

Water Committee Meeting
Tuesday, November 26, 2024 6:00 PM
Lower Platte North NRD Office
P.O. Box 126
Wahoo, NE 68066

1. UNFINISHED BUSINESS

2. REGULATORY

2.A. GROUND WATER MANAGEMENT AREA

2.A.1. Well Permit Program

2.A.1.a. Fire Protection Well Permit

Carson Stratman representing Yutan 92 LLC, is requesting a well permit for a fire protection well in S35-15N-9W, SE of Yutan. Attached is information from Yutan Fire Department, NeDNR, NDEE, well permit and maps.

Carson explained the reasoning for requesting a well permit for a fire protection well in a housing subdivision. The Committee felt that a water flow meter should be installed per rules along with a PVC tube installed in the annular space of the well casing so LPNNRD staff can install a datalogger.

2.A.2. Richland-Schuyler Management Area Hearing information

A hearing was conducted on proposing moving a portion of the Richland-Schuyler Phase 3 Management Area to a Phase 4 Management Area. The attachment "Phase 4 Hearing Documents" shows the area being proposed along with the rules to be implemented. A draft copy of the transcript from the hearing is attached. Below shows all the exhibits that were presented at the hearing with copies available at the NRD office.

Exhibit 1 - Affidavit of publication of the public notice from the Schuyler Sun

Exhibit 2 - The public notice with legals (read aloud)

Exhibit 3 - A copy of the LPN Groundwater Management Rules and Regulations amended on June 15, 2018.

Exhibit 4 - A copy of the Rule and regulation that will be implemented for Phase 4 in this water quality management area.

Exhibit 5 - A map of the area being proposed for higher level management with 3 years of sampling results shown that included nitrates and uranium. A chart on the map shows the contamination levels and percentages.

Exhibit 6 - A letter from the Nebraska Department of Environment and Energy. (Read aloud)

Exhibit 7 - A letter from the Nebraska Department of Natural Resources. (Read aloud)

Exhibit 8 - Sampling results collected by LPNNRD staff for 2020, 2023 and 2024

Exhibit 9 - Sampling results shown spatially and collected by producers for 2022, 2023 and 2024

Exhibit 10 - A copy of the Vadose Zone and Groundwater Nitrate Study conducted by Daniel Snow and Jessica Garcia Nascimento showing the nitrates are a combination of sources.

The Committee reviewed the exhibits and testimony from the hearing. Questions arose from the hearing about how the samples were collected and not sampling the same well every year. It was pointed out that, yes, the same well was not utilized, but it does show that a nitrate and uranium issue does exist. It was suggested to work into the new regulations gradually and explain to producers that the NRD wants to work on a solution that might not solve the problem immediately but begin working toward a long-term solution.

2.A.3. Groundwater Management Plan

An invoice is attached for \$3,830.75 for updating the Groundwater Management Plan (GWMP). A second draft will be presented to staff on December 20th with Jon Mohr attending the Water Committee Meeting on January 8. There will be a Groundwater Retreat on Friday, February 7, 2025, from 10 to 3 in Wahoo for all Board members. Dave Hume from LRE will be at this meeting explaining all the updates done on the GWMP, groundwater levels and triggers with suggested changes. Other items that can be discussed are groundwater quality, permits, flow meters and variances.

Stakeholder and public meetings.

Thursday, January 9 from 5:30 to 8 pm at the Educational Building in Wahoo.

Thursday, January 16 from 5:30 to 8 pm at the Community Building in Platte Center.

2.A.4. Nitrate Assessment Project

Attached is an invoice for \$3,909.50 for nitrate assessment of the Shell Creek Area. This project will be discussed in detail at the GW retreat on February 7th.

2.A.5. Special Quantity Subareas

In the crop year 2024, the NRD voted to increase the allocation to 30 from 27 inches for the Colfax-Platte Water Quantity Management Area (SQS #2). This was discussed at last month's Water Committee Meeting to allow one more year with the 30-inch allocation but would like the rules updated by the end of 2025. The Groundwater Management Plan should be completed by late winter 2025, with recommendations to include updating the Rules and Regulations.

2.A.6. Cost Share Programs

2.B. GROUND WATER ENERGY LEVELS

Attached is groundwater energy level fall update. It was suggested to staff to utilize a minimum of 25 years of data for analysis.

2.C. GROUND WATER QUALITY SAMPLING

Attachment of water samples results.

3. GROUND WATER PROGRAMS

3.A. DECOMMISSIONED WELL PROGRAM

3.A.1. Well Estimates

One new well has been reviewed and approved for decommissioning since the last Committee meeting.

Well Owner	Type of Well	Cost Share Estimate	County
Gillwell Foundation	Domestic	\$929.25	Saunders
James Vandenburg (JMV Farms)	Domestic	\$489.37	Butler

3.A.2. Plugged Wells

No wells have been plugged, reviewed, and ready for cost share payment approval this month.

Well Owner	Type of Well	Cost Share Estimate	County
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3.B. LOWER PLATTE NORTH NRD GROUND WATER STUDIES

3.B.1. Phase Area Update

After their hearing on November 14th, there has been increased interest in cost share items. Questions about whether producers that are not in FSA program eligible for a flow meter cost share.

Staff will be available to assist with online reporting at the Schuyler Library on the following dates:

- Thursday, December 5 from 1 to 3 pm
- Wednesday, December 11 from 1 to 3 pm
- Thursday, December 12 from 5 to 7 pm

Applications received:

Lanny Schmid - Cover Crops

N SE 30-17-3 - 40 acres at \$5 additional over EQIP - \$200

E SE & SE NE 35-18-2 - 120 acres at \$5 additional over EQIP - \$600

SW SW 29-17-3 & S SE 30-17-3 - 100 acres at \$5 additional over EQIP - \$500

Midland Land LLC

Soil Moisture Sensors - SE SE 14-17-3 - \$750

Three Water Flow Meters - SE SE 14-17-3, SW SW 13-17-3, SE SW 14-17-3 - \$1000 per meter - \$3,000

Farmland Reserve

Variable Rate Nitrogen - NE SW 23-17-3 - 244 acres at \$10 additional over EQIP - \$2,440

Variable Rate Nitrogen - NW SE 24-17-3 - 168 acres at \$10 additional over EQIP - \$1,680.

Trish Vojtech

Grid Soil Sampling - N NW 2-17-2 - 80 acres at \$5 additional over EQIP - \$400

One Water Flow Meter - N NW 2-17-2 - \$1,000

Variable Rate Nitrogen - N NW 2-17-2 - 80 acres at \$10 additional over EQIP - \$800

Soil Moisture Sensors - N NW 2-17-2 - \$750

Skytown Properties

One Water Flow Meter - SE SE 16-17-3 - \$1,000

Cover Crop - SE SE 16-17-3 = 35 acres at \$5 additional over EQIP - \$175

Soil Moisture Sensors - SE SE 16-17-3 - \$750

3.B.2. Domestic Well Water Treatment Costshare

Attached is the version of the Water Treatment Cost-share that was updated from June 2024 Water Committee Meeting.

3.C. NEW MONITORING WELLS

4. SURFACE WATER PROGRAMS

5. OTHER

Attached is information on the Northeast Nebraska Ag Conference.

5.A. COMMENTS FROM THE PUBLIC

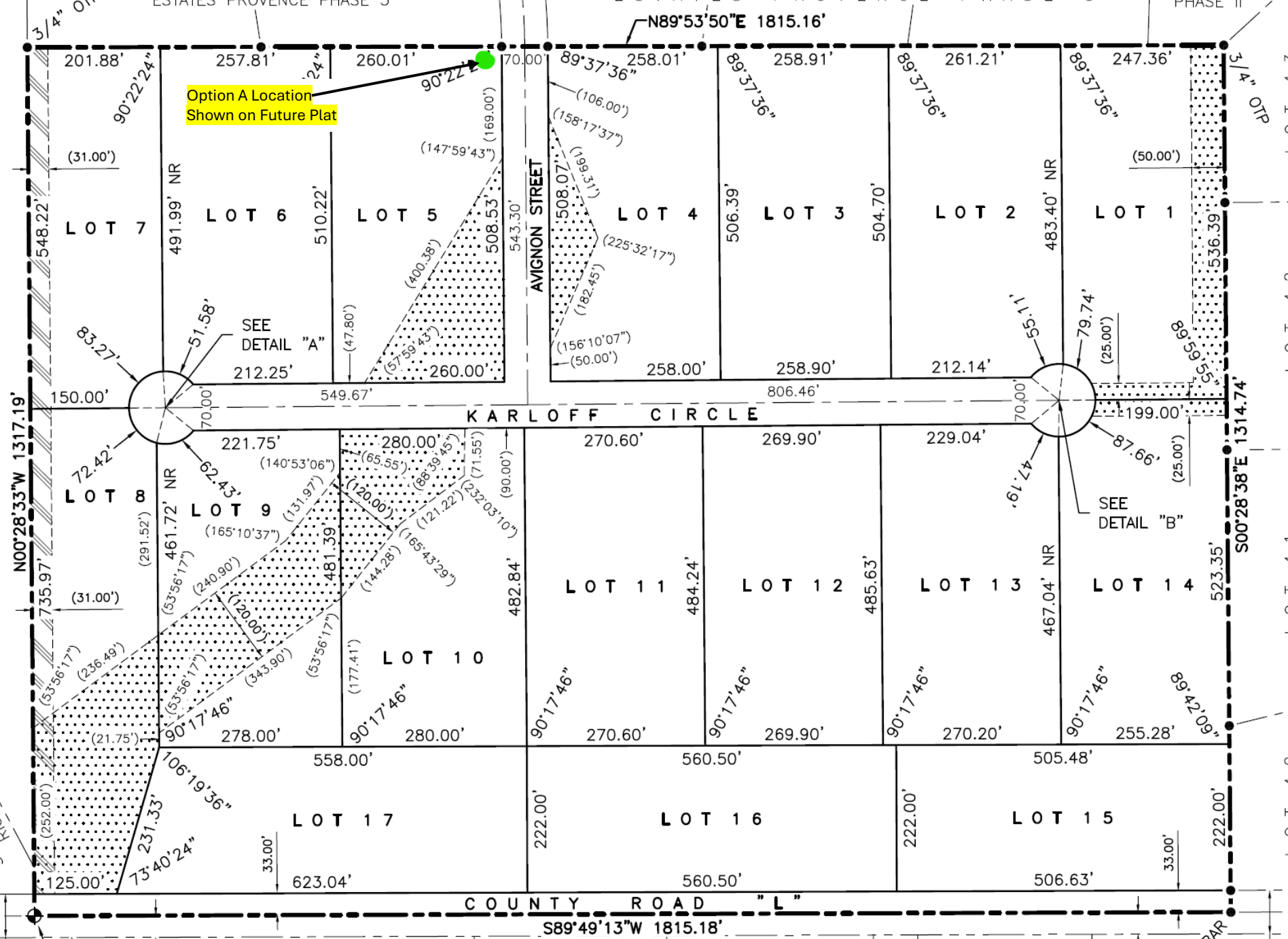
Extended View



Zoomed View



PART OF THE SW 1/4 OF SECTION 35-15-9



BURLINGTON
SANTA FE
RIGHT-OF-WAY

REBAR

LOT 4 3
LOT 4 2
LOT 4 1
LOT 4 0

**APPLICATION FOR A PERMIT TO CONSTRUCT A WATER WELL
IN THE LOWER PLATTE NORTH NATURAL RESOURCES DISTRICT**

DNR & NRD USE ONLY			
Permit No. _____	Date Approved/Denied _____	NRD Representative _____	
Permit Type: New, Replacement or Late _____	Date Received _____	Paid: Cash or Check _____	
Date Post-inspected _____	Registration No. _____	Updated Form: June 2022	

ALL APPLICANTS SEEKING A WATER WELL PERMIT MUST COMPLETE PAGES 1 AND 2, AND THE APPROPRIATE SECTION BASED ON THE PURPOSE OF THE WELL. (CLASS 1 – 4 WELL PERMIT)
 WATER WELL PERMITS FOR IRRIGATED ACRES GREATER THAN 160 ACRES IN SIZE OR TOTAL ANNUAL WATER USE BETWEEN 150 AND 300 ACRE FEET PER YEAR MUST COMPLETE PAGES 1, 2, AND 3, AND THE APPROPRIATE SECTION BASED ON THE PURPOSE OF THE WELL. (CLASS 3 WELL PERMIT)
 WATER WELL PERMITS FOR TOTAL ANNUAL WATER USE EQUAL TO OR GREATER THAN 300 ACRE FEET PER YEAR, REGARDLESS OF NUMBER OF IRRIGATION ACRES, MUST COMPLETE PAGES 1, 2, AND 4, AND THE APPROPRIATE SECTION BASED ON THE PURPOSE OF THE WELL. (CLASS 4 WELL PERMIT)

1. NAME AND ADDRESS OF LAND OWNER: <u>Yutan 92, LLC</u> <u>423 Sorbonne Ave</u> <u>Yutan, NE 68073</u> Phone: <u>402-578-1570</u>	NAME AND ADDRESS OF CONTACT: <u>Carson Stratman</u> <u>423 Sorbonne Ave</u> <u>Yutan, NE 68073</u> Phone: <u>402-578-1570</u>
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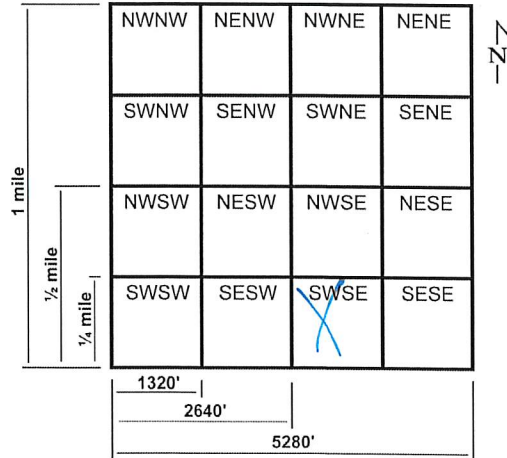
2. PURPOSE OF NEW WATER WELL (indicate one):

<input type="checkbox"/> Irrigation (Complete section A)	<input type="checkbox"/> Dewatering (Over 30 days, Complete section B)
<input type="checkbox"/> Livestock (Complete section C)	<input type="checkbox"/> Domestic (Irr. on one acre or larger, Complete section D)
<input type="checkbox"/> Industrial (Complete section E)	<input type="checkbox"/> Public Water Supply (Complete section F)
<input type="checkbox"/> Recovery or Remediation (Complete section G)	
<input checked="" type="checkbox"/> Other (specify) <u>Fire Well</u> (Complete section H)	

3. IDENTIFY LOCATION OF PROPOSED WELL:

A. Saunder's County, 1/4 of the 1/4 of Section 35, Township 15 North, Range 9 East/West. (circle one)

B. The box at the right represents one square mile, (section). Indicate with an "X", the proposed location of the well. Outline the proposed water use area. If the water is to be used outside the above written legal description, give legal description of water use area, 1/4 of the 1/4 of Section 35, Township 35 North, Range 15 East/West.



C. The well will be located 4,000 feet from the North/South section line, and will be 1,900 feet from the East/West section line. Or enter Lat. / Long.
 Latitude Degree _____ Minute _____ Second _____
 Longitude Degree _____ Minute _____ Second _____

4. REPLACEMENT AND ABANDONED WELL INFORMATION:

A. Is this a replacement well? Yes, No If yes, fill out the rest of this section.
 B. Registration number of well to be replaced: _____
 C. Well to be replaced was last operated (month/year): _____
 D. Replacement well is _____ feet from original well.
 E. Decommissioning of Original well on (month/day/year): _____
 F. If water use is for irrigation, list the number of acres watered by the original well: _____
 G. If water use is for irrigation, will replacement well, water the same tract of land as the decommissioned well?
 Yes, No: If No, list the number of additional acres _____ and legal description _____ 1/4 of the _____ 1/4 of Section _____, Township _____ North, Range _____ East/West. (circle one)

- A replacement water well must deliver water to the same tract of land as the original water well, pump from a comparable aquifer, and yield approximately the same gallons per minute and total annual water use as the original water well.

5. SPECIFICATIONS OF INTENDED WELL AND PUMP:


- A. Approximate date when construction will begin (month/day/year): December 2024
- B. Expected total well depth: 200 feet.
- C. Well Casing Diameter: 6 inches.
- D. Pump Column Diameter: _____ inches.
- E. Estimated pumping capacity: 300 GPM.
- F. Expected total annual water use in Acre Inches / Year 0 or Total Gallons / Year 0
- G. The system is to be powered by Electric Fuel
- H. Will the well be used in a system with other wells? Yes, No. If Yes, How many _____
List well registration number and legal description of each well in Section 6 below.
- I. Name of Well Driller: Sargent (Please attach test hole log, if available.)

6. List additional information requested in this Section or attached additional sheet.

7. Addition information and requirements for Lower Platte North NRD review.

- Attach current tax assessor records including map, parcel number, and current land use such as irrigated acres.
- Attach aerial photo showing location of water source(s) and area water or reuse water is to be used.
- All new and replacement water wells must install a District approved flow meter and report water pumped annually to the LPNNRD by January 31st of the following year. See approved list in this packet.
- Water well permit conditions maybe required for approval by the Lower Platte North NRD for each individual well.

8. I certify that I am familiar with the information contained in this application, and it's restrictions, rules and regulations and that to the best of my knowledge and belief such information is true, complete and accurate.

Date 11-6-24 Signature of Applicant 
Signature of Well System Operator, if different than Applicant _____
NRD Certification Number of Landowner or Operator _____ (Required for irrigation, livestock, domestic (with irrigation on one acre or more of land), industrial, and public water supply wells.)

9. Lower Platte North NRD Use Only. Comments by District Representative.

**APPLICATION FOR A PERMIT TO CONSTRUCT A WATER WELL
IN THE LOWER PLATTE NORTH NATURAL RESOURCES DISTRICT**

**WATER WELL PERMIT FOR IRRGATED ACRES GREATER THAN 160 ACRES IN SIZE OR TOTAL
ANNUAL WATER USE BETWEEN 150 AND 300 ACRE FEET PER YEAR, PROVIDE INFORMATION
REQUESTED ON PAGES 1, 2, AND 3. (CLASS 3 WELL PERMIT)**

10. WATER SOURCE INFORMATION:

In a TWO-mile radius around the water source location, provide the following information to the LPNNRD in both paper copy and electronically in Excel Spreadsheet (Microsoft) or Access Database (Microsoft) format.

- A. List of all registered wells in this area giving registration number, well identification number, legal description, latitude / longitude or UTM coordinates in NAD 83, elevation in feet above mean sea level, and well log for each well.
 - B. List of all test holes in the area that have been published by Conservation and Survey Division of the University of Nebraska.
 - C. List of all surface water rights in this area giving appropriation number, priority date, legal description, use, status, current total acres (if applicable), and grant amount.
-

11. WATER USE LOCATION INFORMATION:

In the location where the water will be used, provide the following information to the LPNNRD in both paper copy and electronically in Word (Microsoft) format.

- A. Description of expanded water use including: latitude / longitude or UTM coordinates in NAD 83 of water use location and timeframe or schedule when water will be used.
 - B. Amount of water that will be reused or recycled at this new location.
 - C. Description of how water will be used at this new location, i.e. process water vs. cooling water, etc. and estimated total annual water use for each purpose.
-

**APPLICATION FOR A PERMIT TO CONSTRUCT A WATER WELL
IN THE LOWER PLATTE NORTH NATURAL RESOURCES DISTRICT**

**WATER WELL PERMIT FOR TOTAL ANNUAL WATER USE EQUAL TO OR GREATER THAN 300 ACRE
FEET PER YEAR, REGARDLESS OF NUMBER OF IRRIGATED ACRES, PROVIDE INFORMATION
REQUESTED ON PAGES 1, 2, AND 4. (CLASS 4 WELL PERMIT)**

12. WATER SOURCE INFORMATION:

In a FIVE-mile radius around the water source location, provide the following information to the LPNNRD in both paper copy and electronically in Excel Spreadsheet (Microsoft) or Access Database (Microsoft) format.

- A. List of all registered wells in this area giving registration number, well identification number, legal description, elevation in feet above mean sea level, latitude / longitude or UTM coordinates in NAD 83, and well log for each well.
 - B. List of all test holes in the area that have been published by Conservation and Survey Division of the University of Nebraska.
 - C. List of all surface water rights in this area giving appropriation number, priority date, legal description, use, status, current total acres (if applicable), and grant amount.
-

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 - C. Description of how water will be used at this new location, i.e. process water vs. cooling water, etc. and estimated total annual water use for each purpose.
-

14. AQUIFER PUMP TEST:

In the location of the proposed water source a District approved aquifer pump test is to be performed to obtain geologic data that will be used in the ensuing ground water modeling effort. Data from the pump test is to be reported to the LPNNRD in both paper copy and electronically in Excel Spreadsheet (Microsoft) or Access Database (Microsoft) format.

- A. Description of pumping well should include legal description of well, latitude / longitude or UTM coordinates in NAD 83, elevation of well in feet above mean sea level, total amount of water pumped, gallons per minute during pump test, duration of pump test, well construction, well log, water discharge location and method.
 - B. Description of each monitoring well should include legal description of well, latitude / longitude or UTM coordinates in NAD 83, spacing in feet and direction from pumping well, elevation of well in feet above mean sea level, well log, and well construction.
 - C. Depth to bedrock, bedrock material, and name of geologic formation.
-

15. GROUNDWATER MODEL:

In a FIVE-mile radius of the location of the proposed water source a ground water model using MODFLOW software, or similar software approved by LPNNRD, is to be done. Data from the ground water model is to be reported to the LPNNRD in both paper copy and electronically using the appropriate software.

- A. Model should list boundary conditions used, grid size, include all high capacity wells in modeled area, streams and rivers in the modeled area, expected recharge rates, location and flow amounts, hydrologic conductivity and transmissivity values used.
 - B. At least one iteration, reviewed and approved by LPNNRD, should model steady state conditions over a five-year period with a no flow boundary, and little or no recharge to simulate drought conditions.
-

**APPLICATION FOR A PERMIT TO CONSTRUCT A WATER WELL
IN THE LOWER PLATTE NORTH NATURAL RESOURCES DISTRICT**

PURPOSE OF WELL

IRRIGATION WELLS (SECTION A)

- A. How many acres will be irrigated? _____ acres
- B. Crops to be planted: _____ Crop rotation schedule _____
- C. Type of irrigation system. Center Pivot, Gravity, Other (specify) _____
- D. The irrigation system is to be powered by Electric Fuel
- E. Expected total annual consumptive water use in Acre Inches / Year _____ or
Total Gallons / Year _____
- F. Will Fertilizer, Chemicals or Animal waste be applied through the system? Yes, No

DEWATERING WELLS OVER 30 DAYS (SECTION B)

- A. Purpose of dewatering well, such as installation of building foundation, etc. _____
- B. Expected total number of days the dewatering well will be in use _____
- C. Approximate dates (month/day/year) in operation: Start _____ End _____
- D. Legal description of water discharge location: _____ ¼ of the _____ ¼ of Section _____, Township _____ North,
Range _____ East/West and name of river, stream or water body _____
- E. Will discharge water be used for another purpose, such as livestock, irrigation, etc.? Yes, No
If Yes, list purpose, location and expected total amount of water use in acre-inches / year or total gallons / year.

LIVESTOCK WELLS (SECTION C)

- A. Name of facility _____
- B. Type of Livestock: Feeder Cattle, Dairy Cattle, Swine over 55 lbs., Swine under 55 lbs.,
 Sheep, Poultry, Horses
- C. Average number of livestock per year _____ and average weight per animal _____ lbs.
- D. Peak number of livestock _____ and time of year _____
- E. Is facility approved by Nebraska Department of Environmental Quality? Yes, No. If Yes, list NDEQ
certification IIS number _____ If No, complete the rest of this section.
- F. Type of facility: Open lot, Covered Building
- G. If facility is Open lot, list soil type _____
- H. Estimated depth to ground water under feedlot _____ ft.
- I. Describe manure collection system of feedlot _____
- J. Name and distance of nearest surface watercourse from feedlot _____
- K. For each manure land application site, list legal description and size in acres, method of application, and distance
from feedlot operation. _____

DOMESTIC WELLS WITH IRRIGATION ON ONE ACRE OR MORE (SECTION D)

- A. Check all that apply:
 - a. Water use: Lawn and number of acres to be irrigated _____ acres.
 - b. Water use: Commercial garden and number of acres to be irrigated _____ acres.
 - c. Water use: Tree Farm and number of acres to be irrigated _____ acres.
 - d. Water use: Type of livestock _____ and number _____
- B. Type of irrigation system. Sprinkler, Drip Tape, Other (specify) _____
- C. If applicable, give Street address and town _____

* One acre equals 43,560 square feet.

INDUSTRIAL AND COMMERCIAL WELLS

(SECTION E)

- A. Name of facility _____
- B. Products produced by facility _____
- C. In Section 6 or on a separate sheet of paper, list well registration number and legal description of current wells supplying water to this facility.
- D. In Section 6 or on a separate sheet of paper, provide a short description how water is used within the facility and the expected annual amount of water for each use. For example: "The manufacturing plant will use 45% of total annual water use, or 1.45 million gallons per year, for electroplating of galvanized pipe and the remaining 55% of total annual water use, or 1.77 million gallons per year, will be used for non-contact cooling water throughout the plant".
- E. Will any of the used water or waste water from this facility be re-used for another purpose? Yes, No.
If Yes, list purpose, location and expected total amount of water use in acre-inches / year or total gallons / year.

PUBLIC WATER SUPPLY WELLS

(SECTION F)

- A. On a separate sheet of paper, list the well registration numbers and legal description of current wells supplying water to this community.
- B. Attach a list of the five largest industrial water users that your community supplies water to, and the total annual amount of water supplied to each of these industries for the last five years.
- C. For these same industries list the total annual amount of water returned to the community as waste water for each of the last five years.
- D. Will waste water be used for another purpose, such as livestock, irrigation, etc.? Yes, No
If Yes, list purpose, location and expected total amount of water use in acre-inches / year or total gallons / year.

- E. Attach a list of the golf courses that the community supplies water to and list the location and number of acres for each one.

RECOVERY OR REMEDIATION WELLS

(SECTION G)

- A. Reason for recovery or remediation well, i.e. leaking underground storage tank. _____
- B. Contaminates of concern _____
- C. Treatment method of contaminants _____
- D. Approximate dates (month/day/year) in operation: Start _____ End _____
- E. Legal description of water discharge location: _____ ¼ of the _____ ¼ of Section _____, Township _____ North, Range _____ East/West and name of river, stream or water body _____
- F. Will cleanup water be used for another purpose, such as livestock, irrigation, etc.? Yes, No
If Yes, list purpose, location and expected total amount of water use in acre-inches / year or total gallons / year.

OTHER WELLS

(SECTION H)

- A. Purpose of water use Fire Well
- B. Will the well be used for one calendar year or less? Yes, No
 - a. If Yes, list approximate dates (month/day/year) the well will be in operation: Start _____ End _____
 - b. If No, list the approximate dates (months) or seasons of the calendar year that well is expected to be in peak or highest use. only when Fire
- C. Legal description of water discharge location: _____ ¼ of the _____ ¼ of Section 35, Township 15 North, Range 9 East/West and name of river, stream or water body _____

This form must be completed in full and accompanied by a non-refundable \$50.00 filing fee (payable to the Lower Platte North Natural Resources District). In addition, for Class 3 well permits an added fee of \$250.00 is required for District review. For Class 4 well permits an added fee of \$500.00 is required for District review. Forward this application and filing fees to:

**Lower Platte North Natural Resources District
P.O. Box 126
Wahoo, NE 68066
Phone: (402) 443-4675**

Please take the time and fill out the information correctly. The District will return an incomplete or defective application, with 60 days being allowed for resubmission. The District shall issue all permits with conditions attached, or denied not later than 30 days after receipt of a complete and properly prepared application.

WATER WELL PERMIT RESTRICTIONS

1. A well permit is required prior to the construction of a water well. If construction of a water well is commenced prior to obtaining a permit, a late permit must be completed and accompanied by a \$250.00 application fee. Construction or operation of a new water well without an approved water well permit shall result in the District issuing a 'cease and desist order' against further construction or use of that water well.
2. An irrigation well shall not be constructed within 1000 feet of any registered industrial or public water supply well or within 600 feet of a registered irrigation well; A public water supply well shall not be constructed within 1000 feet of any registered irrigation, industrial or other public water supplier's well; An industrial well shall not be constructed within 1000 feet of any registered irrigation, industrial or public water supply well pursuant to §46-609 and §46-651. These spacing restrictions shall not apply to water wells owned by the same person. Any person may apply to the Nebraska Department of Natural Resources for a special permit to drill a water well without regard to the spacing requirements pursuant to §46-653. The District may adopt stricter well spacing requirements based on different aquifer subareas. Check with the District office if you have any questions.
3. This permit does not register the well with the Department of Natural Resources. All wells are required to be registered by the well driller with the Nebraska Department of Natural Resources within 60 days after the well is completed.
4. A replacement water well is one, which replaces an abandoned water well that has been operated within the last three years, and is constructed to water the same tract of land as the abandoned water well that is being replaced. A replacement water well must be pumping from a comparable aquifer and yield approximately the same gallons per minute and total annual water uses as the original water well it is replacing. As of January 1, 1997, both new and replacement wells need a permit from the Lower Platte North Natural Resources District.
5. Consumptive water use in acre-inches is determined from the Department of Natural Resources (DNR) Net Corn Crop Irrigation Requirement map or a similar map produced by the University of Nebraska.
6. If the well is being replaced it must be properly abandoned according to state guidelines. A copy of these guidelines is available from the Lower Platte North NRD.
7. If the water well is not constructed within a one-year period from the date of approval, a new permit is needed.
8. Water wells may not be drilled within 50 feet of a stream bank without first obtaining a surface water right for that water withdrawal from the Department of Natural Resources pursuant to §46-637.
9. Any person who, on or after January 1, 1997, commences or causes construction of such a well for which the required permit has not been obtained, or who knowingly furnishes false information regarding such a permit, shall be guilty of a Class IV misdemeanor pursuant to §46-602.01 and §46-613.02.
10. Permits are not required for test holes or temporary dewatering wells (30 days or less). Permits are needed for water wells designed to pump 50 gallons per minute or less in Level 3 and Stay management areas.
11. Tax assessor records submitted with water well permit must include map, parcel number and an accurate account of current land use, such as irrigated acres.
12. With the well permit application, submit an aerial photograph with markings to show the location of the water source(s) and the location of where the water is to be used.
13. Any person, who knowingly furnishes false information regarding a water well permit, shall be subject to the imposition of penalties imposed through the controls adopted by the District pursuant to §46-746.
14. All new or replacement water wells must install a District approved flow meter and report water pumped annually in acre-inches per year or total gallons per year on LPNNRD approved forms by January 31st of each following year.
15. If multiple water sources are used, landowner must supply flow records from each water source in acre-inches per year or total gallons per year on LPNNRD approved forms by January 31st of each following year.
16. Water well permit applications require that the applicant or operator of irrigation, livestock, domestic (with irrigation on one acre or more of land), industrial, and public water supply wells by NRD certified.

Approved List of Propeller Flow Meters
Lower Platte North Natural Resources District (LPNNRD)
Effective: April 11, 2022



Approved List of Propeller Flow Meters and Required Conditions

LPNNRD requirements for all propeller flow meters:

- Anti-reverse flow feature to prevent backflow.
- Follow manufactures installation recommendations taking into account in-pipe jetting or non-jetting flow conditions. (Correct installation of the flow meter is critical to getting an accurate reading. Most meters require a straight pipe before and after the flow meter that is at least equivalent to five times the pipe diameter in order to obtain an accurate flow measurement. Doing the installation correctly the first time saves money in the long run).
- Straightening vanes are required according to manufacturer’s installation recommendations for in-pipe jetting or non-jetting flow conditions.
- Meter must be positioned to ensure water totally fills the pipe, such as a level pipe or positioned on a riser.
- Meter must be configured: to inside and outside diameter of the pipe, material of the pipe, meter used that will operate within minimum and maximum output flow rates of the well, horizontal or vertical installations, and unobstructed straight run distance upstream and downstream of meter and in most cases straightening vanes (or other flow straightener) will be necessary.
- Meter totalizes flow in acre inches and flow meter dial is in gallons per minute.
- A flow meter must be dedicated to each individual well. (Exceptions will be made if several wells are used to provide enough water to operate a single irrigation system such as a pivot or gated pipe. In these situations a flow meter placed at the central location where all water can be metered is acceptable).

Manufacturer	Model	Notes
McCrometer	McPropeller	All propeller models
Sparling	Propeller saddle meter	Model 312 propeller meter
Geyser	Saddle meter	All propeller models for Farmland Irrigation

LPNNRD prefers the following added features for all propeller flow meters:

- Over-run bearing (or extra bearing) for smother operation and to extend life of the meter
- Canopy cover to protect meter

LPNNRD will inspect systems for proper installation of flow meters

dandersen@lpnrd.org

From: Miesbach, David <david.miesbach@nebraska.gov>
Sent: Thursday, November 7, 2024 12:44 PM
To: Thompson, Mike; dandersen@lpnrd.org
Subject: RE: fire protection well

Perfect.

David L. Miesbach, P.G.
GROUNDWATER SECTION SUPERVISOR/
WATER WELL STANDARDS
Nebraska Department of Environment and Energy
P.O. Box 98922
Lincoln, Nebraska 68509-8922
DIRECT (402) 471-4982 / MAIN OFFICE (402) 471-2186
FAX (402) 471-2909
david.miesbach@nebraska.gov
<http://dee.ne.gov>

From: Thompson, Mike <mike.thompson@nebraska.gov>
Sent: Thursday, November 7, 2024 12:39 PM
To: Miesbach, David <david.miesbach@nebraska.gov>; dandersen@lpnrd.org
Subject: RE: fire protection well

Dave and Daryl,

We often register these as 'Other' – 'Fire Suppression' wells. No spacing issues with that category from a state spacing statute perspective.

Mike Thompson
Manager | Groundwater Registrations | CREP Coordinator

Nebraska Department of Natural Resources
245 Fallbrook Blvd., Suite 201
Lincoln, Nebraska 68521-6729

OFFICE 402-471-0587 / FAX 402-471-2900
Mike.Thompson@nebraska.gov

dnr.nebraska.gov

From: Miesbach, David <david.miesbach@nebraska.gov>
Sent: Thursday, November 7, 2024 12:30 PM
To: dandersen@lpnrd.org; Thompson, Mike <mike.thompson@nebraska.gov>
Subject: RE: fire protection well

How do they intend to register it? If they register it as a commercial well, the domestic well owners (within 1000 ft) would have to get a Declaratory Order (DO) to drill a replacement well. If they called it and irrigation well, domestic well owners (within 600 ft) would have to get a DO for replacements. If they could register it as a domestic well (pumping > 50 gpm) the domestic users would be OK.

David L. Miesbach, P.G.

GROUNDWATER SECTION SUPERVISOR/
WATER WELL STANDARDS
Nebraska Department of Environment and Energy
P.O. Box 98922
Lincoln, Nebraska 68509-8922
DIRECT (402) 471-4982 / MAIN OFFICE (402) 471-2186
FAX (402) 471-2909
david.miesbach@nebraska.gov
<http://dee.ne.gov>

From: dandersen@lpnprd.org <dandersen@lpnprd.org>

Sent: Wednesday, November 6, 2024 10:26 AM

To: Miesbach, David <david.miesbach@nebraska.gov>; Thompson, Mike <mike.thompson@nebraska.gov>

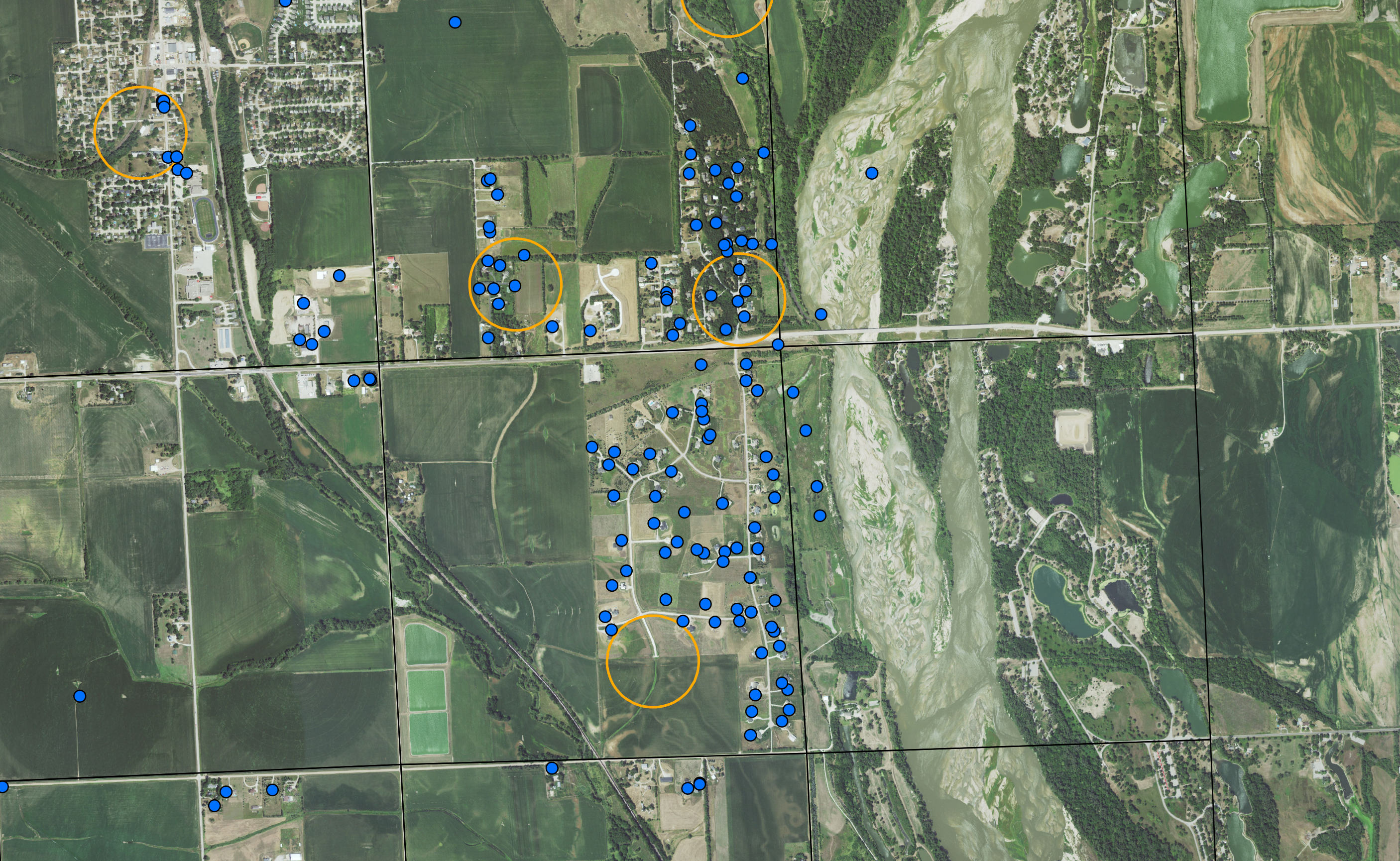
Subject: fire protection well

Dave and Mike,

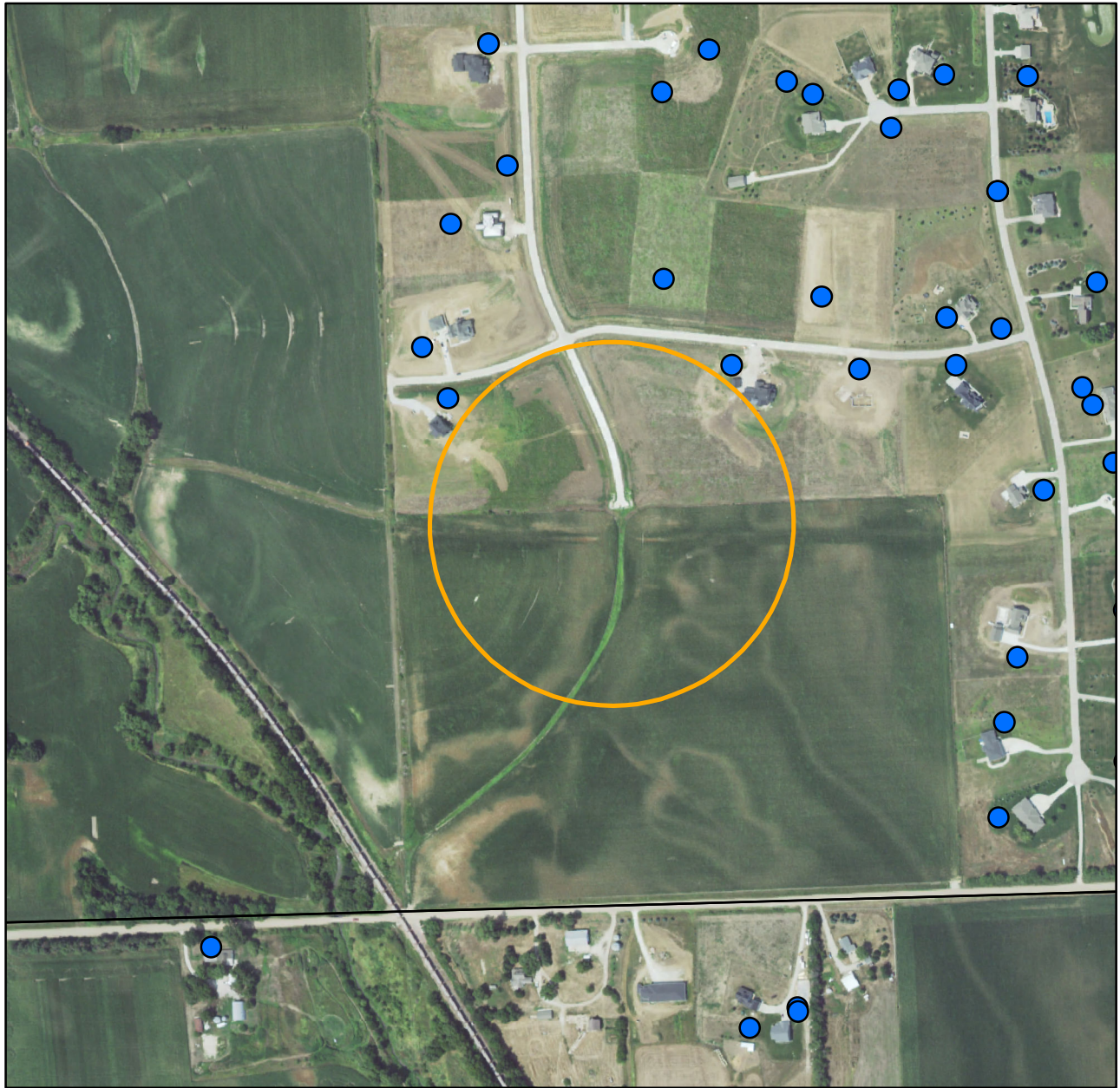
We have a sub-division that is requesting a 300 gpm for fire protection. There would be domestic wells within 600 feet or closer. Anything from either one of your agencies that needs to be addressed? I will be receiving a well permit soon.

Thanks,

Daryl Andersen
Water Resources Manager
Lower Platte North NRD



Yutan 92 LLC



The estimated location of the permitted well has been plotted above. Registered wells in the vicinity of the permitted well have also been plotted. Areas within the buffer polygons are subject to spacing protection. If the well will be drilled in an alternate location than what is shown on the map, please contact LPNDR so staff can reassess Nebraska regulatory spacing requirements.

7/3/2024
2022 Aerial Photo
Data: LPNDR, NeDNR, FSA
Projection: NAD 1983 StatePlane Nebraska FIPS 2600 (US Feet)



LOWER PLATTE NORTH
Natural Resources District

- Registered Wells (LPN & DNR Data)
- 600 Foot Buffer
- Sections



Yutan Volunteer Fire Department

www.yutanvfd.org

PO Box 129
Yutan, NE 68073

402-625-2273
Fax 402-625-2044

Mr. Mitch Polack,

I am reaching out to follow up on the Estates Provence Phase 4 addition. I had previously advocated for the inclusion of fire suppression measures in this unit. I am pleased to inform you that Mr. Stratman has agreed to install a well that can supply a minimum of 300GPM with a fire department connection and access. Having carefully reviewed the plans, I wholeheartedly favor this arrangement. Not only will it benefit the entire community, but it will also serve as the primary water source for the area, emphasizing our collective dedication to safety. We anticipate full support of the planning commission along with the board of supervisors and are grateful for Mr. Stratman's commitment to choosing safety and the best solution for all.

**Respectfully submitted,
Matt Thompson
Fire Chief
Yutan Fire/Rescue
402 689 8552
Chief@yutanvfd.com**

Parcel Information	
Parcel ID	007950019
Links	Photo #1
Area #	
Current Owner	YUTAN 92, LLC
Mailing Address	20010 MANDERSON SUITE 100 ELKHORN, NE 68022-0000
Situs Address	
Tax District	214
School District	6108 (YUTAN 9)
Legal Description	OUTLOT B ESTATES PROVENCE PHASE II (.52 ACRES) 35-15-9
Class	Single Family

Current Value Information			
Land Value	Dwelling Value	Improvement Value	Total Value
\$8,200	\$0	\$0	\$8,200

Prior Year Value Information				
Year	Land Value	Dwelling Value	Improvement Value	Total Value
2023	\$8,200	\$0	\$0	\$8,200
2022	\$8,200	\$0	\$0	\$8,200
2021	\$8,200	\$0	\$0	\$8,200
2020	\$8,200	\$0	\$0	\$8,200
2019	\$8,200	\$0	\$0	\$8,200



Yearly Tax Information		
Year	Amount	Levy
2023	\$153.88	1.987916

2023 Tax Levy	
Description	Rate
COUNTY GENERAL	0.222592
COUNTY BLDG	0.001962
COUNTY FLOOD CONTROL	0.001506
COUNTY LAW ENFORCEMENT BOND	0.019986
YUTAN 9 GENERAL	0.942702
YUTAN 9 SPECIAL BLDG	0.079534
YUTAN 9 BOND	0.051577
ESU #2 GENERAL	0.015000
SOUTHEAST COMMUNITY COLLEGE GENERAL	0.073700
SOUTHEAST COMMUNITY COLLEGE CAP IMPT FUND	0.020000
PLATTE NORTH GENERAL	0.028652
YUTAN FIRE GENERAL	0.023621
YUTAN FIRE BOND	0.028172
YUTAN FIRE SINKING FUND	0.016379
SID #11 (ESTATES PROV) GENERAL	0.256181
SID #11 BOND	0.141940
UNION TWP GENERAL	0.057437
AG SOCIETY	0.006184
AG SOCIETY IMPROVEMENT FUND	0.000791

Sales Information					
Sale Date	Sale Price	Book & Page	Seller	Buyer	Other Parcels
2/24/2021	\$791,752.00	554 / 1243	BOONE, JUDY L	YUTAN 92, LLC	003898126, 003899500

Land Information		
Lot Basis	Square Feet	Acres
Lump Sum	0	0

Photo



Parcel Information	
Parcel ID	003899000
Links	
Area #	4
Current Owner	YUTAN 92, LLC
Mailing Address	20010 MANDERSON ST, STE 100 ELKHORN, NE 68022-0000
Situs Address	
Tax District	213
School District	6108 (YUTAN 9)
Legal Description	TR S 1/2 SE 35-15-9 (55 ACRES)
Class	Agricultural

Current Value Information			
Land Value	Dwelling Value	Improvement Value	Total Value
\$298,912	\$0	\$0	\$298,912

Prior Year Value Information				
Year	Land Value	Dwelling Value	Improvement Value	Total Value
2023	\$279,369	\$0	\$0	\$279,369
2022	\$252,310	\$0	\$0	\$252,310
2021	\$252,310	\$0	\$0	\$252,310
2020	\$263,640	\$0	\$0	\$263,640
2019	\$282,470	\$0	\$0	\$282,470



Yearly Tax Information		
Year	Amount	Levy
2023	\$4,068.30	1.589795

2023 Tax Levy	
Description	Rate
COUNTY GENERAL	0.222592
COUNTY BLDG	0.001962
COUNTY FLOOD CONTROL	0.001506
COUNTY LAW ENFORCEMENT BOND	0.019986
YUTAN 9 GENERAL	0.942702
YUTAN 9 SPECIAL BLDG	0.079534
YUTAN 9 BOND	0.051577
ESU #2 GENERAL	0.015000
SOUTHEAST COMMUNITY COLLEGE GENERAL	0.073700
SOUTHEAST COMMUNITY COLLEGE CAP IMPT FUND	0.020000
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YUTAN FIRE BOND	0.028172
YUTAN FIRE SINKING FUND	0.016379
UNION TWP GENERAL	0.057437
AG SOCIETY	0.006184
AG SOCIETY IMPROVEMENT FUND	0.000791

Sales Information					
Sale Date	Sale Price	Book & Page	Seller	Buyer	Other Parcels
10/14/2024	\$1,350,000.00	612 / 620	KARLOFF, JULENE M REVOCABLE LIVING TRUST	YUTAN 92, LLC	
10/14/2024	\$0.00	612 / 276	KARLOFF, LARRY D REVOC LIVING TRST	KARLOFF, JULENE M REVOCABLE LIVING TRUST	

Agricultural Land Information							
Soil Symbol	Soil Desc	Landuse	LVG	Spot LVG	Unit Value	Acres	Total Value
7205	7205-AKSARBEN SILTY CLAY LOAD 0-2% SLOPE	DRY	1D1		5,965	2.04	12,169
7647	7647-YUTAN ERODED AKSARBEN SILTY CLAY LOAMS 2-6%	DRY	1D		5,783	18.17	105,077
7646	7646-YUTAN ERODED-JUDSON COMPLEX 6-11% SLOPES	DRY	3D	3DX	4,617	10.88	50,233
ROAD	ROAD	ROAD			0	1.39	0
7750	7750-NODAWAY SILT LOAM-OCCASIONALLY FLOODED	DRY	2D1		5,660	8.36	47,318

11/6/2024

Saunders County Assessor



7231	7231-JUDSON SILT LOAM 2-6% SLOPES	DRY	1D		5,783	1.92	11,103
7280	7280-TOMEK SILT LOAN 0-2% SLOPES	DRY	1D1		5,965	12.24	73,012
					Totals	55	298,912

Well Permitting Policy for Fire Protection Wells

Approved 03/08/2021.

1. Fire Protection well is designed solely for the purpose for emergency use on fire suppression.
2. Fire Department has sole control for the use of the fire protection well.
3. LPNNRD shall require a water quality test from the well being drilled.
4. The well owner, landowner and tenant will allow the LPNNRD to measure the groundwater energy levels within the new well and add it to the LPNNRD GWEL network.
5. The well owner will install small diameter piping, placed in the gravel pack of the high capacity well, so LPNNRD can measure drawdown when the pump is operating and to measure the recovery rate.
6. In Restricted Development Area three test holes will be required to show the geology at and near the proposed well site. One test hole will be drilled at the proposed well site with the second and third test hole drilled approximately 300 feet from the proposed well site and spaced from each other. If a registered well with a well log exists within 1,000 feet of the proposed well site, then this well log maybe used to replace one of the required test holes.
7. A pump test must be performed for a minimum of 2 hours (this is probably a realistic number on fire protection wells) or until the flow stabilizes or slows down. This pump test will be conducted August thru November.
8. Minimum gallons per minute would be established per situation or request from fire department.
9. A dedicated monitoring well will need to be installed before pump test within 1000 feet with an automated data logger. Data will need to be submitted to LPNNRD after pump test.
10. A water level drop of no more than 10 percent of total water depth will be allowed during pump test at dedicated monitoring well.
11. Project will need to be complete, and all conditions met within 1 year after LPNNRD receives the application to obtain a well permit or permit application is null and void.
12. NRD staff will be allowed to be on-site during drilling of test holes and pump test.
13. After all conditions outlined are met the NRD Board will approve the permit application.
14. Upon approval of the fire protection well permit a required Operation and Maintenance (O&M) will be signed by LPNNRD, fire department and homeowner association and/or landowner.

Lower Platte North Natural Resources District Phase Four Public Hearing

November 14, 2024.

Cobblestone Inn Public Meeting Room

2218 Colfax St., Schuyler, NE 68661

The Phase Four Public Hearing was called to order at 7:04 p.m.

1. Notice of Meeting

Joe Birkel (LPNNRD Board Member) welcomed everyone and thanked the group for coming. Joe informed the public that the hearing was being recorded. The hearing was convened under the rules pursuant to *NEB. Rev. Stat. § 46-743*, of the Nebraska Revised Statutes, for the purpose to allow LPNNRD to move a certain part of the District in Platte and Colfax County from Phase 3 to Phase 4 Water Quality Nitrogen Management. The LPNNRD began accepting testimony.

2. Lower Platte North Natural Resource Testimony

Daryl Andersen introduced himself and presented testimony on behalf of the Lower Platte North NRD. The following exhibits were presented in this order.

Exhibit 1: Public notice that was put into the Schuyler paper, published three times prior to the meeting.

Exhibit 2: Public notice of the Hearing Meeting, including legals.

Exhibit 3: A copy of the Lower Platte North NRD Ground Water Management Rules and Regulations amended on June 15, 2018.

Exhibit 4: A copy of the Rules and Regulations that will be implemented for Phase 4 in this Water Quality Management Area. Rules 1-7 were presented.

Exhibit 8: Water Sampling Results collected by LPNNRD staff for the years 2020, 2023, 2024 and an average of the three years.

Exhibit 9: Water Sampling Results shown spatially and collected by producers for the years 2022, 2023, and 2024.

Exhibit 10: Study conducted by Daniel Snow and Jessica Garcia Nascimento of UNL 'Vadose Zone and Groundwater Nitrate Study' showing the nitrates of a combinations of sources. Daryl noted a section in the conclusion that states "Analysis of six deep vadose zones samples shows pore water nitrate concentrations with location averages ranging 8.82 from 42.55 mg/L." "Over half of nitrate nitrogen is likely from the overapplication of commercial fertilizer."

Exhibit 6: Read aloud by Joe Birkel, A letter from the Nebraska Department of Environment and Energy.

Exhibit 7: Read aloud by Joe Birkel, A letter from the Nebraska Department of Natural Resources.

The goals and objectives for establishing the Phase 4 Water Quality Management Area were presented on the screen:

- a. Provide safe drinking water without treatment.
- b. To reduce nitrates in the groundwater for each section within the Phase 4 area by 1 mg/l (ppm) within 3 years.
 1. To reduce the whole Phase 4 area average to below 10 mg/l withing 10 years.
- c. To change the current trendline from gaining in nitrogen groundwater concentrations to decreasing.
- d. To improve the Nitrogen Use Efficiency (NUE) in 50 percent of the fields in 3 years.
 1. Improve NUE in all fields in 10 years.
 2. NUE equations can be found by dividing grain yield by the total amount of N available to the crop.

3. Public Testimony

Joe Birkel announced, "if anybody has a testimony they would like to enter at this time", and informed that they will need to sign in to testify and can proceed to address the body. It was stated that if anyone would like to submit written testimony, they can do so and submit it prior to November 22nd, 2024.

Andrew Kallweit had a testimony:

"I'm Andrew Kallweit, maybe some of you knew my father Steve Kallweit, who passed away four years ago. Anyway, a few things I would like to say, I do understand and appreciate what you guys are doing, its just, sometimes I wonder if the data., it can be a little bit confusing or not always accurate. I am in three different NRD's: Upper Big Blue, Lower Loup, and they all get their own water samples not trying to be mean but, my dad eight years ago couldn't get to a well and so we just mixed the water samples together so I am just wondering how accurate these can be. I am not trying to put anybody down but when are we supposed to collect these water samples, during when we are running them? In the spring? Cause we don't have that information, no one ever tells us.

Lower Loup I had some, oh couple, tests that was 102 nitrates in the soil. So where are these samples supposed to be at? They said under the pivot, and I said, "You're telling me how much nitrogen to use?" "How do you get that calculation that's the whole field", oh you're not supposed to go to dry land, I was never told this I thought we were supposed to take the average of the field not the average of what was under the pivot. So, it looked like I used 40 more pounds of nitrogen than I really did. But it was averaging out for the whole field. That's one point I'm trying to make. I had my water samples done in August, even the Lower Loup they went down about five. So, I have four wells in Colfax. One was 16ppm in 2022, 20ppm in 2023, 13ppm in 2024. The other one was 14 ppm- 2022, 19ppm in 2023, 14 ppm in 2024. Frickles? Well, I just said the field name but, 13 ppm in 2022, 13 ppm in 2023, and 11 ppm this year. And this field 19ppm in 2022, 21 ppm in 2023, 11 ppm this year. So, I don't know if the drought had to do with something. And I know these say we should just always split application, well we are having a hard time finding labor and some of us don't have the machinery. Maybe if anybody knows me, if they've ever seen the field on Road 3, it was under water until almost the end of July. I do not know how I would've split applicated it. I also have another couple fields. I do like split application on hills and sand ground. That's where I do see a benefit of it. But some of these fields we can't, it's just too hard to do management and labor and is a big challenge too. I don't know how I'd do it. I spray, side dress,..., but that's all I have to say thank you."

4. Comments from Hearing

Following the Testimony, it was asked if anyone else in the room had a testimony at that time, there were none. Joe Birkel announced that the process moving forward is the LPNNRD Water Committee will review all the testimony November 26 with a recommendation made to the Board of Directors. The Board of Directors will meet on December 9th at 1:30 pm with the decision being implemented after the Board Meeting.

The option to give testimony was announced again prior to the conclusion of the meeting.

5. Adjournment

The hearing was closed at 7:19pm.

X _____ Date: _____.

Joe Birkel
Moderator/Board Member

AFFIDAVIT OF PUBLICATION

Schuyler Sun
1254 27th Ave., Columbus, NE 68601
(402) 564-2741

State of Texas, County of Bexar, ss:

I, Amber Finneseth, of lawful age, being duly sworn upon oath depose and say that I am an agent of Column Software, PBC, duly appointed and authorized agent of the Publisher of Schuyler Sun, a legal newspaper printed and published daily Tuesday-Saturday in Colfax County, State of Nebraska and of general circulation in Colfax County; that said newspaper has a bonafide circulation published within said county for more than 52 successive weeks immediately prior to the first date of the published notice, and is produced in an office maintained at the place of publication. This affidavit is a true and correct copy of notice which appeared in said newspaper.

Publication Dates:

- Oct 24, 2024
• Oct 31, 2024
• Nov 7, 2024

Notice ID: dhF2wGB0yVCfqblHuhxF
Publisher ID: COL-NE-1500080
Notice Name: Public Hearing - Phase 4

Publication Fee: \$41.67

Section: Class Legals
Category: 0099 LEGALS

Amber Finneseth

Agent

VERIFICATION

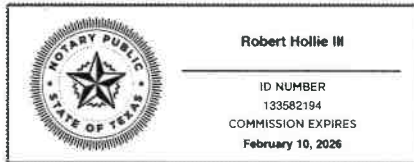
State of Texas
County of Bexar

Signed or attested before me on this: 11/07/2024

[Signature]

Notary Public

Electronically signed and notarized online using the Proof platform.



Public Hearing

The Lower Platte North Natural Resources District (LPNNRD) has scheduled a Public Hearing at the Cobblestone Inn & Suites located at 2218 Colfax Street, Schuyler NE. This hearing will begin at 7 pm on Thursday November 14, 2024. The purpose of this hearing is to hear comments regarding moving Sections 31-36, Township 18 North, Range 2 East, Sections 31-34, Township 18 North, Range 3 East, Sections 1-26, Township 17 North, Range 2 East and Sections 1-22 and 28-30, Township 17 North, Range 3 East from Groundwater Quality Phase Three to Phase Four. The criteria for this change are outlined in LPNNRD's Groundwater Management Area Rules and Regulation, dated June 15, 2018.

The Groundwater Rules and Regulations are available upon request at the Lower Platte North NRD office by regular mail at 511 Commercial Park Road, P O Box 126, Wahoo, NE 68066, by phone at 402-443-4675, or on our website at www.lpnnrd.org. October 24, 31, November 7, 2024. COL-NE-1500080 ZNEZ

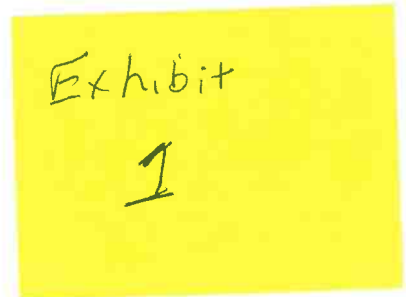
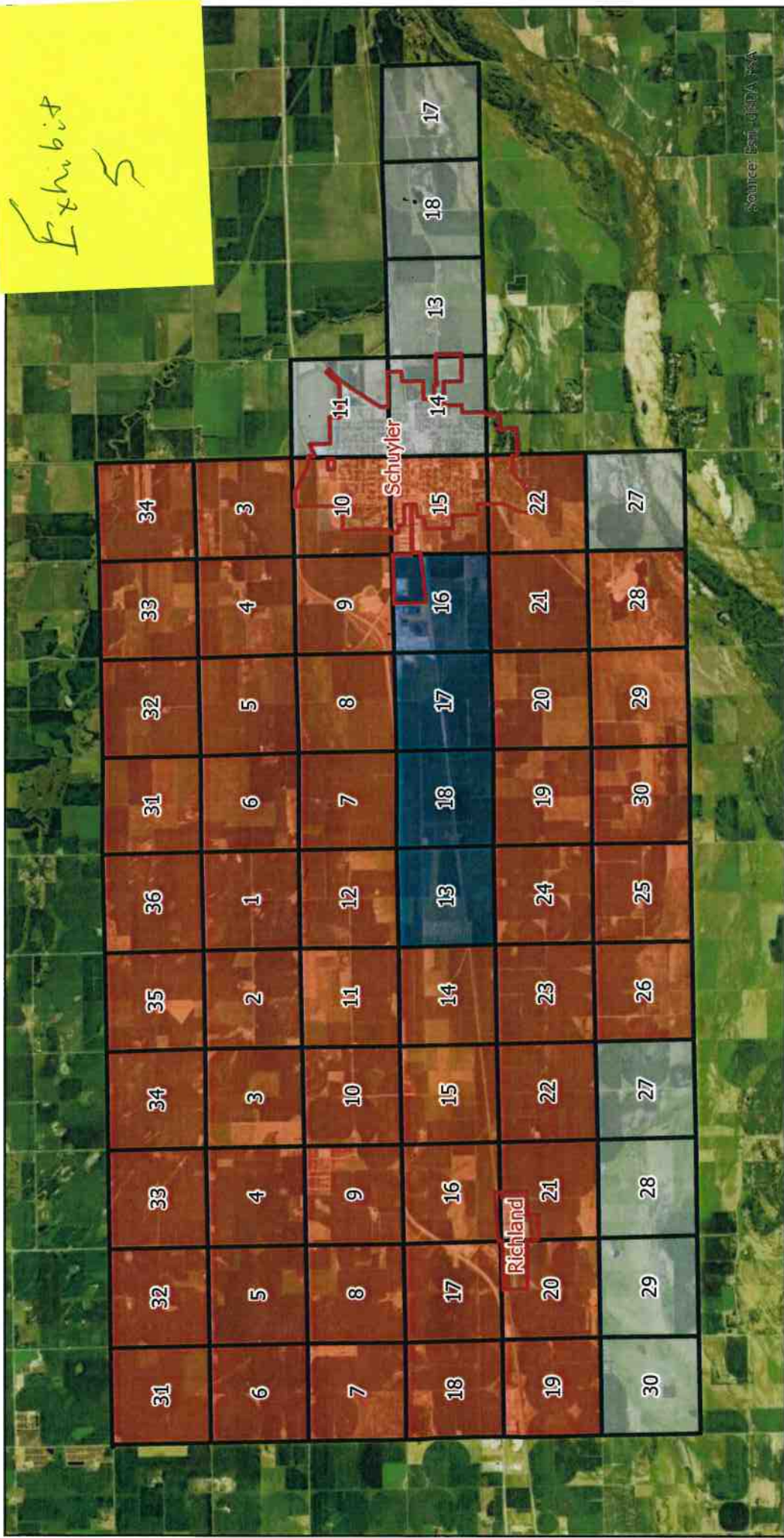


Exhibit 5



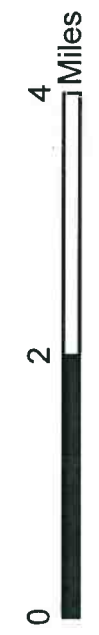
Proposed Phase 4 Management Area

*Average uranium concentration in 4 sections is 39.99 ppb (8 samples from 2023 and 2024). The EPA has set the Maximum Contaminant Level (MCL) for Uranium in drinking water at 30 parts per billion (ppb).

- Proposed Phase 4 Nitrate
- Phase 4 Uranium*
- Phase 3
- Sections
- City Boundaries

Nitrate samples in proposed phase 4 area

Year	Above 15.01	Samples	> 15.01	Avg
2020	29	58	50%	16.7
2023	48	80	60%	17.4
2024	35	63	56%	16.9



Created November 2024 by LPNIRD
 NAD 1983 StatePlane Nebraska FIPS 2600 (US Feet)
 Data: LPNIRD Imagery: NRCS

LOWER PLATTE NORTH
 Natural Resources District

Source: Esri, DigitalGlobe, GeoEye

Hearing Documents

Section I Groundwater Quality Management Area - Phase Four

Rule 1 Phase Four Criteria

When levels of nitrate-nitrogen exceed 15.01 parts per million, or levels of other human induced non-point source contaminants exceed 100% of the MCL or LHAL, a Phase Four area will be declared. Within the same aquifer; boundary setting for Phase Four Areas will be initiated when: water quality analytical results within a minimum 9 square mile area are at identified trigger levels for a minimum of 2 sampling events. The area must contain a minimum of 10 registered wells and contaminant trigger levels must be exceeded in over 50% of the wells. When irrigation wells are not available, other wells may be used. Initial investigation by the District will be to determine if the contamination is a result of point-source or non-point source pollution. If non-point source pollution is found to be the reason, more intensive investigation for boundary setting will ensue. If a Wellhead Protection Area should be established due to non-point source pollution, the District may set boundaries that are less than 9 square miles. After the establishment of a Phase Four Area, if non-point source contamination levels should decline, two consecutive sampling events below the trigger levels are needed before the Area could be placed in Phase Three, Phase Two or Phase One.

- **The criteria for the boundary have been met, which includes sections with human induced non-point source contaminants exceeding 100% of the MCL concentration of uranium.**

Rule 2 Continuation of Phase One, Two and Three Rules

A continuation of Phase One Rules as defined in Section E, Rules 1-6, Section F, Rule 2, Phase Two Rules as defined in Section G, Rules 3, 4, 5, 8, 9, 10 and 11, Phase Three Rules as defined in Section H, Rule 4.

- **A 2-step reporting process for Phase 4 reports with March 15th for soil samples and District nitrogen recommendations with a December 15th deadline for reporting actual yields and nitrogen applications.**

Rule 3 Fertilizer Application On All Soils

Split application of commercial nitrogen fertilizer is required with 80 pounds maximum applied before May 1.

- **This is to encourage split applications and the utilization of manure credit.**

Rule 4 Nitrogen Recommendations

Nitrogen applications must not exceed District Recommendations. Application data may be required to verify the amount of nitrogen that is applied to the field(s) within the management area.

- **The District will utilize the nitrogen recommendation formula that has been used since the management area was established. Emphasis will be given on correct soil sampling protocols and realistic yield expectations when calculating nitrogen recommendations.**
- **The District will require soil samples down to 36 inches.**

Rule 5 Well Metering

Flow meters are required on all high capacity wells.

- **A high capacity well is a well that can achieve a flow rate of 50 gallons per minute (GPM) or higher.**
- **All high capacity irrigation wells will require a properly installed, District approved flow meter.**
- **Water Use report is required annually with nitrogen report**

Rule 6 Acre-Inch Allocations

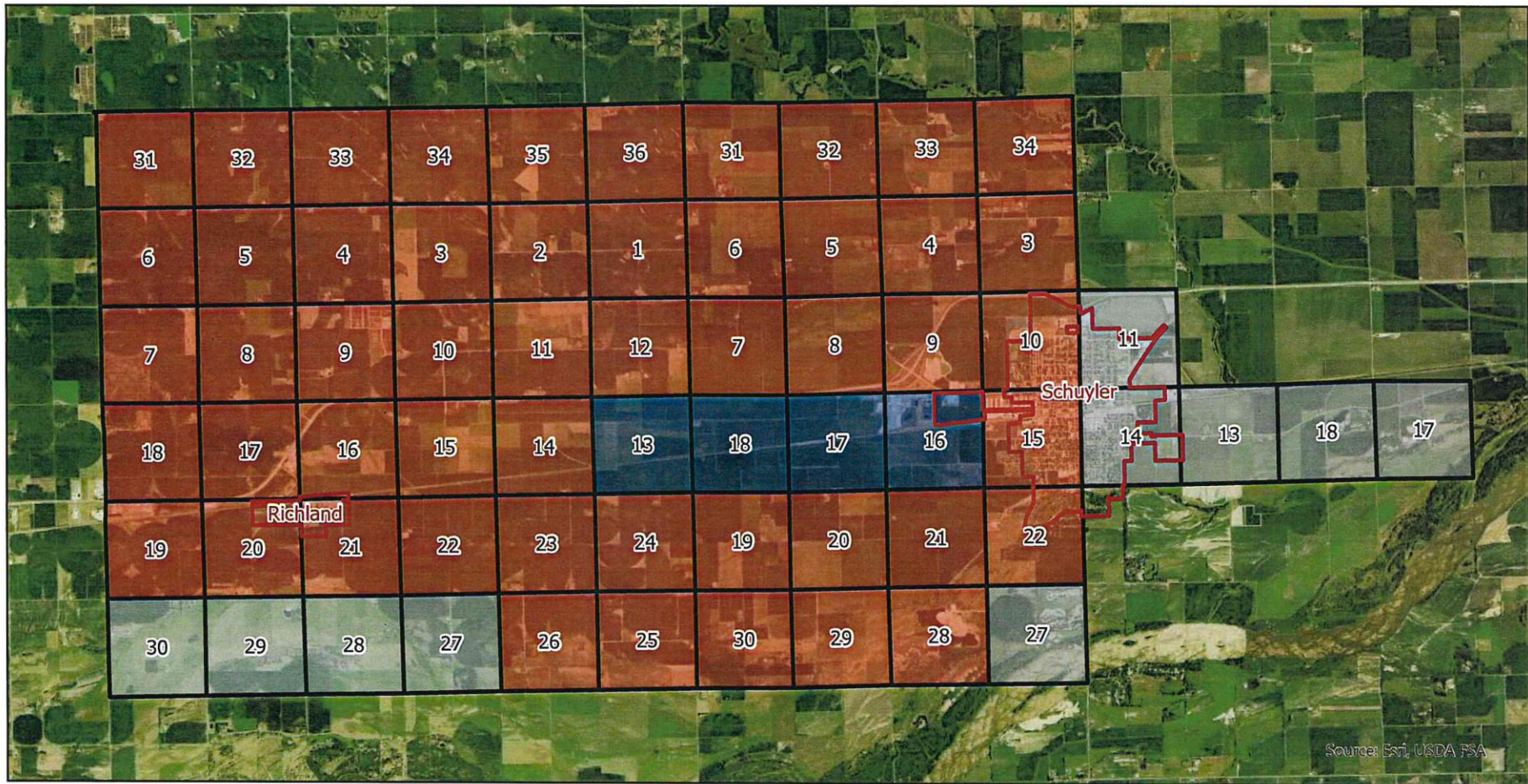
A rolling acre-inch allocation, in 3-year increments, will be put into place by the District and will be based on the aquifer subarea, crop planted, irrigation distribution system, percent decline of the aquifer, water use of the aquifer, climatic conditions, net corn crop requirements, and discretionary factors.

- **The District will collect 3 years of water use information from all of the producers within the Phase 4 area and then consider if an allocation should be implemented.**

Rule 7 Staff Assistance

NRD Staff will work directly with individuals on Best Management Practices. Staff may spot check fields before May 1 by collecting a soil sample to monitor Rule 3.

- **Staff will work with producers to implement a Nutrient/Irrigation Agreement or a Nitrogen Reduction Incentive.**



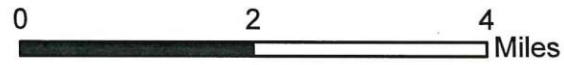
- Proposed Phase 4 Nitrate
- Phase 4 Uranium*
- Phase 3
- Sections
- City Boundaries

Proposed Phase 4 Management Area

*Average uranium concentration in 4 sections is 39.99 ppb (8 samples from 2023 and 2024). The EPA has set the Maximum Contaminant Level (MCL) for Uranium in drinking water at 30 parts per billion (ppb).

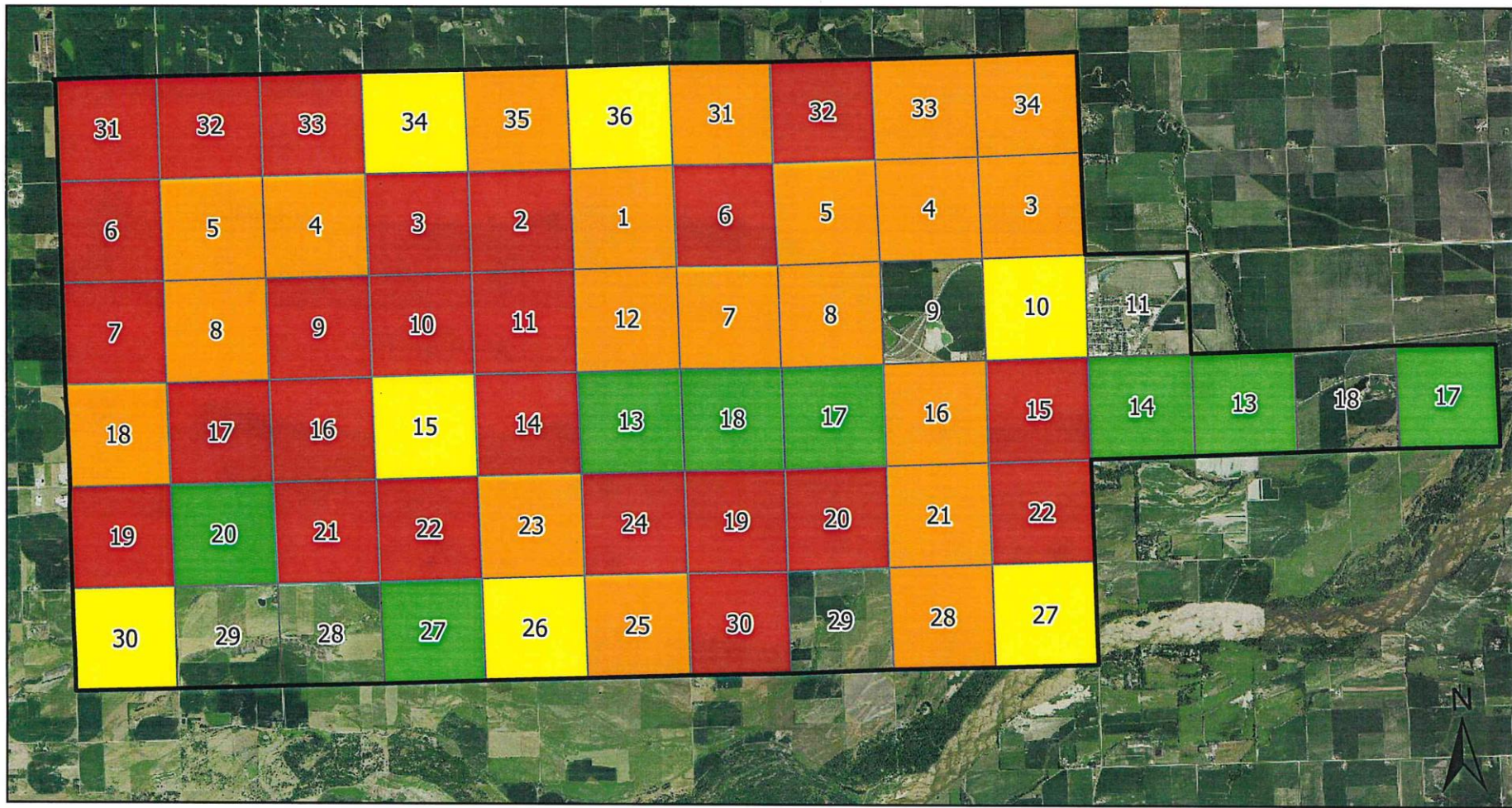
Nitrate samples in proposed phase 4 area

Year	Above 15.01	Samples	> 15.01	Avg
2020	29	58	50%	16.7
2023	48	80	60%	17.4
2024	35	63	56%	16.9



Created November 2024 by LPNDRD
 NAD 1983 StatePlane Nebraska FIPS 2600 (US Feet)
 Data: LPNDRD Imagery: NRCS





Richland Schuyler Phase III

2020

Mean Nitrates

- 0 - 8
- 8.01 - 10
- 10.01 - 15
- > 15.01

Mean N by Section 2020 NRD Samples

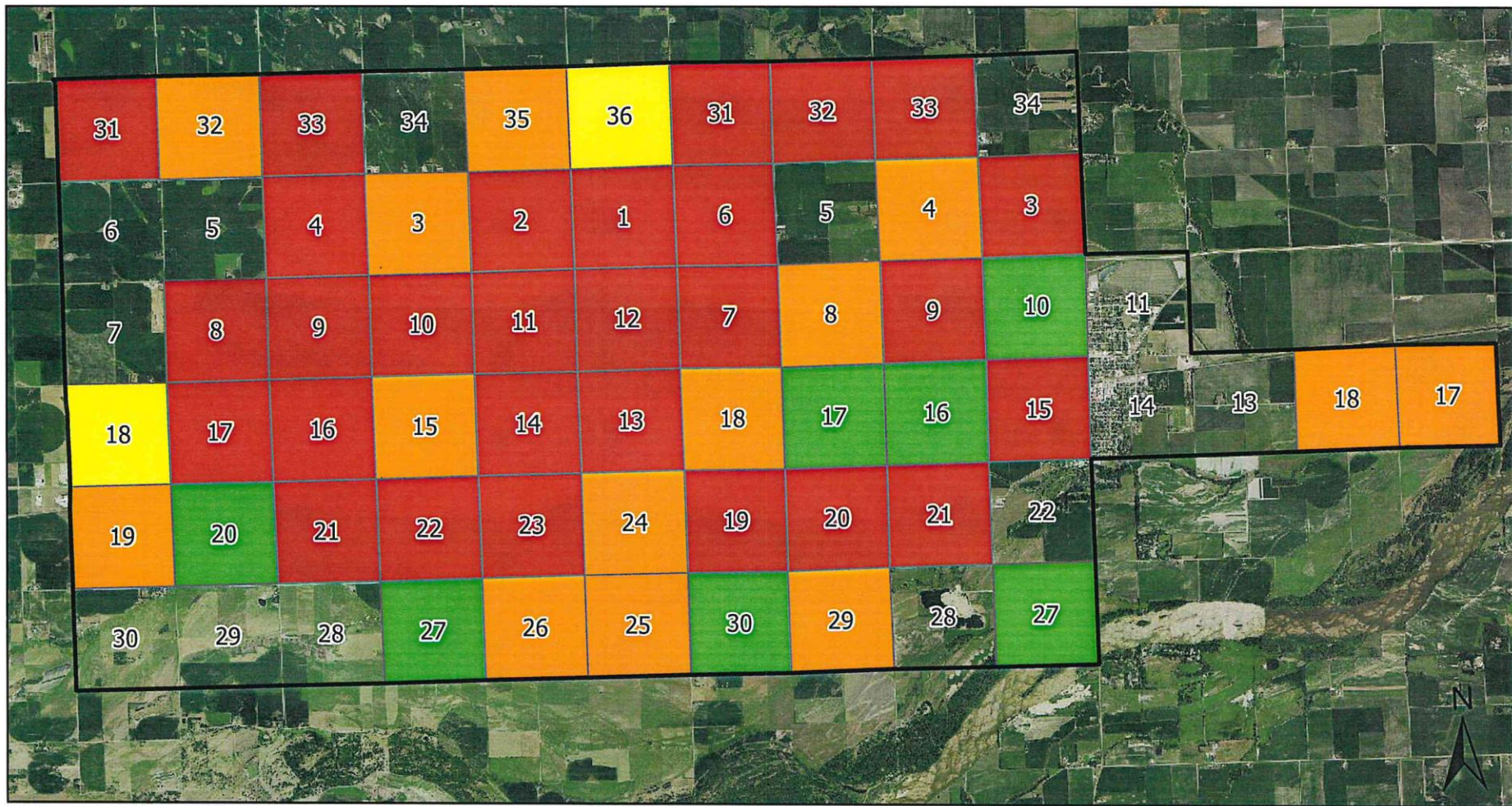
Includes data from 69 samples

The Environmental Protection Agency (EPA) has set the maximum contaminant level (MCL) for nitrate in drinking water at 10 parts per million. This is due to health risks associated with consuming water with high nitrate levels.



Created 10/19/23 by LPNNRD
 NAD 1983 StatePlane Nebraska FIPS 2600 (US Feet)
 Data: LPNNRD Imagery: NRCS





Richland Schuyler Phase III

2023

Mean Nitrates

- 0 - 8
- 8.01 - 10
- 10.01 - 15
- > 15.01

Mean N by Section 2023 NRD Samples

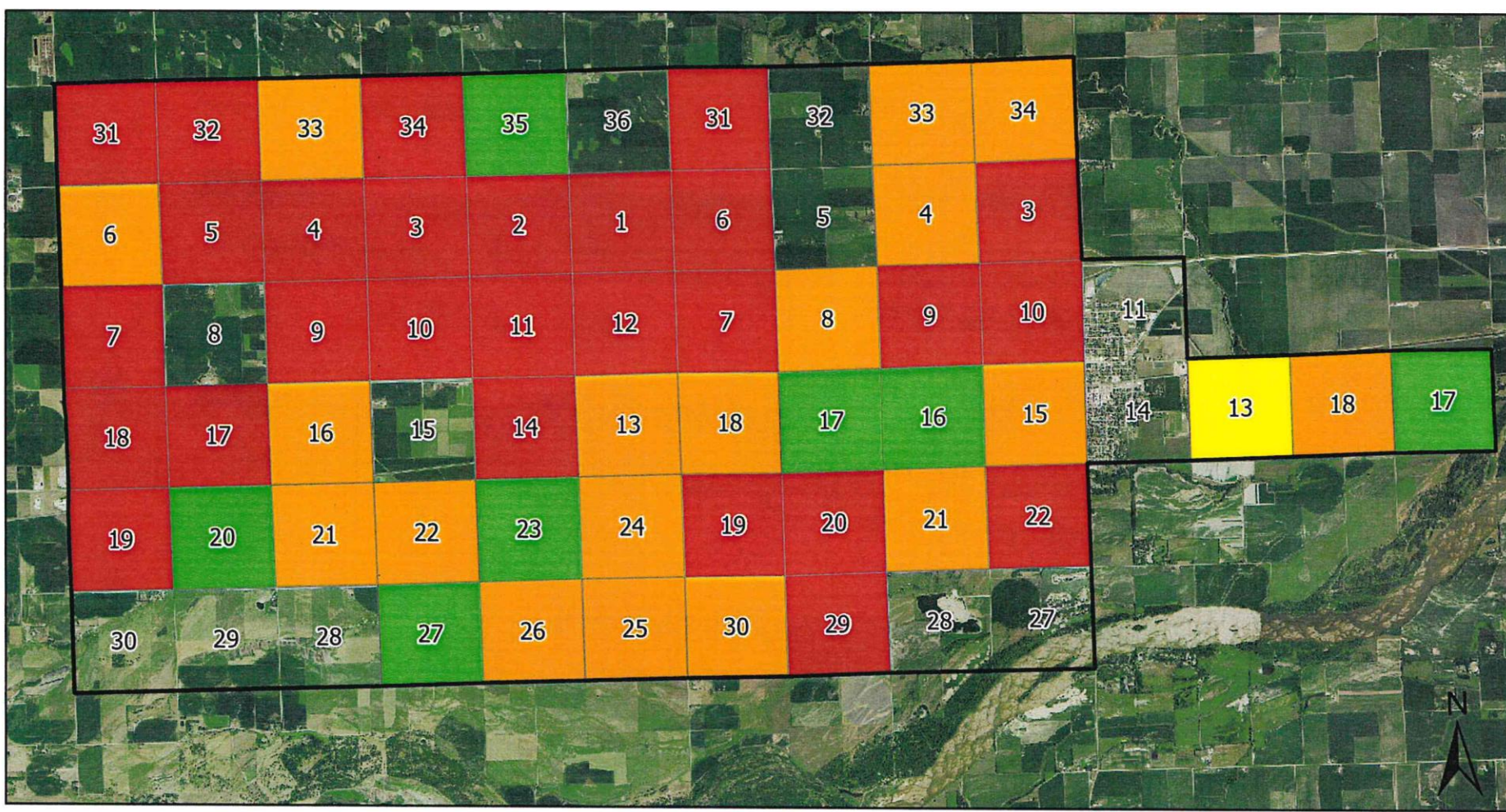
Includes data from 94 samples

The Environmental Protection Agency (EPA) has set the maximum contaminant level (MCL) for nitrate in drinking water at 10 parts per million. This is due to health risks associated with consuming water with high nitrate levels.



Created 10/19/23 by LPNNRD
 NAD 1983 StatePlane Nebraska FIPS 2600 (US Feet)
 Data: LPNNRD Imagery: NRCS





Richland Schuyler Phase III

2024

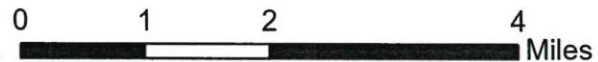
Mean Nitrates

- 0 - 8
- 8.01 - 10
- 10.01 - 15
- > 15.01

Mean N by Section 2024 NRD Samples

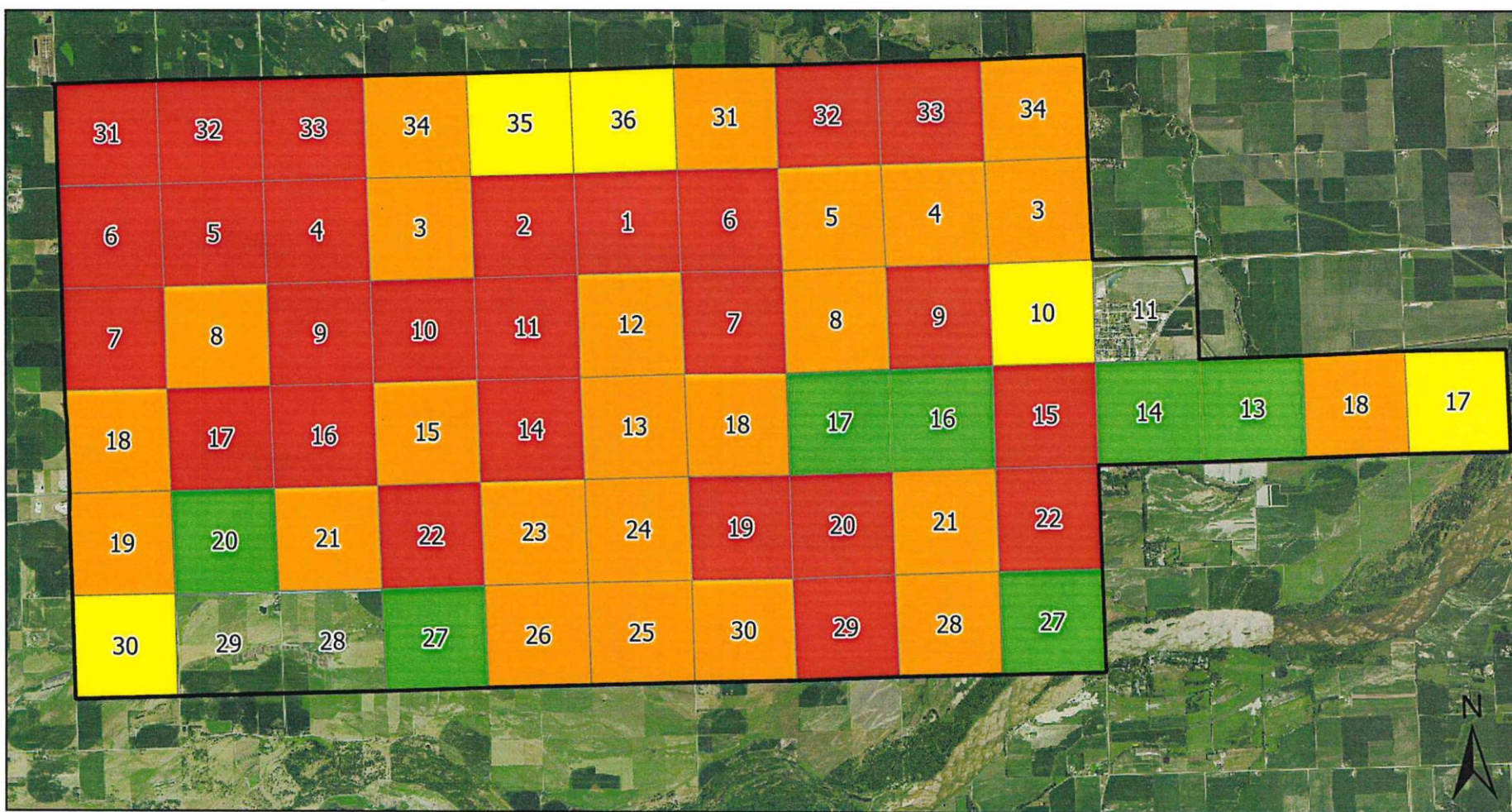
Includes data from 79 samples

The Environmental Protection Agency (EPA) has set the maximum contaminant level (MCL) for nitrate in drinking water at 10 parts per million. This is due to health risks associated with consuming water with high nitrate levels.



Created 10/24/2024 by LPNNRD
 NAD 1983 StatePlane Nebraska FIPS 2600 (US Feet)
 Data: LPNNRD Imagery: NRCS





Richland Schuyler Phase III

2020, 2023, 2024

Mean Nitrates

- 0 - 8
- 8.01 - 10
- 10.01 - 15
- > 15.01

Mean N by Section 3-Year NRD Samples

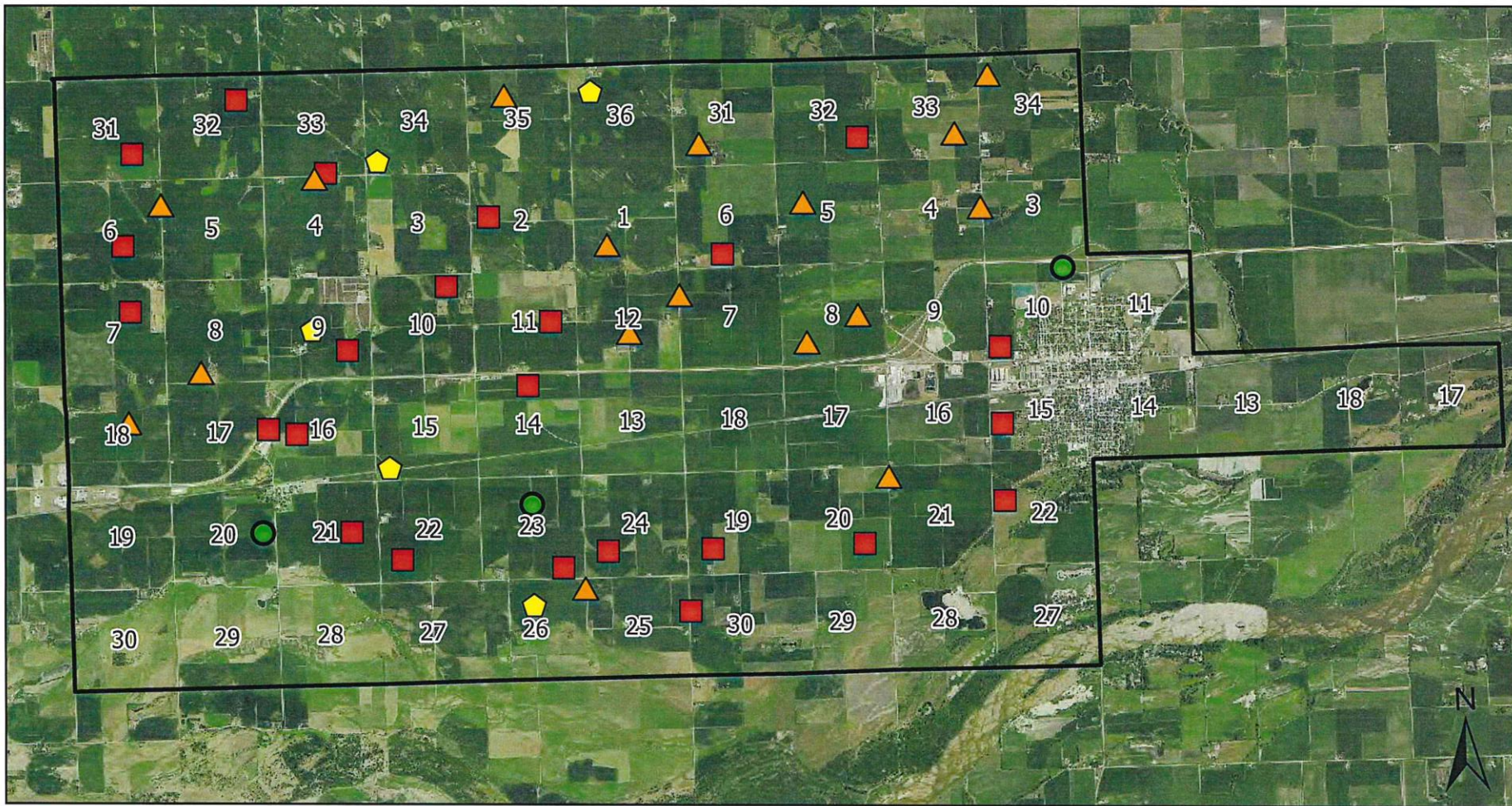
Includes data from 242 samples (2020, 2023, 2024)

The Environmental Protection Agency (EPA) has set the maximum contaminant level (MCL) for nitrate in drinking water at 10 parts per million. This is due to health risks associated with consuming water with high nitrate levels.



Created 10/24/2024 by LPNRRD
 NAD 1983 StatePlane Nebraska FIPS 2600 (US Feet)
 Data: LPNRRD Imagery: NRCS





Richland Schuyler Phase III

Nitrates

- 0 - 8
- ⬠ 8.01 - 10
- ▲ 10.01 - 15
- > 15.01

2020 NRD Sample Points

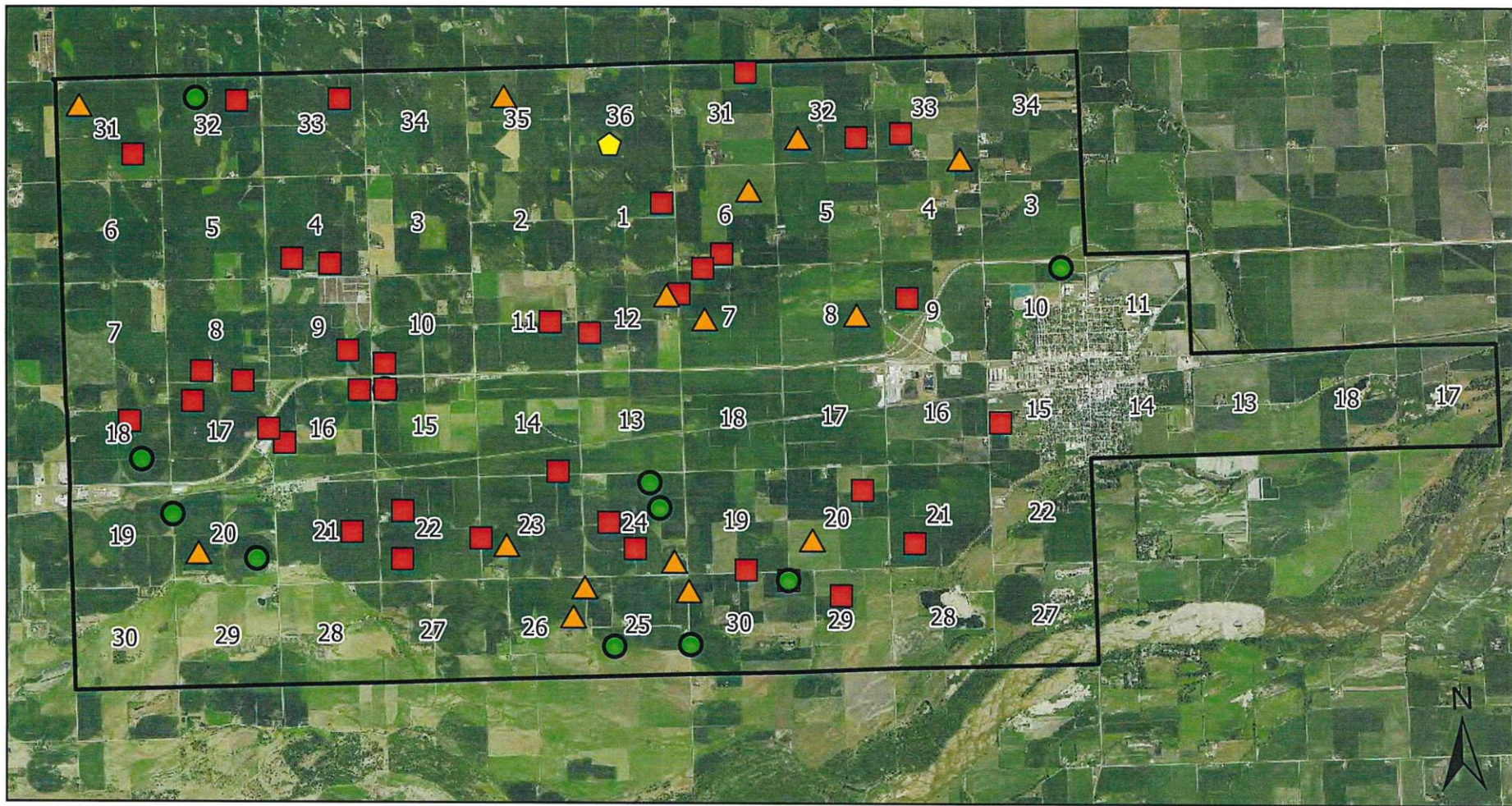
Includes data from 58 samples

The Environmental Protection Agency (EPA) has set the maximum contaminant level (MCL) for nitrate in drinking water at 10 parts per million. This is due to health risks associated with consuming water with high nitrate levels.



Created 11/13/2024 by LPNNRD
 NAD 1983 StatePlane Nebraska FIPS 2600 (US Feet)
 Data: LPNNRD Imagery: NRCS





Richland Schuyler Phase III

Nitrates

- 0 - 8
- ⬠ 8.01 - 10
- ▲ 10.01 - 15
- > 15.01

2023 NRD Sample Points

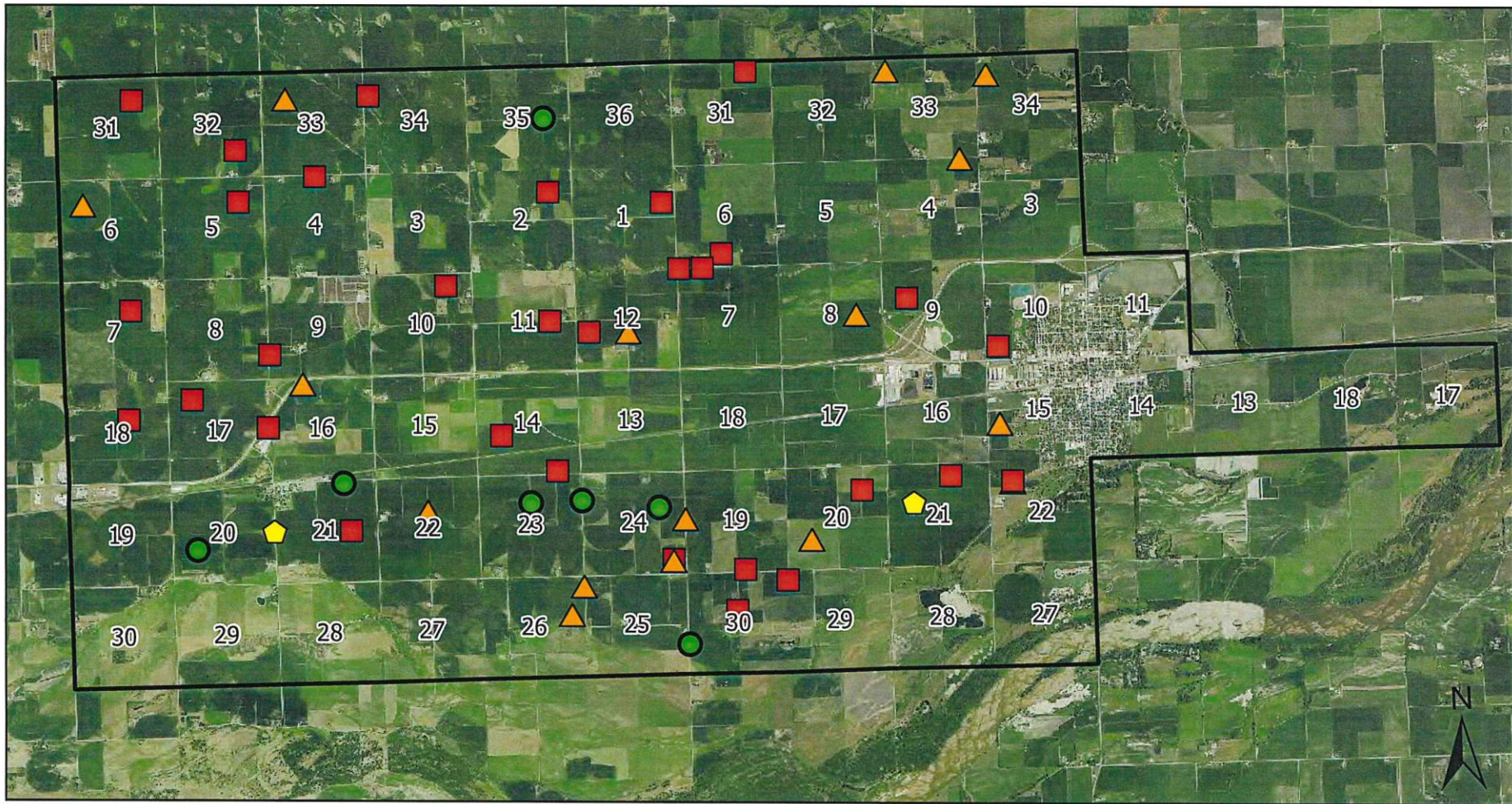
Includes data from 80 samples

The Environmental Protection Agency (EPA) has set the maximum contaminant level (MCL) for nitrate in drinking water at 10 parts per million. This is due to health risks associated with consuming water with high nitrate levels.



Created 11/13/2024 by LPNNRD
 NAD 1983 StatePlane Nebraska FIPS 2600 (US Feet)
 Data: LPNNRD Imagery: NRCS





Richland Schuyler Phase III

Nitrates

- 0 - 8
- ⬠ 8.01 - 10
- ▲ 10.01 - 15
- > 15.01

2024 NRD Sample Points

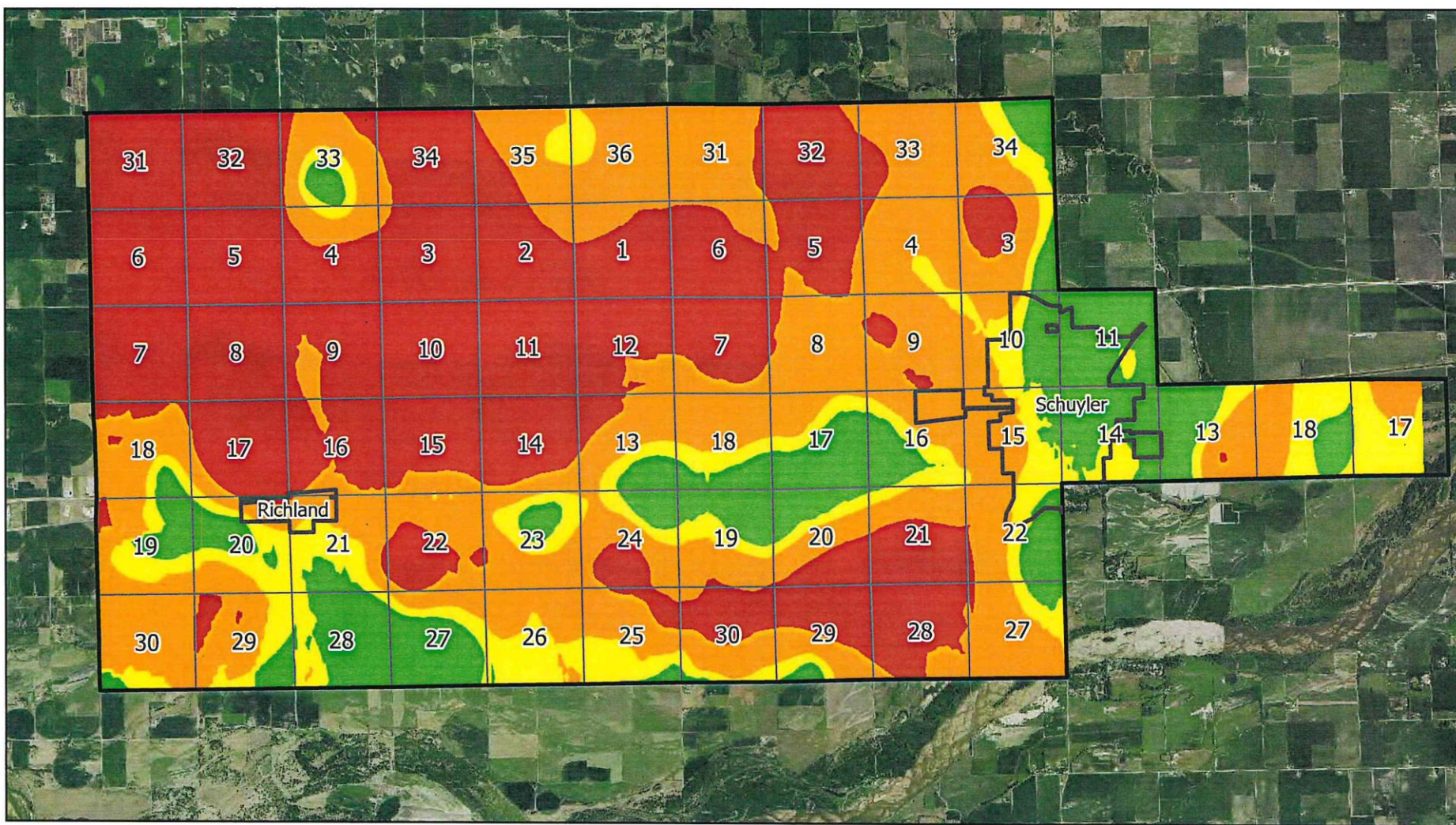
Includes data from 63 samples

The Environmental Protection Agency (EPA) has set the maximum contaminant level (MCL) for nitrate in drinking water at 10 parts per million. This is due to health risks associated with consuming water with high nitrate levels.



Created 11/13/2024 by LPNNRD
 NAD 1983 StatePlane Nebraska FIPS 2600 (US Feet)
 Data: LPNNRD Imagery: NRCS

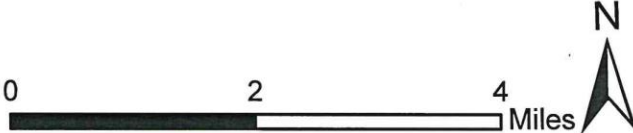


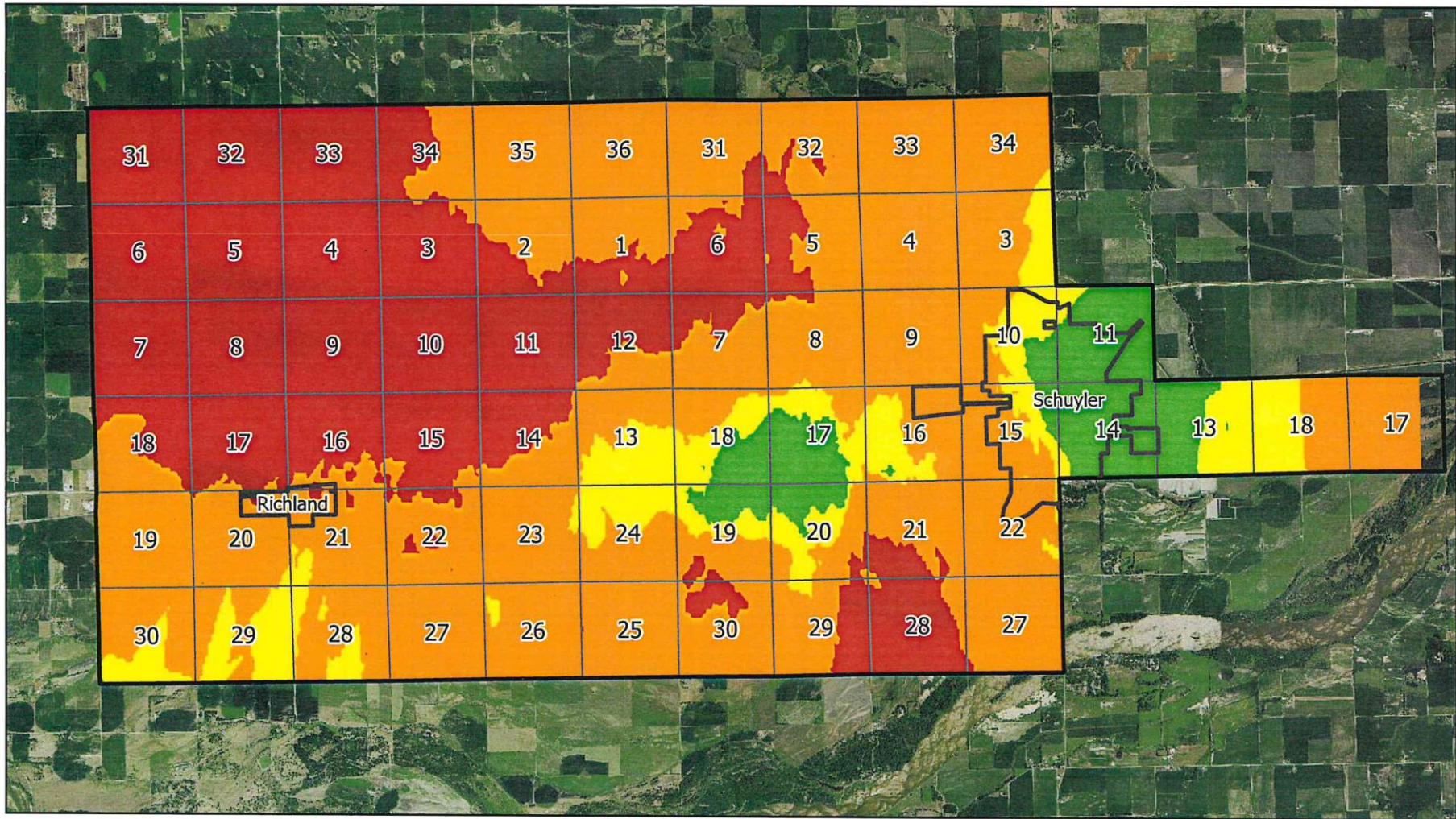


2024 Nitrate Results: Spatial Analysis (Producer Kits)

Includes data from 334 samples

- City Boundaries
 - Richland Schuyler Phase III
 - Section
- 2024 Producer Sample Kits
- VALUE
- 0 - 8
 - 8.01 - 10
 - 10.01 - 15
 - > 15

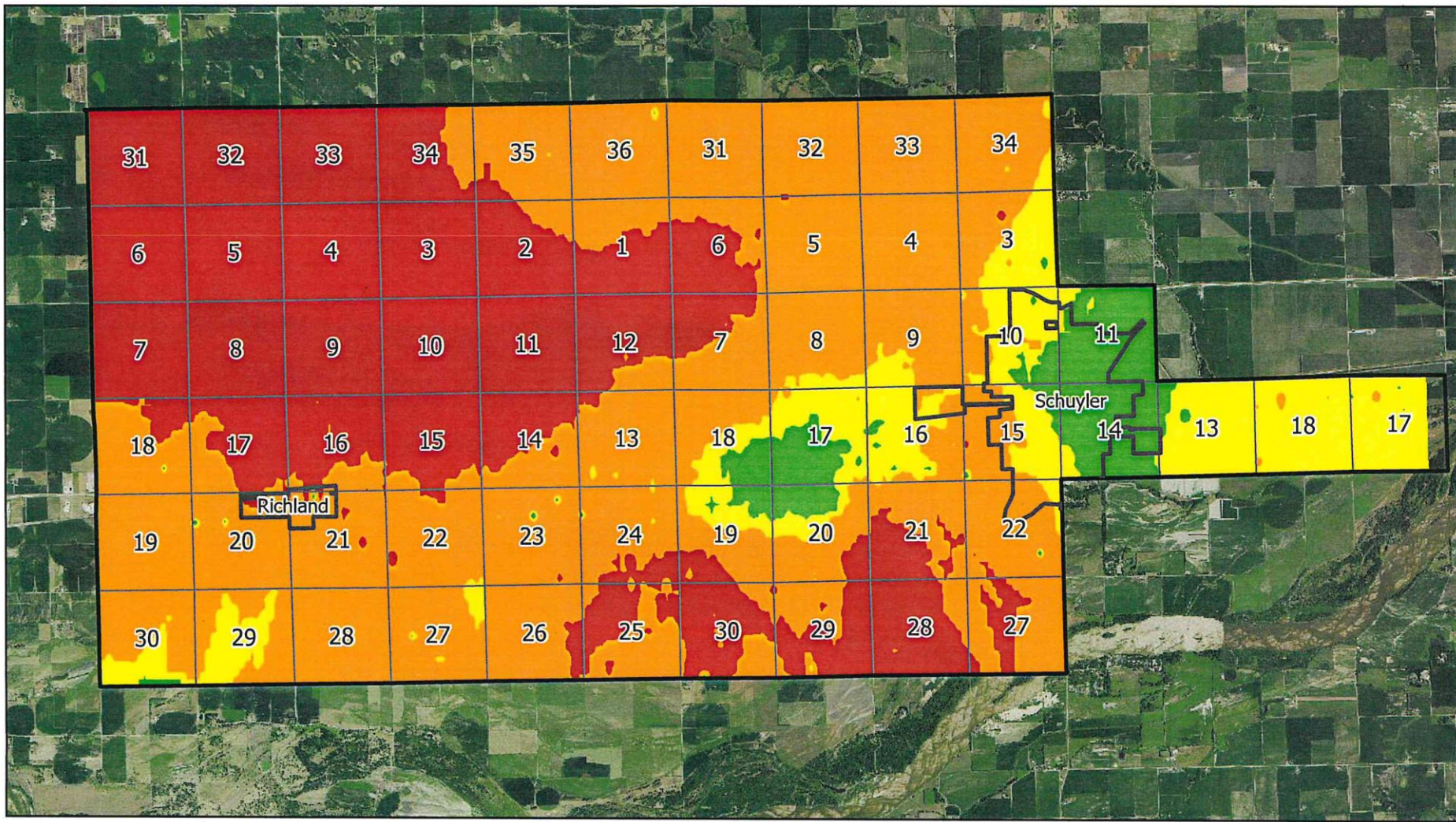




- City Boundaries
 - Richland Schuyler Phase III
 - Section
- 2023 Producer Sample Kits
- Nitrate
- 0 - 8
 - 8.01 - 10
 - 10.01 - 15
 - > 15

2023 Nitrate Results: Spatial Analysis (Producer Kits)

Includes data from 324 samples



- City Boundaries
- Richland Schuyler Phase III
- Section

2022 Producer Sample Kits

- Nitrate
- 0 - 8
 - 8.01 - 10
 - 10.01 - 15
 - > 15

2022 Nitrate Results: Spatial Analysis (Producer Kits)

Includes data from 332 samples



Vadose Zone and Groundwater Nitrate Study

Lower Platte North Natural Resources District

Prepared for: Lower Platte North NRD

June 2021, Revised August 2021

By: Daniel Snow and Jessica Garcia Nascimento
University of Nebraska-Lincoln Water Sciences Laboratory



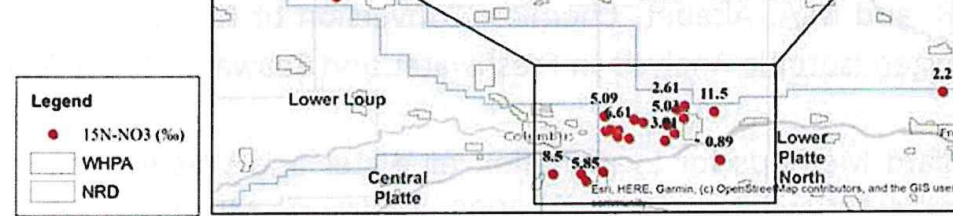


Figure 11. Distribution of ^{15}N -nitrate isotope composition in all groundwater samples collected for this study.

Conclusions

Based on the trends of groundwater and vadose zone nitrate levels in this area of the LPNNRD, there is clearly continued loading of nitrate to the water table. The Bellwood Phase 2, Richland and Schuyler Phase 2 and 3 Groundwater Management Areas have some of the highest groundwater nitrate concentrations of the district. Analysis of six deep vadose zone samples shows pore water nitrate concentrations with location averages ranging 8.82 from 42.55 mg/L, similar to local groundwater concentrations. Vadose zone nitrate was highest beneath cropland with continuous corn and soybeans, while alfalfa, grass, and cover crops had much lower nitrate levels. Except for 2 wells, arsenic and uranium concentrations in groundwater samples were generally below the maximum contaminant level for drinking water. Stable isotope analysis of nitrate in the groundwater and vadose zone samples indicates over half of nitrate nitrogen is likely from the overapplication of commercial fertilizer. Several samples show evidence of enrichment by denitrification, especially grab samples taken near the water table, and several have nitrogen isotope composition characteristic of a mixture of organic (manure) nitrogen and commercial fertilizer. Comparison of sites with enriched nitrogen to manure application can help confirm the importance of this source. The majority of samples, however, have nitrogen isotope composition similar to commercial (inorganic) nitrogen, and thus efforts to limit the application of fertilizer is

The goals and objectives for establishing the Phase 4 Water Quality Management Area:

- Provide safe drinking water without treatment.
- To reduce nitrates in the groundwater for each section within the phase 4 area by 1 mg/l (PPM) within 3 years
 - To reduce the whole Phase 4 area average to below 10 mg/l within 10 years
- To change the current trendline from gaining in nitrogen groundwater concentration to decreasing.
- To improve the Nitrogen Use Efficiency (NUE) in 50 percent of the fields in 3 years
 - Improve NUE in all fields in 10 years
 - NUE equation can be found by dividing grain yield by the total amount of N available to the crop.
- Within 10 years, reduce the total amount of nitrogen applied by 15% against the baseline year of 2024.



November 19, 2024
 Invoice No: 28283

Invoice Total:	\$2,423.50
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Daryl Andersen
 Lower Platte North NRD
 511 Commercial Park Road
 Wahoo, NE 68066-0126

Please Remit To:
LRE Water
1221 Auraria Pkwy
Denver, CO 80204
(303) 455-9589
billing@LREwater.com

Invoice Email: dandersen@lpnrd.org
 Project No.: 5036LPN04
 Project Name: LPNNRD Nitrate Assessment Project

Professional Services through October 25, 2024

Task 01 Risk Tool Expansion

Professional Personnel

	Hours	Rate	Amount	
Barry, Michael	3.00	204.00	612.00	
Bauer, Jacob	.75	235.00	176.25	
Totals	3.75		788.25	
Total Labor				\$788.25
		Total this Task		\$788.25

Task 02 USC Groundwater Model

Professional Personnel

	Hours	Rate	Amount	
Fuentes Arias, Fabiana	3.50	180.00	630.00	
Fullmer, Tucker	1.50	141.00	211.50	
Hume, David	1.25	245.00	306.25	
Mohr, Jonathan	2.50	195.00	487.50	
Totals	8.75		1,635.25	
Total Labor				\$1,635.25
		Total this Task		\$1,635.25

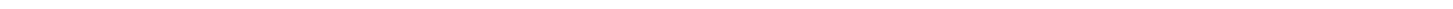
Total this Invoice \$2,423.50

Outstanding Invoices

Number	Date	Balance
27950	10/16/2024	1,486.00
Total		\$1,486.00

Total Now Due

\$3,909.50



Unbilled Detail and Aging

Tuesday, November 19, 2024
9:13:45 AM

LRE Water

Aged as of 11/19/2024

Billing Status	Date	Labor Code /Account	Employee/ Reference	Description	Hours/ Units	Billing Rate	Billing Amount	Current	31-60	61-90	91-120	121-150	Over 151
Project Number: 5036LPN04 LPNNRD Nitrate Assessment Project													
Task Number: 01 Risk Tool Expansion													
Labor:													
B	9/27/2024	016	10203	Barry, Michael	3.00	204.00	612.00						612.00
B	10/26/2024	016	10203	Barry, Michael	4.00	204.00	816.00	816.00					
B	10/27/2024	016	10203	Barry, Michael	4.00	204.00	816.00	816.00					
B	10/28/2024	016	10203	Barry, Michael	12.00	204.00	2,448.00	2,448.00					
B	10/29/2024	016	10203	Barry, Michael	14.00	204.00	2,856.00	2,856.00					
B	10/30/2024	016	10203	Barry, Michael	7.00	204.00	1,428.00	1,428.00					
B	10/31/2024	016	10203	Barry, Michael	7.25	204.00	1,479.00	1,479.00					
B	11/3/2024	016	10203	Barry, Michael	3.00	204.00	612.00	612.00					
B	11/4/2024	016	10203	Barry, Michael	10.00	204.00	2,040.00	2,040.00					
B	11/5/2024	016	10203	Barry, Michael	9.00	204.00	1,836.00	1,836.00					
B	11/6/2024	016	10203	Barry, Michael	7.25	204.00	1,479.00	1,479.00					
B	11/7/2024	016	10203	Barry, Michael	7.00	204.00	1,428.00	1,428.00					
B	11/8/2024	016	10203	Barry, Michael	6.00	204.00	1,224.00	1,224.00					
B	11/11/2024	016	10203	Barry, Michael	1.50	204.00	306.00	306.00					
B	11/15/2024	016	10203	Barry, Michael	3.00	204.00	612.00	612.00					
B	9/26/2024	000	10123	Bauer, Jacob	.50	235.00	117.50						117.50
B	9/27/2024	000	10123	Bauer, Jacob	.25	235.00	58.75						58.75
B	11/8/2024	007	10233	Salazar, Timothy	.75	169.00	126.75	126.75					
					Total Billable Labor	99.50	20,295.00	19,506.75	788.25				
					Total Labor	99.50	20,295.00	19,506.75	788.25				
					Total for 01	99.50	20,295.00	19,506.75	788.25				
Task Number: 02 USC Groundwater Model													
Labor:													
B	9/26/2024	000	10269	Fuentes Arias, Fabiana	2.00	180.00	360.00						360.00
B	9/27/2024	000	10269	Fuentes Arias, Fabiana	1.50	180.00	270.00						270.00
B	10/14/2024	000	10196	Fullmer, Tucker	1.50	141.00	211.50						211.50
B	9/26/2024	000	10172	Hume, David	1.25	245.00	306.25						306.25
B	10/14/2024	000	10217	Mohr, Jonathan	2.50	195.00	487.50						487.50
					Total Billable Labor	8.75	1,635.25	1,635.25	1,635.25				
					Total Labor	8.75	1,635.25	1,635.25	1,635.25				
					Total for 02	8.75	1,635.25	1,635.25	1,635.25				
					Total for 5036LPN04	108.25	21,930.25	19,506.75	2,423.50				

2024 Fall Groundwater Level Report

Lower Platte North NRD

District Basis

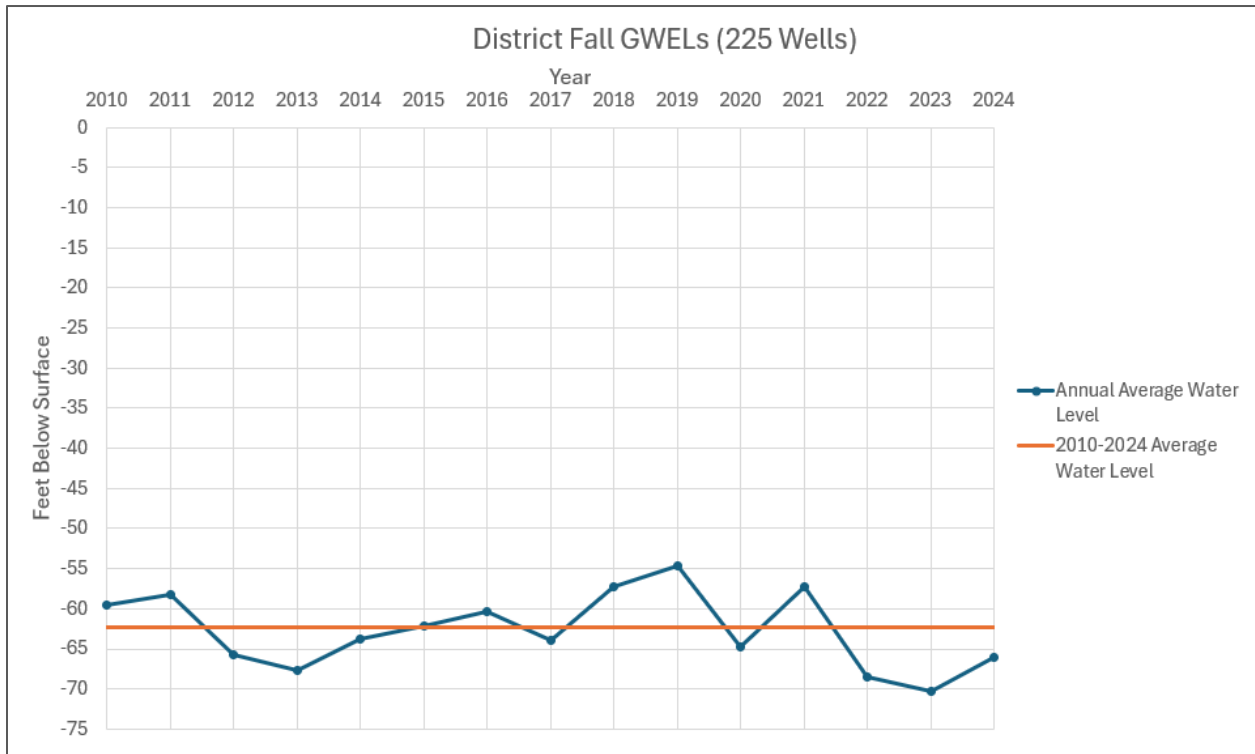
Using the measured Fall depths to water from 2010 to 2024, the average depth was calculated for each annually measured well in the district.

From 2010-2024, the average Fall distance to water from the ground surface in the district was 62.38’.

The average distance to water in the Fall of 2024, across the district, was 66.04’.

In comparison to the average Fall well depths from 2010 to 2024, the 2024 Fall well depths are 3.65’ lower on average.

In reference to the 2023 Fall well levels, the 2024 Fall well levels averaged as a 3.72’ rise across the district.



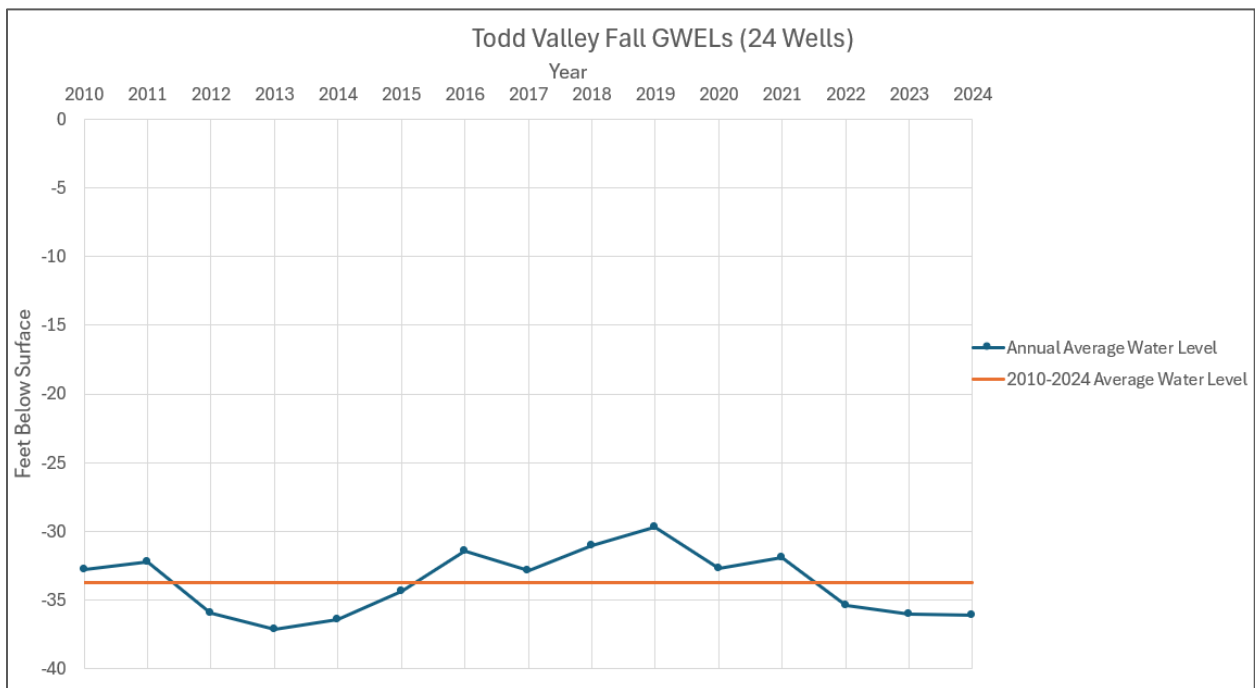
Todd Valley

From 2010-2024, the average Fall distance to water from the ground surface in Todd Valley was 33.69'.

The average distance to water in the Fall of 2024, across Todd Valley, was 36.12'.

In comparison to the average Fall well depths from 2010 to 2024, the 2024 Fall well depths of Todd Valley are 2.43' lower on average.

In reference to the 2023 Fall well levels, the 2024 Fall well levels averaged as a 0.10' drop across Todd Valley.



Platte Valley

The Platte Valley region has 4 wells that are included within in it that skew the data greatly. This is due to their large distance to water compared to the rest of the Platte Valley. These 4 wells are PRU-02, PRU-04, PRU-06, and PRU-08. PRU stands for Platte River Uplands. These 4 wells are North of Fremont. Data was assembled both with including these wells in the Platte Valley and excluding them.

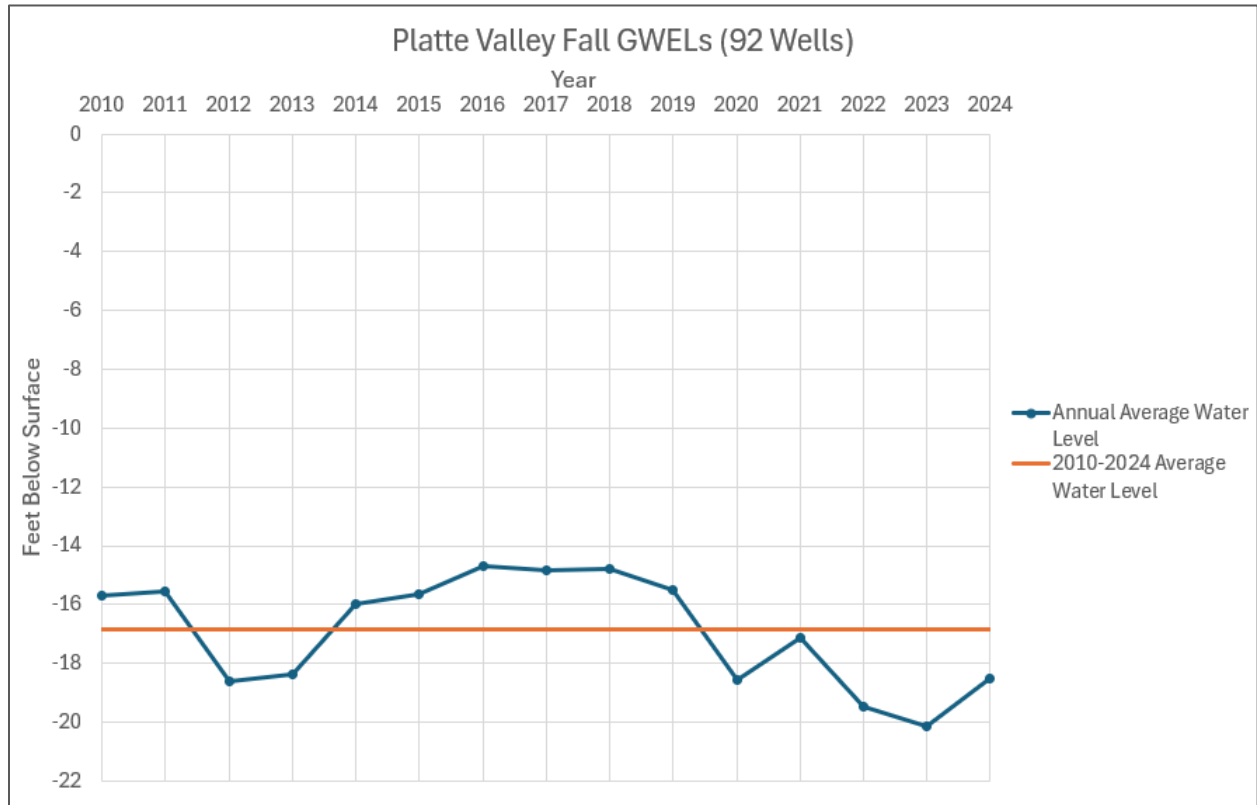
Including PRU wells

From 2010-2024, the average Fall distance to water from the ground surface in Platte Valley was 16.84'.

The average distance to water in the Fall of 2024, across Platte Valley, was 18.54'.

In comparison to the average Fall well depths from 2010 to 2024, the 2024 Fall well depths of the Platte Valley are 1.70' lower on average.

In reference to the 2023 Fall well levels, the 2024 Fall well levels averaged as a 1.62' rise across the Platte Valley.



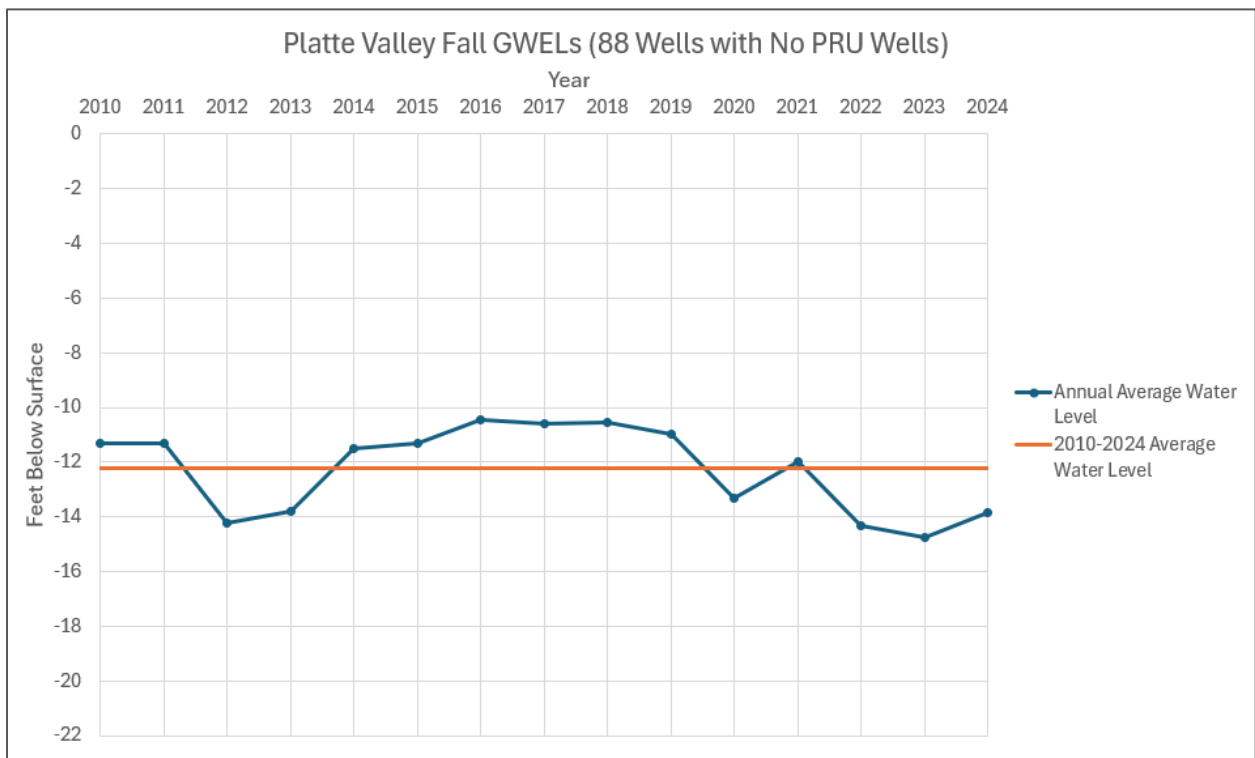
Excluding PRU wells

From 2010-2024, the average Fall distance to water from the ground surface in Platte Valley was 12.23'.

The average distance to water in the Fall of 2024, across Platte Valley, was 13.84'.

In comparison to the average Fall well depths from 2010 to 2024, the 2024 Fall well depths of the Platte Valley are 1.61' lower on average.

In reference to the 2023 Fall well levels, the 2024 Fall well levels averaged as a 0.94' rise across the Platte Valley.



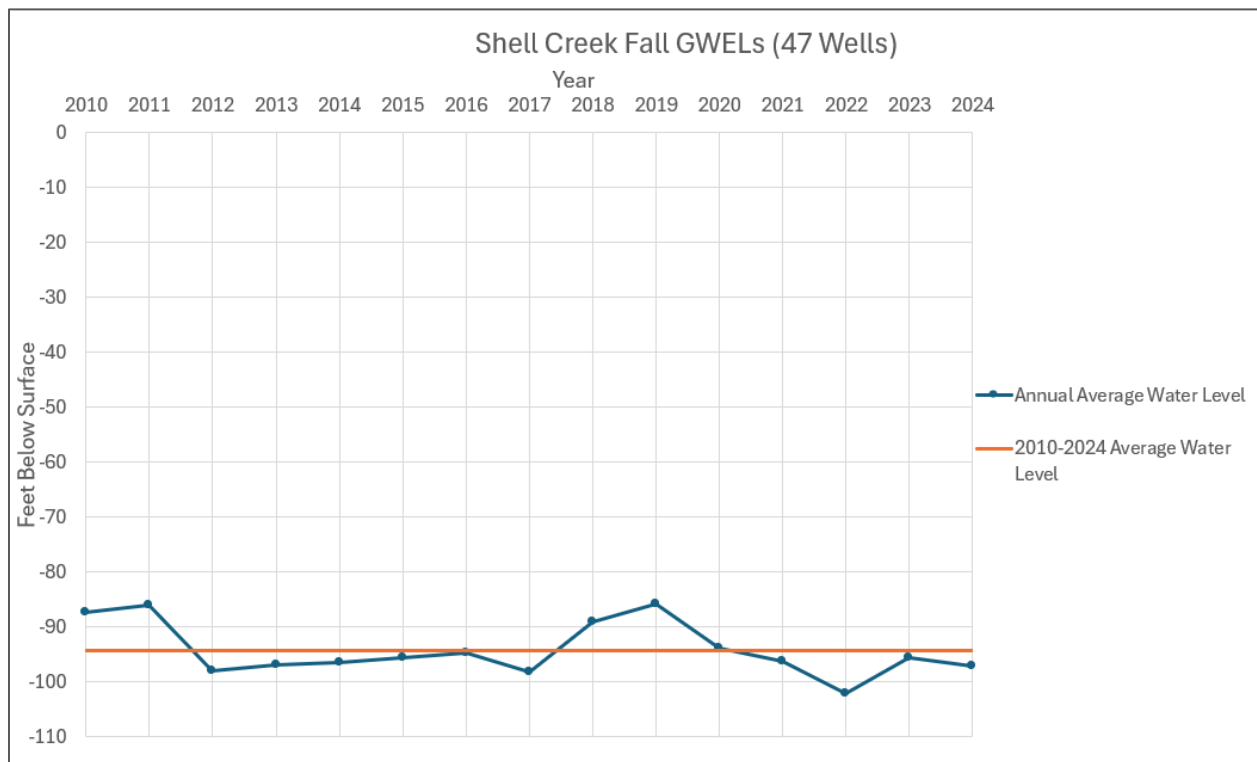
Shell Creek

From 2010-2024, the average Fall distance to water from the ground surface in the Shell Creek region was 94.23'.

The average distance to water in the Fall of 2024, across the Shell Creek region, was 97.16'.

In comparison to the average Fall well depths from 2010 to 2024, the 2024 Fall well depths of the Shell Creek region are 2.94' lower on average.

In reference to the 2023 Fall well levels, the 2024 Fall well levels averaged as a 1.48' drop across the Shell Creek region.



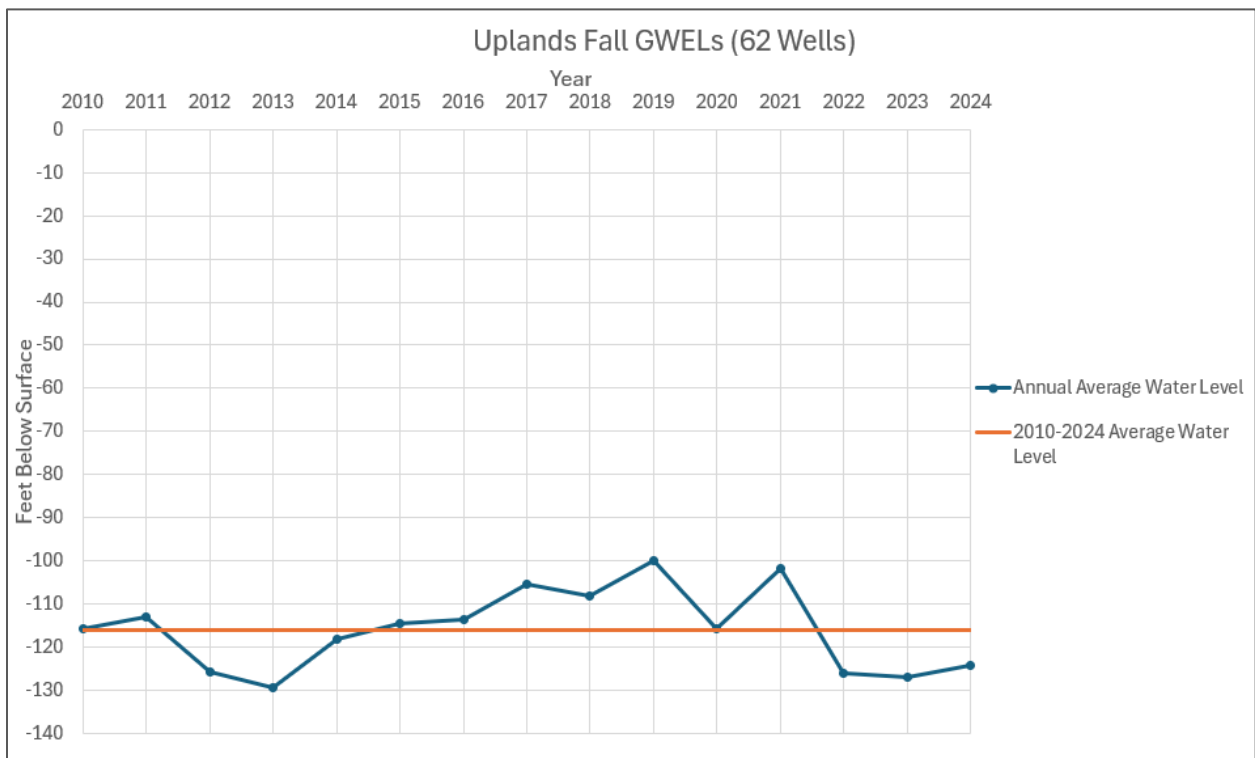
Uplands

From 2010-2024, the average Fall distance to water from the ground surface in the Upland regions was 115.94'.

The average distance to water in the Fall of 2024, across the Upland regions, was 124.25'.

In comparison to the average Fall well depths from 2010 to 2024, the 2024 Fall well depths of the Upland regions are 8.31' lower on average.

In reference to the 2023 Fall well levels, the 2024 Fall well levels averaged as a 2.71' rise across the Upland regions.



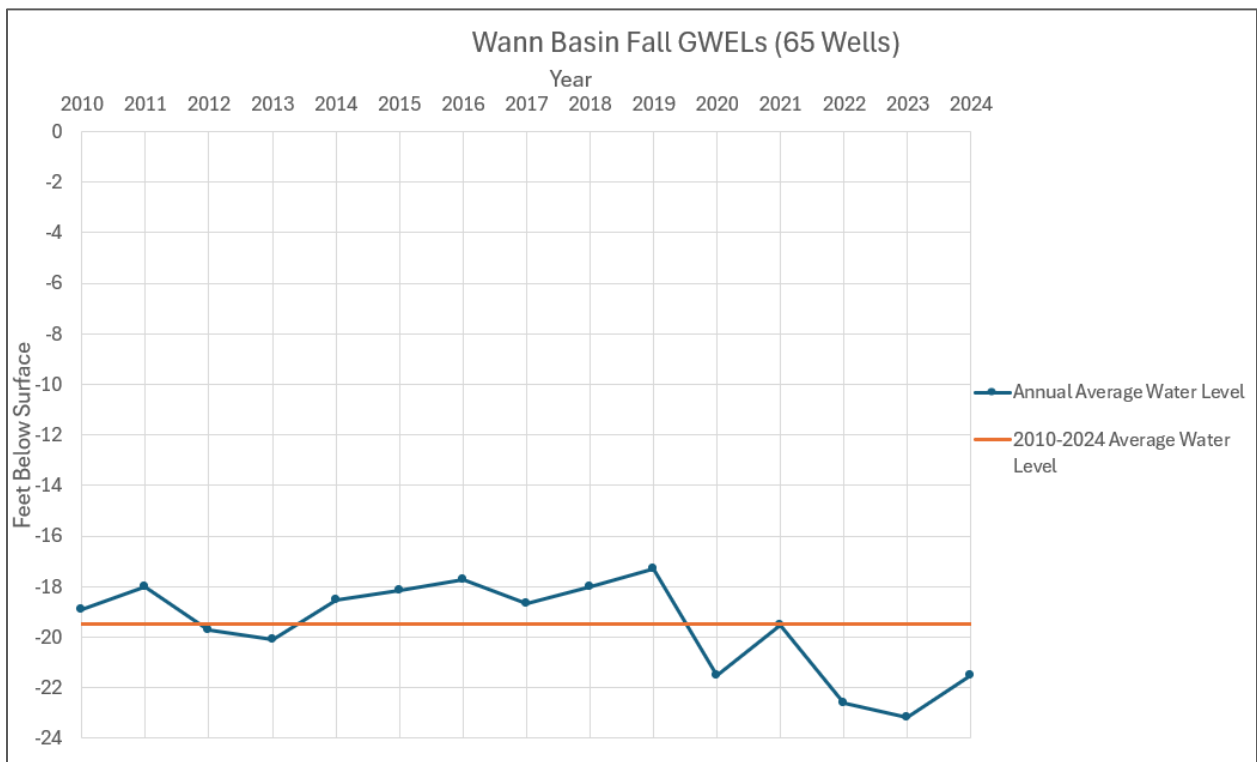
Wann Basin

From 2010-2024, the average Fall distance to water from the ground surface in Wann Basin was 19.50'.

The average distance to water in the Fall of 2024, across Wann Basin, was 21.54'.

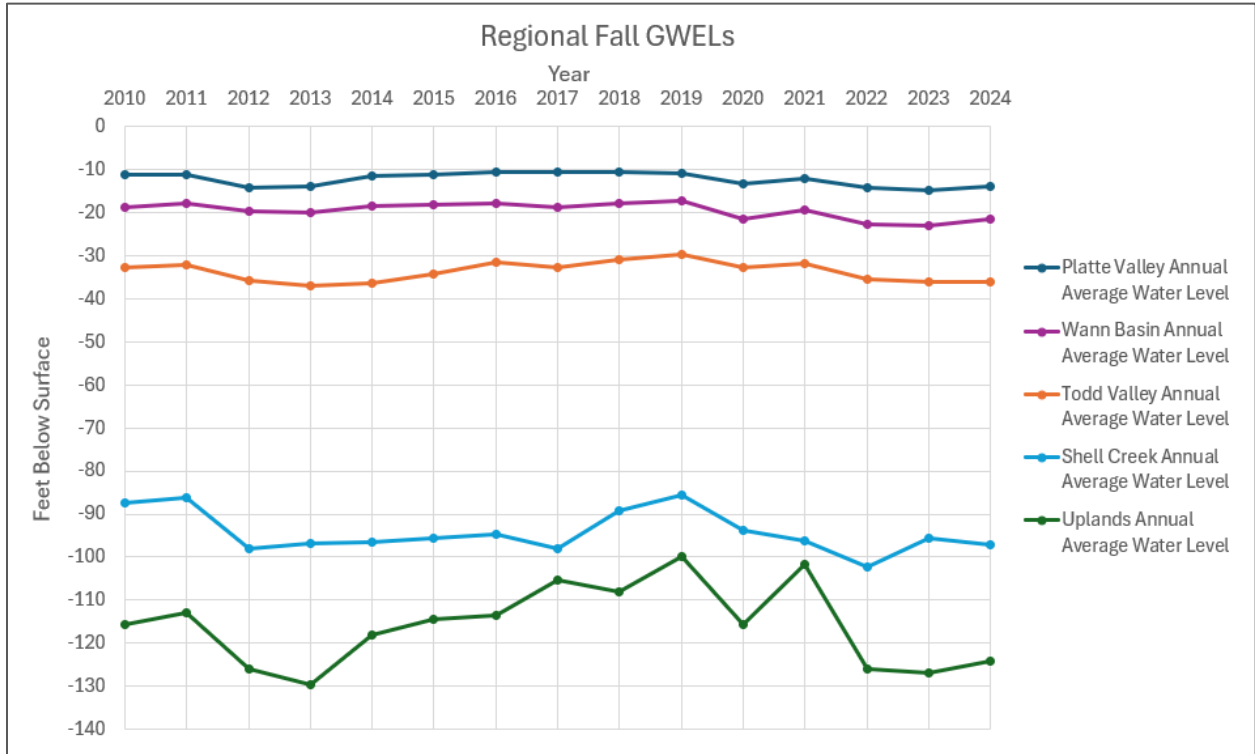
In comparison to the average Fall well depths from 2010 to 2024, the 2024 Fall well depths of Wann Basin are 2.04' lower on average.

In reference to the 2023 Fall well levels, the 2024 Fall well levels averaged as a 1.64' rise across Wann Basin.



Regional Comparisons

The following plot is to compare the different water levels across the different regions of the district.



Lab ID	Str	Sample ID	Collection Dt	% Chlorogenic acid	% Chlorogenic aldehyde	% Chloro-N-methylnicotinamide	% Catechin	% Quercetin	% Caffeoylquinic acid	% Caffeoylshikimic acid	% Caffeoylmalic acid	% Caffeoylglucuronic acid	% Caffeoylmalic acid	% Caffeoylshikimic acid	% Caffeoylmalic acid	% Caffeoylglucuronic acid	% Caffeoylmalic acid	% Caffeoylshikimic acid	% Caffeoylmalic acid	% Caffeoylglucuronic acid	Batch	% Metformin	% Metformin	% Metformin	% Metformin	Analysis D	Protocol	Project	NotRun	Sample Wt	Sample Wt	
24-4197	G	179795	6/11/2024	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	W24531	8.97	45.44	51.47	8/28/2024	20_02_01	23_BarS_AI	0	51.55	0	
24-4199	NR-TU	98-05	6/11/2024	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	W24531	18.40	80.61	52.34	8/28/2024	20_02_01	23_BarS_AI	0	51.09	0	
24-4200	G	098488	6/11/2024	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	W24531	30.64	64.45	65.67	8/28/2024	20_02_01	23_BarS_AI	0	51	0	
24-4201	G	098489	6/12/2024	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	W24531	13.82	54.85	57.88	8/28/2024	20_02_01	23_BarS_AI	0	49.4	0	
24-4202	G	098490	6/12/2024	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	W24531	18.43	70.03	55.31	8/28/2024	20_02_01	23_BarS_AI	0	49.11	0	
24-4203	G	098491	6/12/2024	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	W24531	21.40	86.29	62.64	8/28/2024	20_02_01	23_BarS_AI	0	53.61	0	
24-4204	NR-TU	98-06	6/12/2024	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	W24531	58.96	78.00	82.34	8/28/2024	20_02_01	23_BarS_AI	0	52.09	0	
Method Detection Limits (ug/L)=>				0.006	0.007	0.009	0.006	0.014	0.001	0.006	0.006	0.006	0.006	0.012	0.008	0.004	0.006	0.010	0.008	0.004	0.006	0.004	0.006	0.004	0.008	0.006						

DOMESTIC WELL WATER TREATMENT SYSTEM COST-SHARE PROGRAM

Purpose: *This program is intended to assist with funding the installation of a water treatment system on eligible domestic wells.*

Eligible Participants: Active domestic wells within the LPNNRD. Well must be sampled through the LPNNRD's domestic well sampling program, which utilizes the Nebraska State Laboratory. Cost-share program is for a one-time purchase of a water treatment system through this program.

Eligible Components:

- Equipment and installation costs for a water treatment system
- Registration cost of the domestic well up to \$70.

In-Eligible Components:

- Maintenance costs and follow up sampling
- Registration of illegal wells or equipment (i.e. sand point wells)

Requirements:

1. If the domestic well is not currently registered, the LPNNRD will assist in the paperwork along with the cost of registering the well.
2. Well owners must first apply for and utilize any other funding if available and eligible.
3. If ineligible for other funding, or funding is exhausted, well owners may apply for LPNNRD cost share program.
4. **The sample results must be 8 ppm or greater for nitrate or test positive for other contaminants over the drinking water standards.**
5. The application must be approved by the LPNNRD prior to the purchase and installation of the equipment.
6. Equipment must reduce nitrate to **less than 6** parts per million (mg/l) and be approved by the LPNNRD. For other contaminants the equipment must reduce the level to meet drinking water standards and be approved by the LPNNRD. Cost estimate from a licensed plumber must be submitted for the installation of an RO system certified by the American National Standards Institute.
7. Following installation, well owners are required to conduct one follow-up sample to verify the equipment is functioning correctly and send results to LPNNRD.
8. After receiving water treatment system cost share, the domestic well is no longer eligible for the LPNNRD's water sampling program.

Cost-Share: 75% of the total cost, not to exceed \$800. One time use program.

Reasons to register your well:

- What you get in return is over \$300 in water testing for free! Testing your water, especially if you have a family drinking, bathing, and cooking with it, will give you peace of mind that the water is safe.
- Registering your well allows NRD staff to review locations when high capacity well permits are submitted. This might give you protection from potential infringements on your quality and quantity of water from new wells drilled in the future.
- Registering your well is easy and it opens the door to this program and others that may be offered by the LPNNRD in the future. The potential to save thousands of dollars and improve the quality of your drinking water makes this program WELL worth looking into,

Registration Cost for a well

Important! For single water wells which were completed before 2002 and are being registered by the well owner please review the bottom of the last page of the registration form for minimal information required. For single wells pumping 50 gallons per minute (gpm) or less the current registration fee is **\$70**. For single wells pumping more than 50 gpm the current fee is **\$110** and you may need a permit from your local Natural Resources District (District) before the well may be registered. Check with the District before submitting a registration form for wells pumping more than 50 gpm. For more detailed fee information and instructions on how to fill out a registration form please click the link below to download the companion instruction document. It is imperative that the geographic coordinates for the well location and the legal description required in section 3 of the form are accurate and consistent with each other.



Northeast Nebraska Ag Conference



Co-hosted by the Bow Creek Watershed Project
and the Bazile Groundwater Management Area

December 17th, 2024
LIFELONG LEARNING CENTER
Northeast Community College
Norfolk, Nebraska

Dynamic Speakers, Vendor Booths & Door Prizes!!!

Agenda

- | | |
|------------------------|---|
| 8:00 – 8:30 AM | Registration Check-in/ Visit Sponsors & Exhibitors |
| 8:30 – 8:45 AM | Welcome! |
| 8:45 – 9:45 AM | Keynote Speaker: Rick Clark—Increasing Farm Profits with Conservation |
| 9:45 – 10:00 AM | Break / Visit Sponsors & Exhibitors |
| 10:00-11:00 AM | Green Breakout Sessions:
Jason Mauck—Farm Weird; Nathan Mueller—Erosion & Soil Health;
Bob Noonan—Changing Soils: Don't Give Up Now!; Roy Thompson—Soil Health
& Human Health; NeDNR & NRDs—Nitrogen Reduction Incentive Act |
| 11:00 –11:15 AM | Break / Visit Sponsors & Exhibitors |
| 11:15 –12:15 PM | Yellow Breakout Sessions:
Rick Clark—Organic No-Till; Paul Jasa—Practical Application Tips;
Austin Baldwin—Improving Pasture & Cropland with Summer Annual Forages;
John Heerman—Biological Farming; Dr, Caro Cordova—Measuring Soil Carbon,
Key to Understanding Farm Health |
| 12:15– 1:30 PM | LUNCH / Visit Sponsors & Exhibitors |
| 1:30 – 2:30 PM | Blue Breakout Sessions:
Mitchell Hora—Carbon Intensity Score & Ethanol Tax Credits;
Jim Williams—Biology Made Easy; Value-Added Products Panel ;
Keith Berns—Profit Partners: Cover Crops & Livestock Integration; Jackson
Stansell—How Fertigation Improves Sustainability Practices, the Environment &
your Operation. |
| 2:30 – 2:45 PM | Break / Visit Sponsors & Exhibitors |
| 2:45 – 3:45 PM | Closing Session: 'Making It Work Here' : Local Farming Panel |
| 3:45 – 4:00 PM | Closing Comments / Door Prizes— (Must be present to win!) |

CEUs, CCAs & NRD Nitrogen Certification offered

Register online :

[Northeast Nebraska Ag Conference Tickets, Tue, Dec 17, 2024 at 8:00 AM | Eventbrite](#)

no later than 12/06/2024 !





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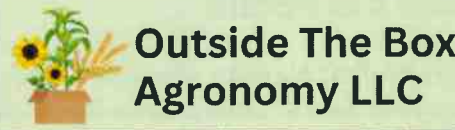
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Exhibitors



Nebraska Water Center
Daugherty Water/for Food Global Institute