	0	1	0	0	0	0	0	1	749.0913	75	0.67	18.076293	974.83866	5.42	292.45
25-141	HCA	No	23.14	100.8575	75	100.00	0	1	100	100	50	25	150	35	0	0	100	0	0	-100	1	735.8575	64	0.75	11.105477	985.94414	3.33	295.78
25-103	HCA	No	94.77	125.8434	50	30.00	0	1	100	100	50	25	150	0	1	0	100	0	0	0	1	731.8434	93	0.75	66.103382	1052.0475	19.83	315.61
25-032	HCA	No	37.26	119.5967	50	75.00	25	1	100	100	35	25	125	75	0	0	0	0	0	0	1	729.5967	96	0.67	23.96553	1076.013	7.19	322.80
25-027	HCA	No	130.12	96.6644	100	10.00	25	1	0	100	35	50	175	35	0	0	100	0	0	0	1	726.6644	31	0.67	27.026006	1103.0391	8.11	330.91
25-059	HCA	No	99.90	108.4886	75	30.00	0	1	100	0	50	50	175	35	1	0	100	0	0	0	1	724.4886	66	0.75	49.448543	1152.4876	14.83	345.75
25-089	HCA	No	135.00	89.2107	125	10.00	0	1	0	100	35	75	150	35	0	0	100	0	0	0	1	719.2107	22	0.75	22.274186	1174.7618	6.68	352.43
25-003	HCA	Yes	74.00	94.0771	125	40.00	0	1	0	100	35	25	150	0	0	0	100	50	0	0	1	719.0771	16	0.75	8.8795193	1183.6413	2.66	355.09
25-130	HCA	No	67.49	92.6158	100	40.00	0	1	0	100	50	50	150	35	0	0	100	0	0	0	1	717.6158	38	0.75	19.233756	1202.8751	5.77	360.86
25-060	HCA	No	119.90	110.9925	75	20.00	0	1	100	0	50	50	175	35	0	0	100	0	0	0	1	715.9925	66	0.75	59.3509	1262.226	17.81	378.67
25-140	HCA	No	53.55	124.9495	75	50.00	0	1	100	100	50	25	150	35	1	0	100	0	0	-100	1	710.9495	64	0.75	25.705924	1287.9319	7.71	386.38
25-105	HCA	Yes	108.50	184.5073	100	20.00	0	1	100	100	50	75	100	75	1	50	100	-250	0	0	1	705.5073	49	0.75	39.872545	1380.6728	11.96	398.34