

Water Committee Meeting  
Thursday, October 30, 2025 9:30 AM  
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. Variance Request in the Hydrologically Connected Area (Limited Development Area)

Last month, the Committee asked staff to reach out to Dan Wondercheck as his application scored 385.78, but the field had 21.5% Class 6 soils. Dan is willing to work with the NRD on this site to get it approved. Staff has redrawn the map which allows this site to meet the criteria. Dan had already leveled the field and planted a cover crop, so the field would look different. (Staff had not visited the site to verify it). Dan would be asking to run the pivot through the area not approved that would need to be dry.

A map and scoring sheet are attached. The Committee reviewed the map provided by staff, which showed only a small sliver would be needed to meet the criteria of less than 20% of Class 6 soils. It was suggested to require to continuing cover crops on the soils.

Jon Engel received an expansion of acres variance LPN-V-024-0645 for 35 acres. Jon would like an extension on this variance to get his pivot installed. Staff would recommend a 6-month extension.

2.A.2. Voluntary Integrated Water Management Plan - LPNNRD

A presentation will be given by DWEE and LPN staff for the annual update on the V-IMP.

2.A.3. Well Permit Program

2.A.4. Groundwater Management Plan

The GWMP is going through review at DWEE, which they have 90 days to submit comments.

Jon Mohr from LRE (Spheros Environmental will be the new name) explained the scope of service offered by them to evaluate the current variance scoring and recommended changes to reflect the updated data. The other changes included groundwater quantity management procedures along with finalizing the GWMP for a total cost of \$26,200 for all three tasks. (Attachment explaining all the

tasks)

These were recommended updates from the GWMP and the Committee felt it would be beneficial to consider these tasks.

2.A.5. Special Quantity Subareas

LRE will give an update on the special quantity subareas. The plan is to present this information to producers in the first week of December.

2.A.6. Cost Share Programs

2.A.6.a. Soil Moisture Sensors

Robinson MeadowBrook G.P. applied on 12 fields for soil moisture sensors. The application allows for 50% up to \$750 with one application per entity. This is a program the NRD started in 2021 to encourage producers to install soil moisture sensors.

Attachment.

2.A.6.b. Flow Meter Maintenance Program

The flow meter maintenance program will be taking place in Madison, Platte and Boone counties. Postcards were sent out to producers earlier this week.

2.B. GROUND WATER ENERGY LEVELS

Staff is conducting fall water level measurements.

3. GROUND WATER PROGRAMS

3.A. DECOMMISSIONED WELL PROGRAM

3.A.1. Well Estimates

No new wells have been reviewed and approved for decommissioning since the last Committee meeting.

Well Owner	Type of Well	Cost Share Estimate	County
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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

An invoice for Richard Hoppe has been submitted for our Flow Meter Cost Share Program for 2 meters with the total cost share amount being \$2,000.

#### 3.B.2. Eastern Nebraska Water Resources Assessment (ENWRA)

The group did not receive funding from the WSF grant but is planning on doing small-scale research in specific areas. Katie will be reaching out for areas where the LPN would like to utilize the Ttem equipment.

Attached is a graph with tentative funding within the ENWRA budget.

#### 3.B.3. Lower Platte River Consortium

The group is planning on meeting on Wednesday, November 12 at 10 am in the Board Room at Lower Platte North NRD.

### 3.C. SOURCE WATER PROTECTION

The Source Water Grants for Mead and Yutan were not approved. We have been in contact with both communities to discuss how they want to proceed.

Jake Maslonka will be attending the village of Malmo board meeting on November 3rd to discuss Wellhead Protection with them.

## 4. SURFACE WATER PROGRAMS

## 5. GROUNDWATER EDUCATION

The 2nd Annual UNL-TAPS (Testing AG Performance Solutions) Sprinkler Irrigated Corn Farm Management Competition will be conducted in 2026 at the Eastern Nebraska Research, Extension and Education Center (ENREEC) near Mead, NE. The competition has three awards: 1) most profitable; 2) highest input use efficiency; and 3) greatest grain yield. The farm management competition will host approximately 30 teams made up of individuals and groups. Each team will be assigned a "farm" comprised of four randomized plots within the same field, totaling approximately one-half of an acre. TAPS personnel will manage each farm (i.e., plots) based on participants' management decisions. The yields and costs from each farm will be scaled to represent 1,500 acres of production, as this provides an opportunity to market an amount of grain that is more representative of a modern size farm. Participants will make a series of seven farm management decisions throughout the contest period, that include crop insurance selection, hybrid type, seeding rate, irrigation management, nitrogen management, fungicide application, and grain marketing. The production management decisions made

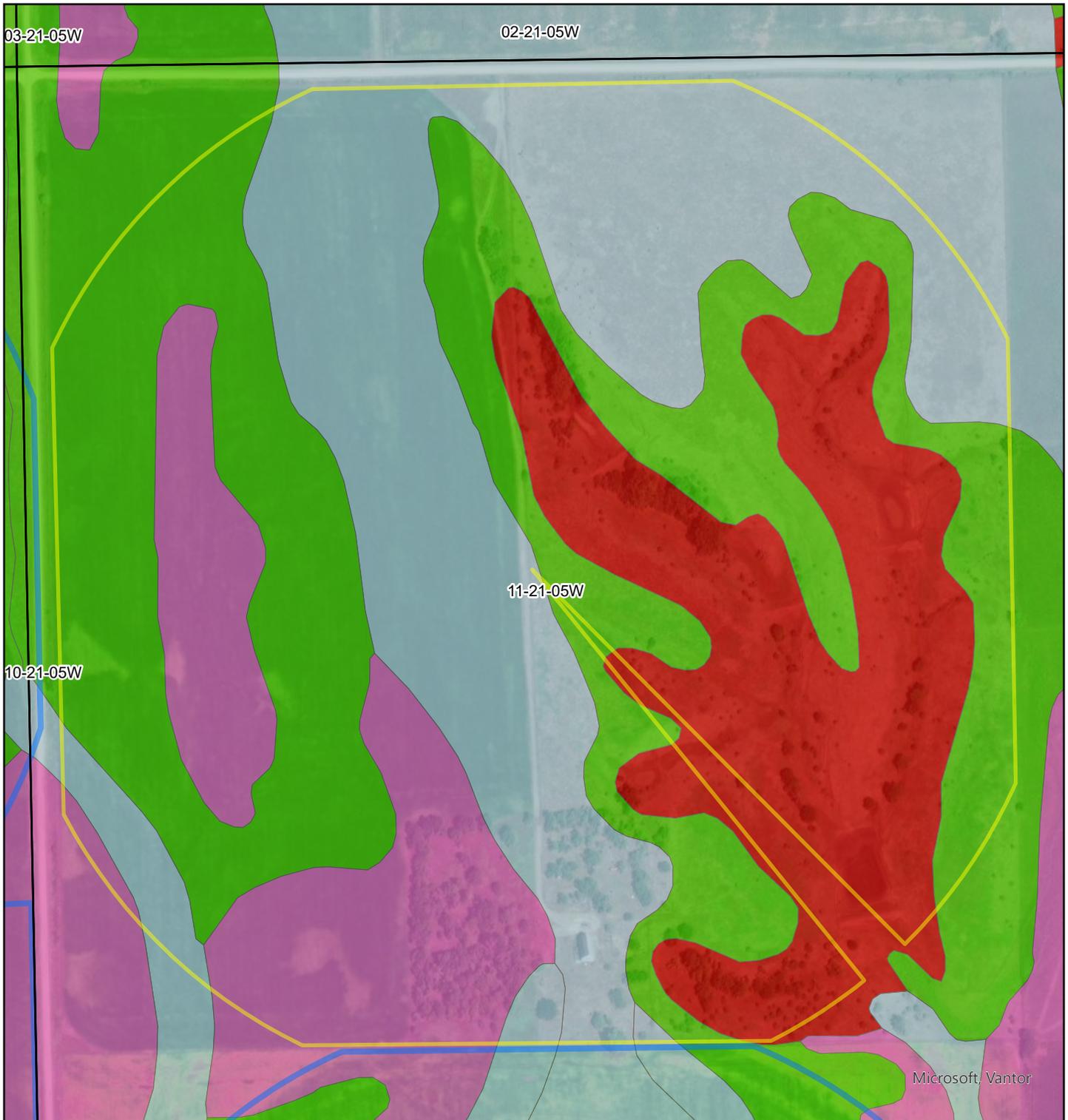
by each team will be imposed on the individual team's assigned plots under the variable rate center pivot irrigation system at ENREEC. All other management categories will be controlled by the TAPS team, e.g. planting date, residue/soil management, etc. These decisions will be based on best management practices and be identical across all farms. Each farm's decisions and farm specific information will be kept until the season's end, and only available to authorized team members and TAPS personnel. Information and data that is general in nature, including plot photos, weather, crop status (e.g., growth stage advancement), and data collected by various technologies, water sensors, aerial photographs, etc., will be posted to the website, as it is collected. Supporting information, such as leaf area index, plant height, and plant nitrogen uptake may be made available to the participants as available or at the end of the growing season. Each competitor will have an opportunity to use innovative technology, test new methods, observe different approaches to solving similar issues, socialize, and discuss the problems, successes, and challenges of the farming business.

Registration is free to participants via eternal contributions to support the program. Actual costs are estimated at \$500 per team. Nine other NRDs contribute to TAPS, with the vast majority contributing \$1,000. Discussion is requested to support TAPS along with promoting the program to LPNNRD producers. NRD staff are planning to participate.

## 6. OTHER

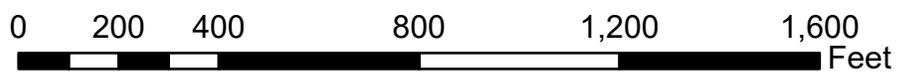
### 6.A. COMMENTS FROM THE PUBLIC

# Dan Wondercheck LPN-V-025-0660



Map Unit Polygons - NE

- 1
- 2
- 3
- 4
- 5
- 6; 7; 8



<b>Draft Changes</b>				
<b>Application Number</b>	<b>Applicant Name</b>	Date:	10/30/25 8:19 AM	
LPN-V-025-0660	Dan Wondercheck		Total Score->	385.78
Category	Divisions	Points Available	Percent of Application	Points Received

<b>New Groundwater Consumptive Use</b>	<b>WF= 1.0</b>			
	0 to 8 Acre Feet	100	100	100
1.993783273	9 to 16 Acre Feet	80	0	0
	17 to 24 Acre Feet	60	0	0
	25 to 32 Acre Feet	40	0	0
	33 to 40 Acre Feet	20	0	0
	41+ Acre Feet	0	0	0
			Total ->	100

<b>Land Class of field</b>	<b>WF= 1.0</b>			
	No Land Impact	100	0	0
136.7	Class 1	100	0	0
	Class 2	80	31.1	24.88
	Class 3	60	34.1	20.46
	Class 4	40	13.6	5.44
	Class 5	10	0	0
	Class 6-8/ not more than 20%	0	21.2	0
			Total ->	50.78

<b>Stream Depletion Factor From DNR</b>	<b>WF= 1.25</b>			
	10 to 20%	100	100	125
6.482267	21 to 30%	90	0	0
	31 to 40%	80	0	0
	41 to 50%	70	0	0
	51 to 60%	60	0	0
	61 to 70%	50	0	0
	71 to 80%	40	0	0
	81 to 90%	20	0	0
	>90%	10	0	0
			Total ->	125

<b>Saturated Thickness</b>	<b>WF= 1.0</b>			
	176 to 200 ft.	100	0	0
57.463303	151 to 175 ft.	90	0	0
	126 to 150 ft.	80	0	0
	101 to 125 ft.	70	0	0
	76 to 100 ft.	40	0	0
	51 to 75 ft.	20	100	20
	26 to 50 ft.	10	0	0
	0 to 25 ft.	0	0	0
			Total ->	20

<b>Specific Yield</b>	<b>WF= 1.0</b>			
	18.1 to 22 %	100	0	0
10	14.1 to 18 %	60	0	0
	10.1 to 14 %	30	0	0
	6.1 to 10 %	10	100	10
	2 to 6%	0	0	0
			Total ->	10

<b>Transmissivity</b>	<b>WF= 1.0</b>			
	21331 to 23700	100	0	0
4186.998989	18961 to 21330	90	0	0
	16591 to 18960	80	0	0

14221 to 16590	70	0	0
11851 to 14220	60	0	0
9481 to 11850	50	0	0
7111 to 9480	40	0	0
4741 to 7110	30	0	0
2371 to 4740	20	100	20
0 to 2370	10	0	0
Total ->			20

<b>Irrigation Systems</b>	<b>WF= 1.0</b>			
	Subsurface Drip	100	0	0
	Surface Drip	80	0	0
	Pivot	60	100	60
	Gravity, Gun, Other	10	0	0
Total ->			60	

<b>Additional Points</b>	<b>WF= 1.0</b>			
	Chemigation	10	0	0
	Variable Rate Irrigation	10	0	0
Total ->			0	

Minimum Score of 300 is needed to be considered for variance approval Once a variance is submitted and not approved, it will be carried over for 3 years Land Classes 6-8, with slopes, greater than 20% of the parcel not eligible for a variance	Total Score->	385.78
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Acres	136.7
Jenkins/ELM	0.06482
Saturated Thickness	57.4633
Specific Yield	10
Transmissivity	44.1667

# LOWER PLATTE NORTH NRD INTEGRATED MANAGEMENT PLAN 2024 ANNUAL REPORT

OCTOBER 30, 2025  
LPNNRD OFFICE, WAHOO, NE

Daryl Andersen  
Water Resources Manager



Tyler Martin  
Basin Coordinator



# WHY CONDUCT IMP REVIEWS?

Joint management of hydrologically connected (HC) groundwater and surface water:

- Identify new opportunities and challenges
- Increase understanding of HC areas (data, studies)
- Evaluate and convey progress towards goals and objectives
- Prioritize joint management actions for upcoming years



# IMP OVERVIEW

# IMP GOALS

## Goal 1

Develop and maintain a District-wide water supply inventory.

## Goal 2

Develop and maintain a District-wide water demand inventory.

## Goal 3

Develop and implement water use policies and practices with the purpose of achieving and sustaining a balance between water uses and supplies.

## Goal 4

Communicate to the public that Nebraska has a great supply of water, and we need to continue to manage it well.

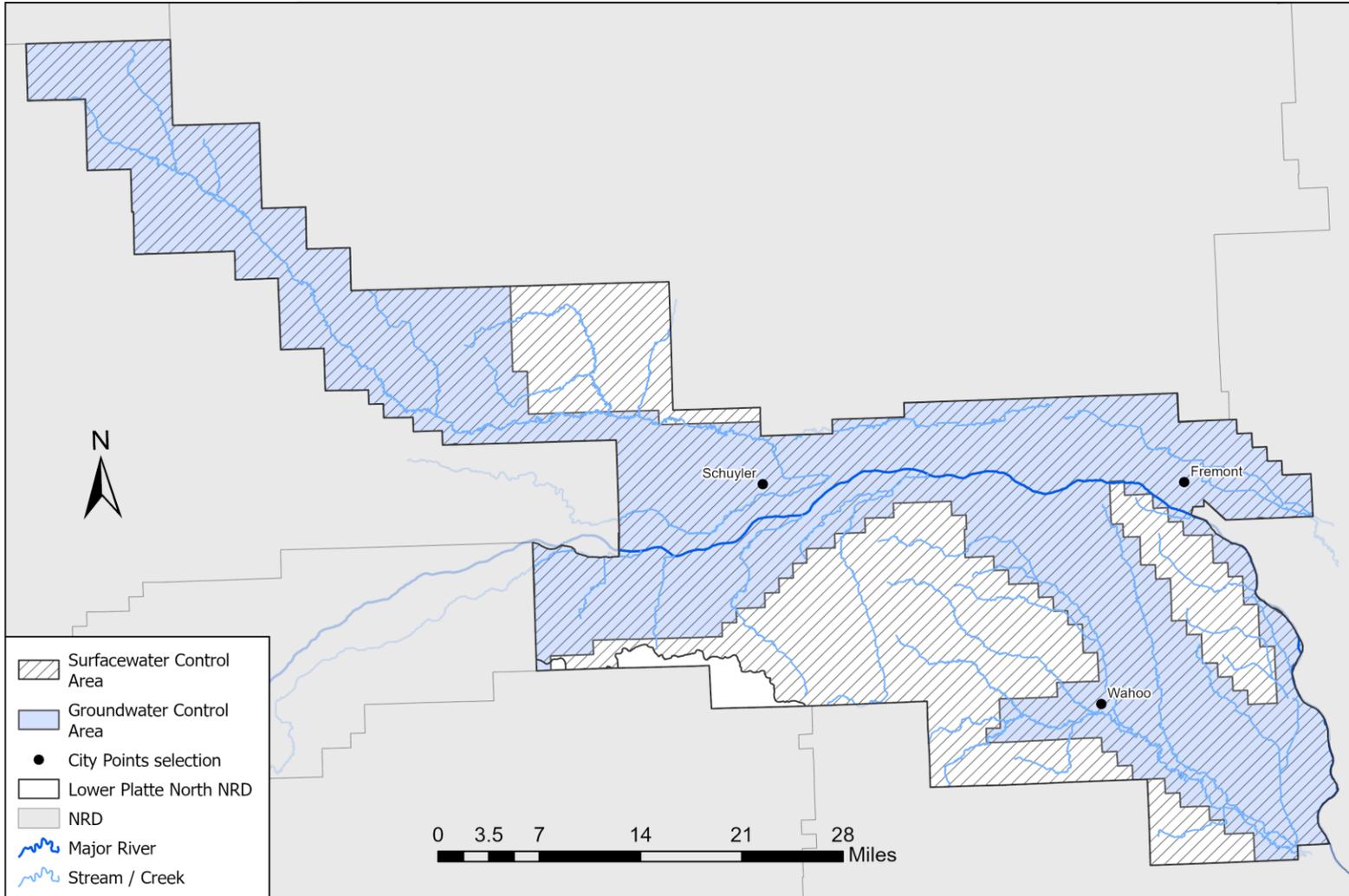
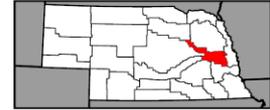
## Goal 5

Coordinate with Lower Platte River Basin NRDs, and appropriate groups and agencies, to develop a water management plan for the Lower Platte River Basin that maintains a balance between current and future water supplies and demands.

# LPNNRD IMP CONTROL AREAS



## Voluntary Integrated Management Plan Control Areas



# SURFACE WATER AND GROUNDWATER MONITORING

# NeDNR DATA COLLECTION & MONITORING

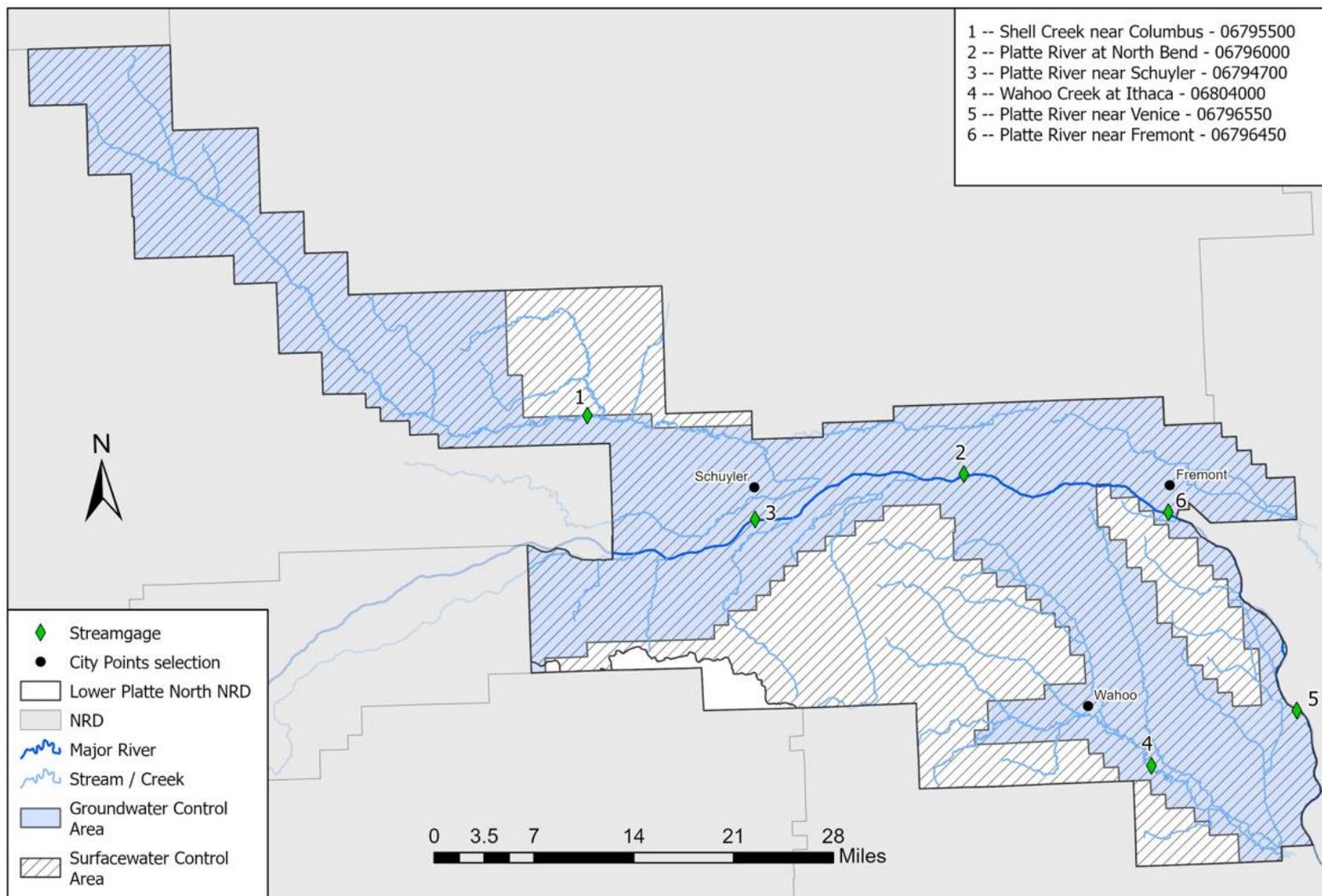
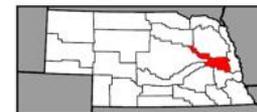
## NeDNR Monitoring

- Surface water monitoring: streamgage locations
- Surface water pump site inspections
- Surface water administration
- Voluntary surface water use reporting
- Hydrologic Investigation Project (HIP)

# USGS STREAMGAGE LOCATIONS IN LPNNRD

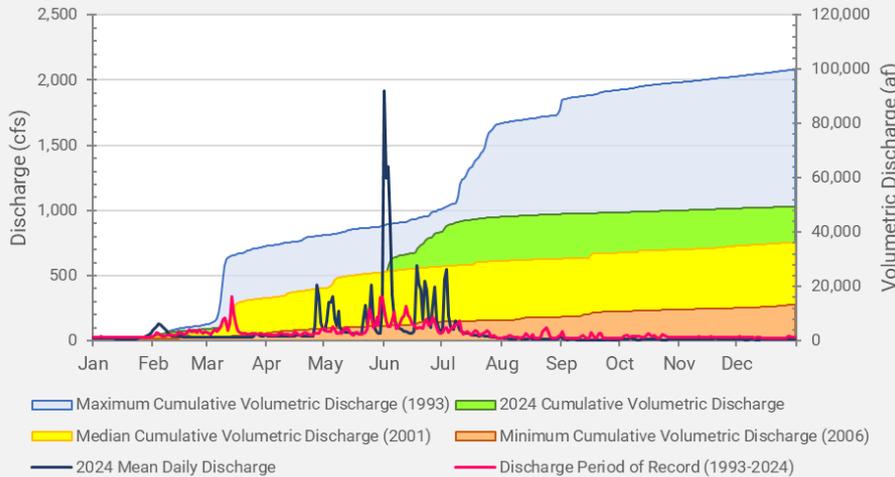


## Streamgages within the Lower Platte North IMP Control Area

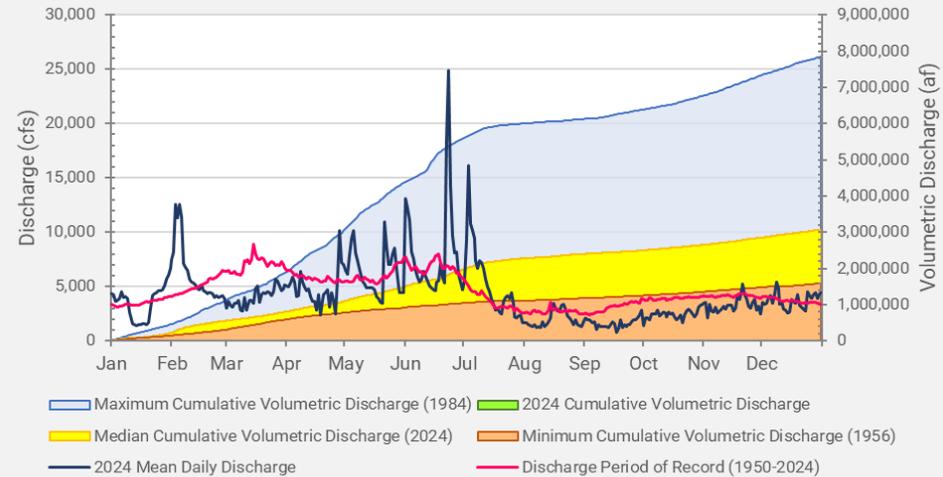


# SURFACE WATER MONITORING

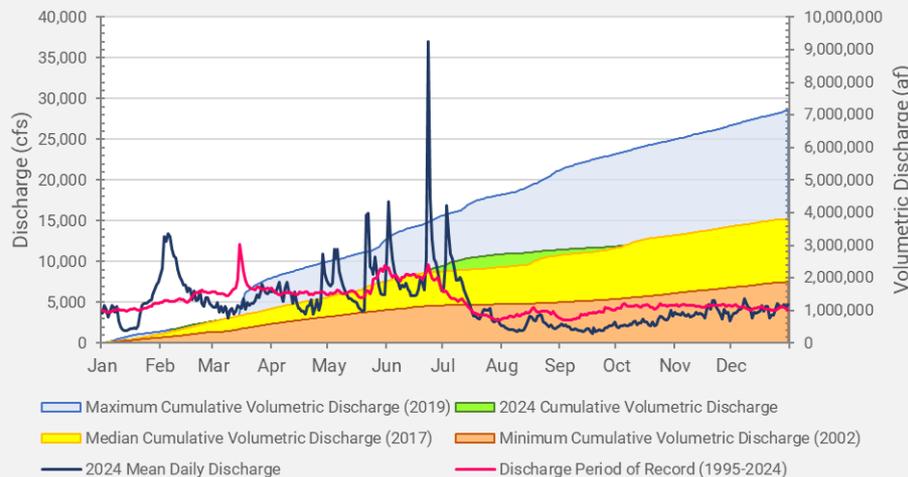
Shell Creek near Columbus  
USGS #06795500



Platte River at North Bend  
USGS #06796000

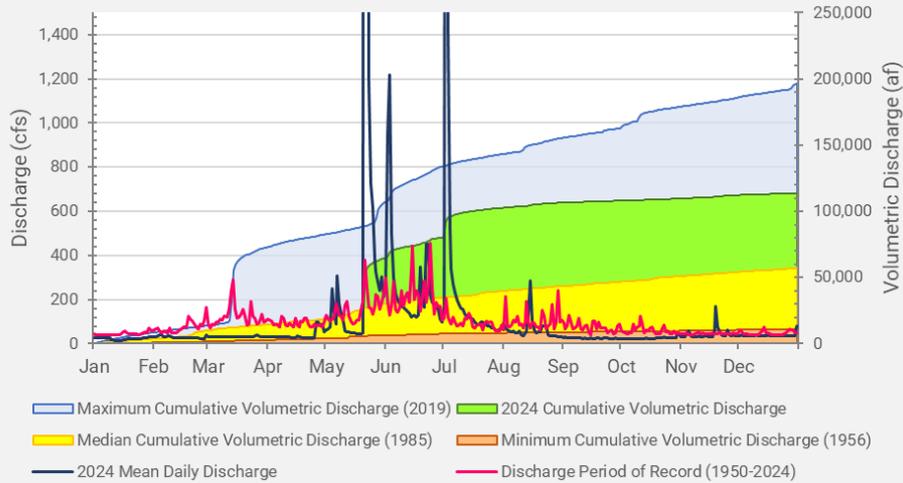


Platte River near Leshara  
USGS #06796500

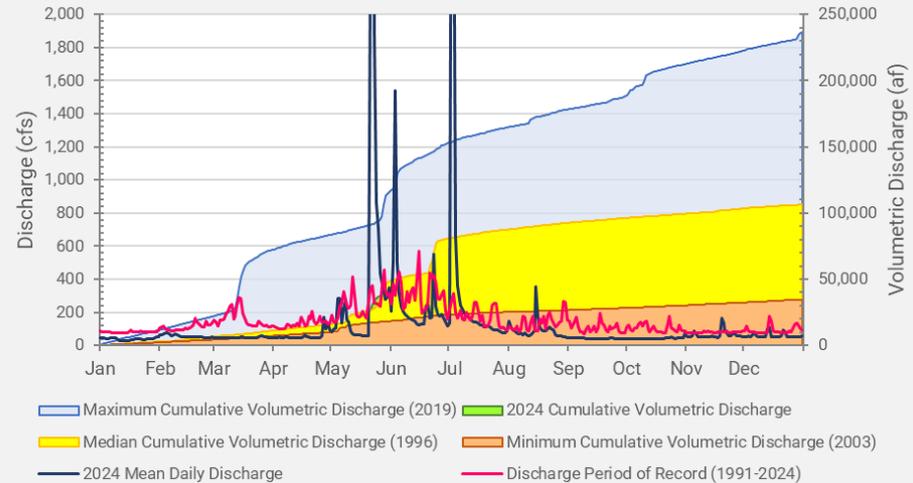


# SURFACE WATER MONITORING

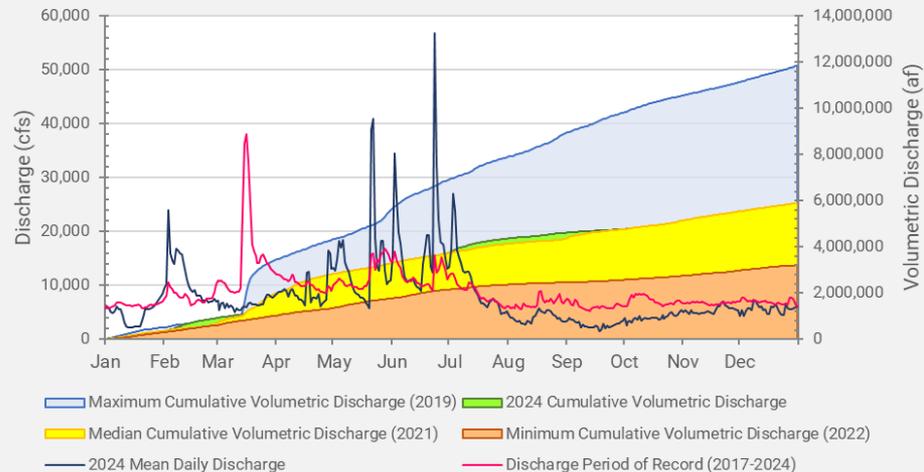
Wahoo Creek at Ithaca  
USGS #06804000



Wahoo Creek at Ashland  
USGS #06804700



Platte River near Ashland  
USGS #06801000



# NE DNR SURFACE WATER PUMP SITE INSPECTIONS

During Summer 2024, the Department inspected 139 pump sites within the LPNNRD. Of the sites visited:

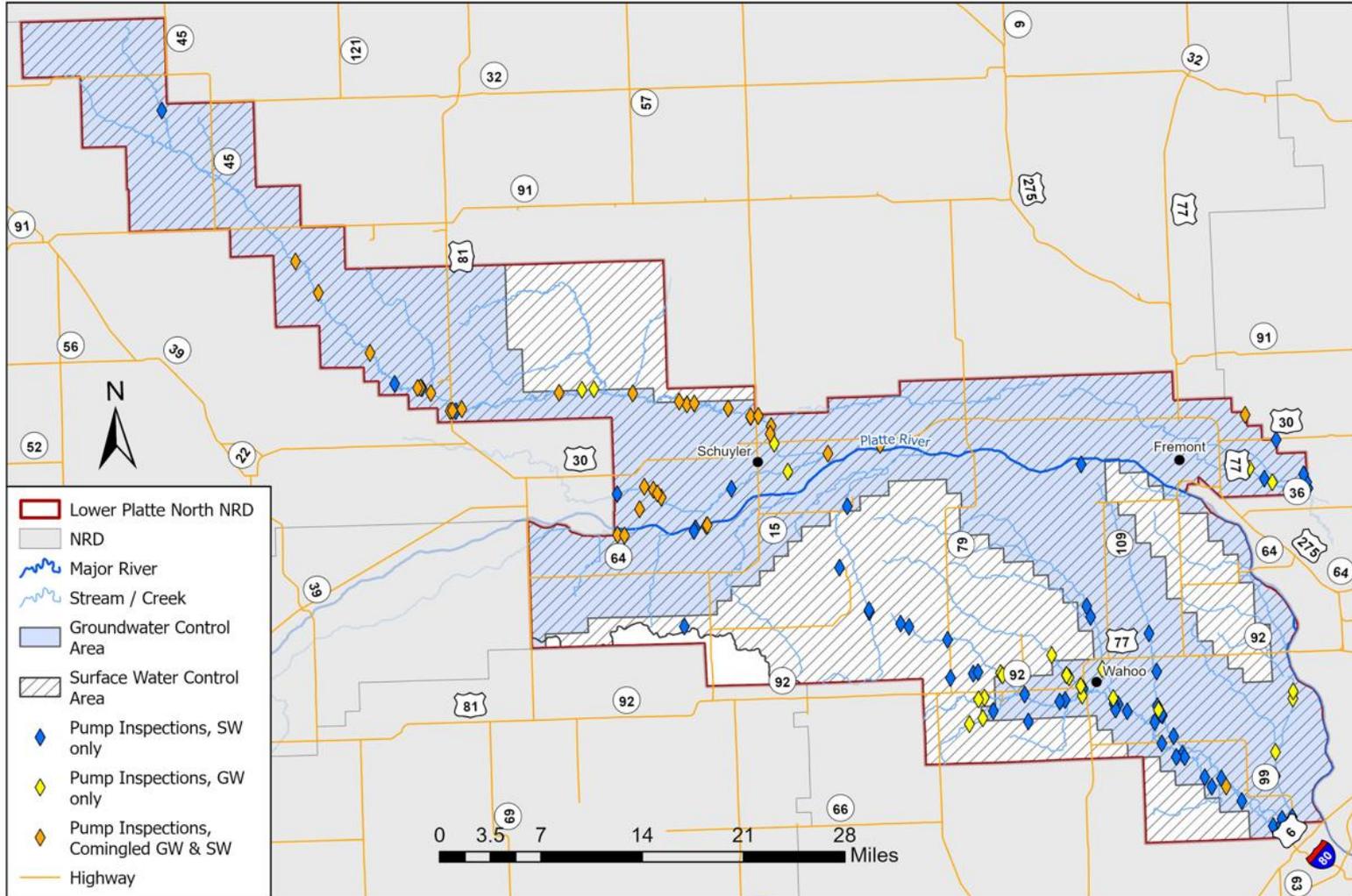
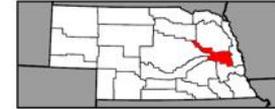
- 16 were surface water
- 49 were groundwater
- 71 appeared to be dryland
- 30 comingled
- A total of 197 pump site observations were made. Some rights were visited more than once for water administration purposes.

*As time and conditions allow, the DWEE field office staff visit pump sites for each appropriation to check for compliance and collect various data.*

# NEDNR SURFACE WATER PUMP SITE INSPECTIONS



## 2024 Pump Site Inspections within the Lower Platte North IMP Control Area



# NE DNR SURFACE WATER PUMP SITE INSPECTIONS

## 2024 Surface Water Pump Site Inspections - Lower Platte Basin NRDs

NRD	Total Number of Permits	Number of pump site Inspections	Number of pump sites set up for irrigation
Lower Elkhorn	339	323	71
Lower Loup	754	658	348
Lower Platte North	139	139	24
Lower Platte South	149	124	8
Papio-Missouri River	50	46	20
Upper Elkhorn	73	73	17
Upper Loup	24	18	0
<b>Total</b>	<b>1528</b>	<b>1381</b>	<b>488</b>

# NEEDNR VOLUNTARY SURFACE WATER USE REPORTING FOR LPNNRD

	Surface Water Only	Groundwater Only	Co-Mingled	Dryland	Estimated Average Inches
<i>2024 Water Use Acres and Source</i>					
# Responses	21	10	9	2	5.8
Acres Irrigated	1521	322			

# HYDROLOGIC INVESTIGATION PROJECT (HIP)

- Designed to identify GW/SW interaction throughout Nebraska
- Assist in aligning and verifying actual conditions of modeling efforts
- Ongoing and Planned Efforts:
  - Identification of perennial and intermittent streams to increase the accuracy of our various models
  - Remote sensing

# 2024 Surface Water Administration in the Lower Platte Basin

Date of closure	Date Reopened	Permit Type	Number Affected	Reason for Closure	Reason for Reopening
5/29/2024	6/03/2024	Natural Flow	19	LLNRD Instream flow not met	LLNRD Instream flow being met
5/29/2024	6/03/2024	Storage	1	LLNRD Instream flow not met	LLNRD Instream flow being met
7/18/2024	8/15/2024	Natural Flow	142	Not enough water for NGPC instream flow right	Water for NGPC instream flow right has been exceeded
7/18/2024	8/15/2024	Storage	29	Not enough water for NGPC instream flow right	Water for NGPC instream flow right has been exceeded
8/27/2024	10/31/2024	Natural Flow	161	Not enough water for NGPC instream flow right	Water for NGPC instream flow right has been exceeded
8/27/2024	10/31/2024	Storage	30	Not enough water for NGPC instream flow right	Water for NGPC instream flow right has been exceeded
9/5/2024	10/31/2024	Natural Flow	82	Not enough water for NGPC instream flow right	Water for NGPC instream flow right has been exceeded
9/5/2024	10/31/2024	Storage	87	Not enough water for NGPC instream flow right	Water for NGPC instream flow right has been exceeded

# NEDNR GROUNDWATER PERMITTING ACTIONS

Groundwater permits cancelled = 1

Groundwater permits issued = 0

*Includes groundwater permits for the following uses:*

- Application to Drill Without Regard to Spacing
- Industrial Groundwater Transfers
- Industrial Transfer Notice
- Municipal Groundwater Transfers
- Municipal Notice of Intent
- Permit to Violate Well Spacing
- Permit to Transfer to Adjoining State

# MUNICIPAL & INDUSTRIAL SURFACE WATER USES

- No new surface water applications for municipal or industrial uses were approved during 2024.

# NEEDNR SURFACE WATER PERMITTING ACTIONS

- Approved for expedited transfer = 0
- Applications approved = 4 (See below)

## Surface Water Applications Approved January 1, 2024 to December 31, 2024

Appropriation Number	Date Approved	Source	Diversion/Reservoir Location	Use	Grant (cfs)	Grant (af)	Acres	New Acres
A-19949	1/3/2024	Wahoo Creek, North Fork, Trib to	Wahoo Creek 26A	ST	0	65.2	0	0
A-19973	7/26/2024	Wahoo Creek	Pump	IR	0.84	177.3	59.1	59.1
A-19956	1/5/2024	Wahoo Creek, North Fork, Trib to	Wahoo Creek 26B	FC	0	121.6	0	0
A-19957	1/5/2024	Wahoo Creek, North Fork, Trib to	Wahoo Creek 27	FC	0	169.5	0	0

# NeDNR SURFACE WATER PERMITTING ACTIONS

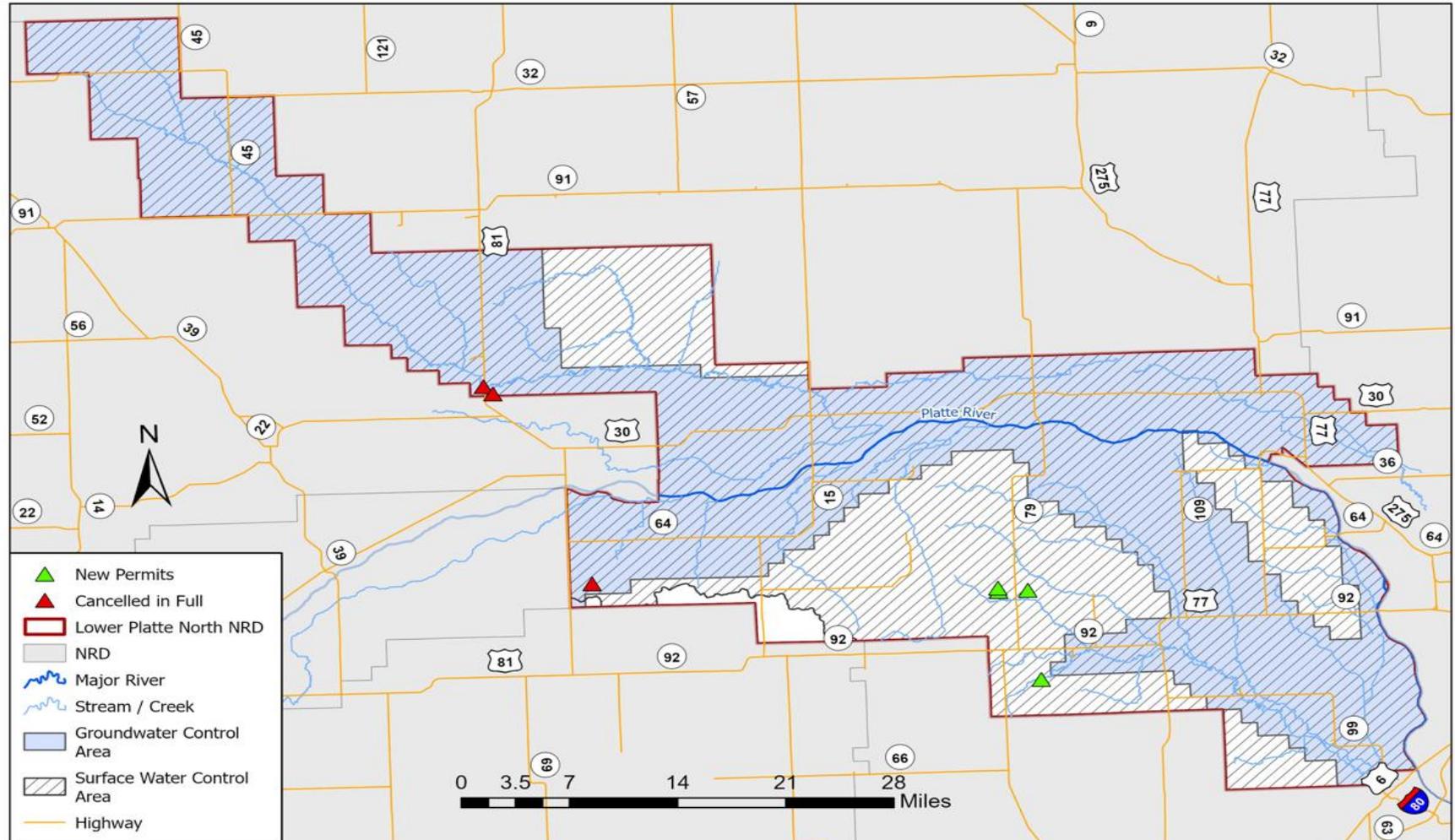
## Surface Water Appropriations Expired, Cancelled-in-Part or Cancelled-in-Full in 2024 Within the Voluntary IMP Area

Appropriation Number	Cancel Date	Source	NeDNR Action	Location Diversion or Reservoir	Use	Begin Acres	Cancelled			Estimated Date of Last Use	Basis for NeDNR Action
							Acres	Grant (cfs)	Grant (af)		
A-19732	1/17/2024	Gruenewald Reservoir	Cancelled in Full	S08 T15N-R01E	IR	95.0	128	0	60.5	Never Used	BUC-10121
A-2787B	12/9/2024	Shell Creek	Cancelled in Full	S30 T18N-R01W	IR	45.5	45.5	0.33	136.5	Unknown	REL-10797

# MAP OF SURFACE WATER PERMITTING ACTIONS

**NEBRASKA**  
DEPT. OF WATER, ENERGY, AND ENVIRONMENT

## 2024 Surface Water Permitting Actions within the Lower Platte North IMP Control Area



# LPNNRD

## DATA COLLECTION & MONITORING

- Groundwater elevation data
- Flow meter data (if meter data is collected)
- Certified irrigated groundwater acres
- Municipal and industrial groundwater uses
- New groundwater consumptive uses (agricultural, municipal, industrial)
- Retirement of groundwater consumptive uses (agricultural, municipal, industrial)
- Well drilling permits approved, cancelled, or denied
- Variances for new water uses granted, cancelled, or denied
- Water transfer permits granted, cancelled, or denied
- Stream gage measurements on District maintained gages
- District regulations/management activities (designated groundwater management areas, use restriction, etc.)
- New depletions accounting report
- Streamflow accretion activities (new projects, conjunctive management projects, etc.)
- Water banking activities (if bank exists)

# LPNNRD

## DATA COLLECTION & MONITORING

IMP includes 14 collection and monitoring activities for the NRD

- NRD Monitoring
  - Irrigated acres expansion
  - Groundwater level measurements
  - Municipal water use
- Other
  - Studies and Planning
  - Education/Outreach Collaborations

# LPNNRD

## DATA COLLECTION AND MONITORING

- Groundwater elevation data
  - Report was given to Committee/Board May 2024 and in LPNNRD Annual Lower Platte Basin Plan Report
- Certified irrigated groundwater acres (HCA - Hydrological Connected Area)
  - Total Irrigated - 402,081.73 acres
  - HCA Area - 344,549.2 acres
  - Non HCA - 57,461.81 acres
- Municipal and industrial groundwater uses
  - 20 communities reported

*\*Access data from the LPNNRD's 2019 Report for the Lower Platte River Basin-Wide Management Plan—put in a HyperLink*

# LPNNRD

## DATA COLLECTION AND MONITORING

### Flow meter data - 2024

- 1420 flow meters reported
  - SQS#1 - 3.51" in/ac
  - SQS#2 - 4.46" in/ac.
  - District Average - 5.08" in/ac
  
- Well Permit - 2024:
  - 41 total well permits
  - 40 irrigation well
    - 19 new wells
    - 20 replacement well
  - 1 other for wildlife pond

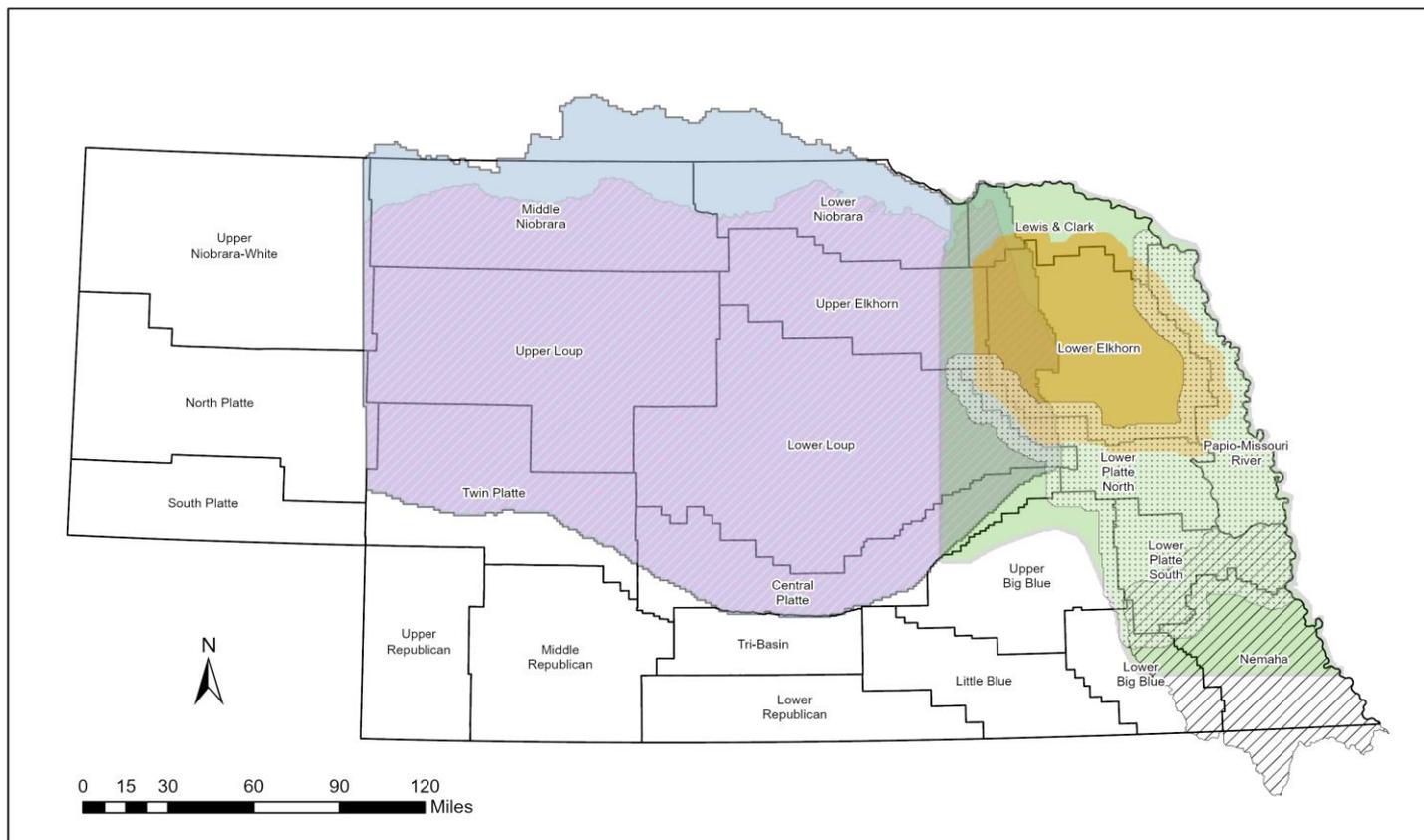
# LPNNRD

## DATA COLLECTION AND MONITORING

- New groundwater consumptive uses (agricultural, municipal, industrial)
  - Agricultural: 182.57 Acre Feet
    - 2,632.60 new irrigated acres
  - None for industrial or municipal
    - These are for wells permitted by the NRD
- Transfer of acres for groundwater consumptive uses (agricultural, municipal, industrial)
  - Agricultural - none in 2024
- Credit groundwater consumptive uses
  - Credit of 6.48 Acre Feet
  - 30 acres approved for irrigation but not developed

# BASIN-WIDE MODELING EFFORTS

## Lower Platte Missouri Tributaries Basin Model Coverage



Created by NeDNR | JWL | 22 July 2024

# LOWER PLATTE 3-DISTRICT MODEL (LP3D)

- Completed constructing model inputs into sub-regional model (LP3D) (Spring 2025)
- Calibration efforts are nearly complete and model stress testing is ongoing
- Scheduled documentation and publication of completed model for late 2025
- To be used for updated HCA and basin-wide analysis

# BASIN COALITION PLAN IMPLEMENTATION

# BASIN-WIDE ACTIVITIES

LPNNRD and NeDNR participate in the Lower Platte River Basin Coalition (LPRBC)

- Managers' and Technical Team meetings
- Annual reporting (see next slides)
- Annual Reporting Database
  - Tool to report and store annual water use data
- Lower Platte Missouri Tributaries Model
  - Tool to analyze aquifer-stream interactions

# ESTIMATED STREAM DEPLETIONS

# NEW DEPLETIONS ACCOUNTING

## LOWER PLATTE RIVER BASIN 2022-2024

2022-2024 Estimated Stream Depletions and Accretions Summary														
NRD	2022				2023				2024				Net Total Depletions	
	Depletions		Accretions		Depletions		Accretions		Depletions		Accretions			
	Peak	Non-Peak	Peak	Non-Peak	Peak	Non-Peak								
Lower Elkhorn	0	0	10	0	0	0	38.02	0	413.2	0	243.5	0	122	0
Lower Loup	145.97	17.4	83.87	9.5	46.1	0	19.2	0	200.0	0	0	0	289	8
Lower Platte North	0	0	0	0	14	0	0	0	33.4	348.2	0	66.03	47	282
Lower Platte South	39.2	10	20	10	0	0	0	50	50.9	140.9	0	0	70	91
Papio-Missouri River	0	18	0	0	0	0	0	0	294.4	0	0	0	294	18
Upper Elkhorn	0	0	0	0	0	30.9	0	0	0	0	0	0	0	31
Upper Loup	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Basin Total</b>	<b>185</b>	<b>45</b>	<b>114</b>	<b>20</b>	<b>60</b>	<b>31</b>	<b>57</b>	<b>50</b>	<b>991</b>	<b>489</b>	<b>244</b>	<b>66</b>	<b>823</b>	<b>430</b>

# DEPLETIONS PERCENTAGES

## BASIN WIDE AND LPNNRD

NRD	Total New Peak Season Depletions	Remaining 5-YR Allowable Depletion (AF)	Combined Percent of Allowable	Percent of Remaining 5-YR Allowable Depletion
Upper Loup NRD	51.3	5302.7	1.0%	97.6%
Lower Loup NRD	145.5	11768.0	1.2%	98.8%
Upper Elkhorn NRD	2.5	2924.5	0.1%	98.6%
Lower Elkhorn NRD	603.4	7484.7	7.5%	89.7%
Papio-Missouri River NRD	342.6	1410.8	19.5%	77.3%
Lower Platte South NRD	50.9	2015.6	2.5%	96.1%
Lower Platte North NRD	210.5	3360.9	5.9%	90.0%
<b>TOTALS</b>	<b>1407</b>	<b>34267</b>	<b>3.9%</b>	<b>94%</b>

# LOWER PLATTE RIVER BASIN COALITION

## 3<sup>RD</sup> INCREMENT PLANNING

- Land Use updates
- Watershed Model
- Groundwater Model
- Hydrologically Connected Areas
- INSIGHT Analysis
- BWP Updates

# ACTIONS AND GOALS

# EDUCATION & OUTREACH ACTIVITIES

## DWEE

- State Fair
- Husker Harvest Days

## LPNNRD

- Nitrogen Certification Classes
- School Presentations

## Joint Activities

- Spring Conservation Educational Event

# JOINTLY IDENTIFIED ACTIONS FOR NEXT TWO YEARS

- Cooperate on efforts to increase sources of available surface & groundwater data
- Participate in basin-wide and regional planning efforts such as ENWRA, the Lower Platte River Consortium (drought planning), and Lower Platte River Basin Coalition (LPRBC)
- Participate in education and outreach events
- Update the LPNNRD to work together with the Basin-wide Plan
- Finish the LPMT-3D Model for inclusion in the 5-year BWP update

# QUESTIONS?

Daryl Andersen  
Water Resources Manager  
dandersen@lpnrd.org



# THANK YOU!

Tyler Martin  
IWM Coordinator  
tyler.martin@nebraska.gov





## CONTRACT AMENDMENT No. 3 LPNNRD GWMP IMPLEMENTATION

This is an amendment to the contract between Spheros Environmental (Spheros), formerly LRE Water, and the Lower Platte North Natural Resources District (LPNNRD) to add expense and labor to complete three tasks including an update to the Variance Scoring Sheets, providing recommendations for quantity trigger adjustments, and additional time related to approval of the Groundwater Management Plan (GWMP) (Project). A detailed scope of services and cost breakdown can be found in Attachment A.

**TERMS OF THE AGREEMENT:** There are no changes. This Project will be referred to as Spheros Project No. 5036LPN07 with a total of three tasks.

This Project represents the third modification to the original agreement executed between the LPNNRD and LRE Water, dated January 18, 2024, for the purpose of updating the LPNNRD’s GWMP. This modification builds upon the scope, objectives, and deliverables outlined in the original agreement and the previous two amendments, incorporating additional tasks and refinements necessary to address evolving groundwater quality and quantity concerns within the LPNNRD. All work associated with this modification shall be conducted in accordance with the terms, conditions, and scope of services defined in the existing agreement, unless otherwise specified.

**PROJECT FUNDS AWARDED (MOD3):** A summary of the past modifications, and this proposed modification are shown in the table below. The amount of funds awarded to Spheros for MOD3 shall be increased by \$26,200 and therefore amended from \$118,000 to \$144,200. The parties hereto have executed this amendment as of the later date signed below.

<b>CONTRACT</b>	<b>COST</b>
Original	\$54,000
MOD 1 – Subareas Delineation, Spring/Fall Well Review, Quantity Trigger Evaluation, and Safe-Yield Thresholds	\$35,000
MOD2 – SQS Study	\$29,000
MOD3 – Scoring Sheets/Triggers	\$26,200
<b>TOTAL</b>	<b>\$144,200</b>



**LRE Water**

Roscoe Sopiwnik, PG

**By (Signature):**

**Title:**

Midwest Regional Director

**Date:**

**LPNNRD**

**By (Signature):**

**Title:**

**Date:**



## **ATTACHMENT A – SCOPE OF SERVICES**

## **Updated Well Variance Scoring Sheets / Groundwater Quantity Triggers**

### **Scope of Services**

**October 29, 2025**

During the Lower Platte North Natural Resource District’s (LPNNRD) Groundwater Management Plan (GWMP) update process, LRE Water— a Spheros Environmental Group Parent Company—reviewed the District’s well variance scoring sheet and recommended - revisions, including separate scoring frameworks for confined and unconfined aquifers. Additional criteria were proposed, such as integration of the Resource Development Risk Map, updated ranges for new consumptive uses, well density metrics, water level trends, and nitrate concentrations.

Since 1987, groundwater quantity management triggers have existed but have not resulted in a Groundwater Management Area control designation. To improve effectiveness, policy adjustments may include eliminating triggers as the primary mechanism for creating controls for confined aquifers, incorporating qualitative criteria, and refining delineation strategies for quantity control areas.

The proposed project includes:

1. Collaborating with LPNNRD staff and the Water Committee to update variance scoring sheets.
2. Continuing review of quantity management triggers and providing recommendations for either eliminating the current triggers as the primary determining factor, evaluating the feasibility of implementing other safe-yield thresholds, or establishing quantity management areas through the use of a groundwater model.
3. Assisting LPNNRD staff in preparing a transmittal letter to the Nebraska Department of Water, Energy, and Environment (DWEE) outlining significant GWMP changes

### **SCOPE OF SERVICES**

#### **Task 1 – Well Variance Scoring Sheet Refinement and Review Procedures**

LRE Water will assist the LPNNRD in refining its well variance scoring system to improve technical defensibility, transparency, and consistency in permit decisions. This task

includes updates to the scoring framework and review protocols for Class 1–3 variance applications.

- Incorporate well location scoring based on the Groundwater Resource Development Risk map.
- Reevaluate point ranges for New Groundwater Consumptive Use.
- Develop separate scoring sheets for:
  - Unconfined aquifers: include specific yield and saturated thickness.
  - Confined aquifers: include aquifer thickness, storativity, and available head.
- Add well density metrics (irrigation, domestic, livestock, municipal) to assess potential interference risk.
- Standardize transmissivity calculations using mapped estimated hydraulic conductivity and aquifer thickness and incorporate aquifer parameter from aquifer pumping tests, if available.
- Estimate aquifer extent, including identification of negative boundaries.
- Calculate theoretical drawdown and radius of influence for a proposed well.
- Score water level trends in the vicinity of the proposed well.
- Integrate nitrate concentration ranges into scoring criteria.
- Benchmark against other NRD scoring systems to identify additional criteria and best practices.
- Define review radii for Class 1 and Class 2 wells; compile all well logs within the study area.
- Describe the purpose of analyzing well logs based on scoring sheet-defined radius or well class.
- Establish a procedure, to be described in a brief summary, provided along with the new scoring sheets to guide the LPNNRD when requiring applicants to conduct site-specific desktop assessments or potential field tests to better assess the potential impacts from a new high-capacity well and address uncertainty, especially where data gaps exist.

**Task 1 Cost: \$12,000**

**Task 2: Revised Criteria for Establishing Quantity Management Areas**

- Identify and prioritize areas with consistent well interference, incorporating data from annual pumping impact reports to track severity.

- Differentiate management strategies for confined and unconfined aquifers, ensuring policy adjustments align with the distinct hydrologic responses for the aquifer type.
- Incorporate data from the existing monitoring practices by utilizing observation wells and hydrograph trends to detect seasonal declines rather than relying solely on spring/fall measurements, allowing for continuous multi-season assessments.
- Incorporate historical drought impact data to evaluate magnitude trends, setting baseline depletion benchmarks for proactive response measures.
- Strengthen unconfined aquifer management through policies aligned with Integrated Management Plan goals, by considering data such as stream depletion factors and annual recharge trend analyses.
- Refine decline impact assessments, distinguishing significant drops (e.g., a 10% decline in aquifers exceeding 100 feet vs. those under 50 feet) to prioritize intervention efforts accordingly.
- Evaluate the practicality of implementing a safe-yield threshold for confined aquifers. For example, establishing a trigger management action at 50% of remaining head above the aquifer top, thus ensuring protection of the aquifer.
- Describe when situations may warrant the utilization of a numerical groundwater flow models to identify areas of concern, assess long-term trends and aquifer response to pumping impacts from a variety of scenarios to refine management strategies and improve predictive capabilities. There is no groundwater modeling as part of this Project.

**Task 2 Cost: \$13,000**

**Task 3 – GWMP Resubmission Support**

LRE Water will assist the District in preparing the modified Groundwater Management Plan (GWMP) for resubmission to DWEE, including:

- Drafting a cover letter summarizing changes and noting full plan rewrite to be signed by the General Manager.
- Preparing PDF and Word versions with revisions clearly marked (additions in red/underline; deletions in strikeout).

- Compiling a list of public comments and supporting data used under Neb. Rev. Stat. § 46-710, with materials available upon request, and included as an attachment to the cover letter.

**Task 3 Cost: \$1,200**

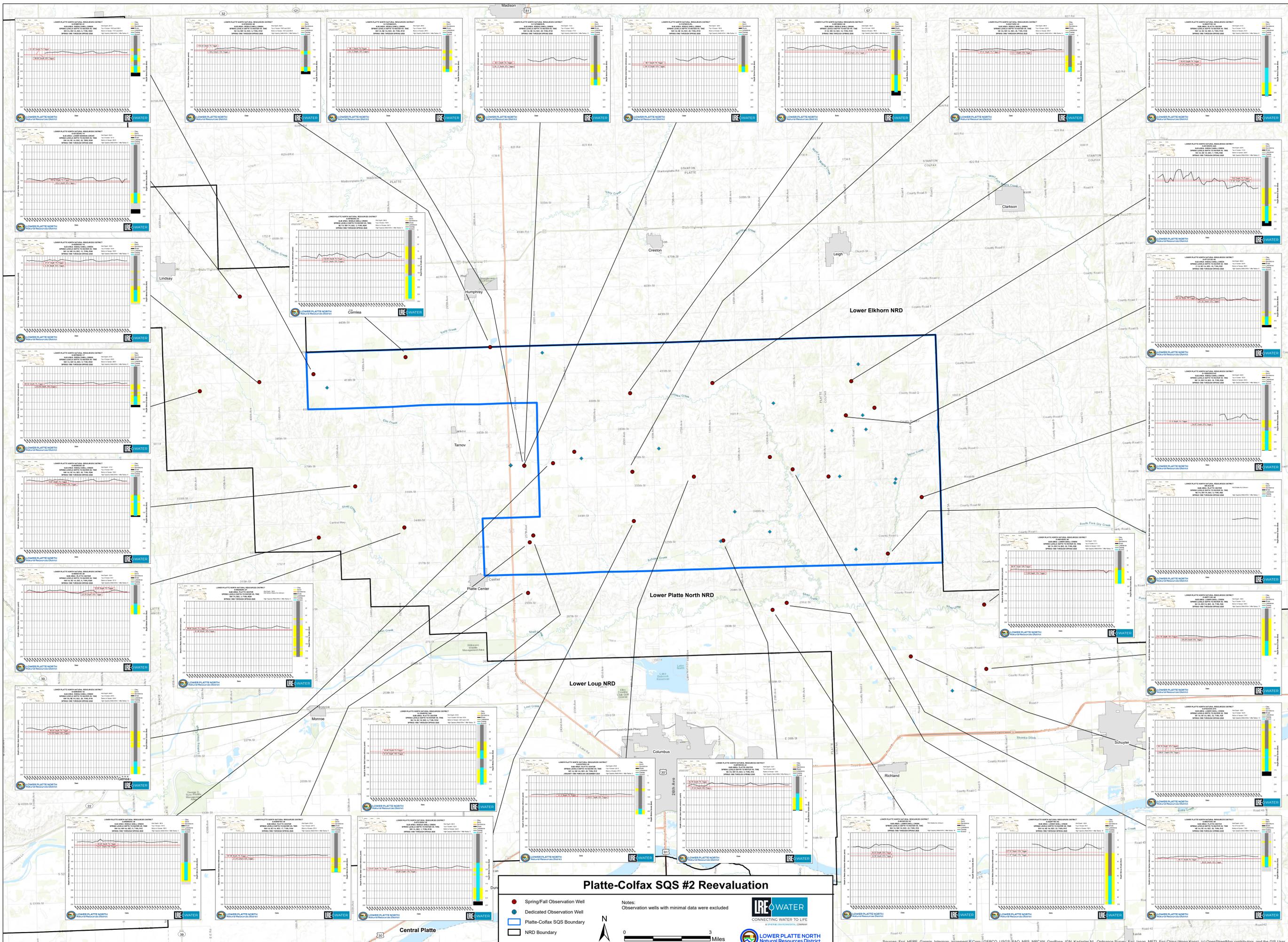
**4. TIME REQUIRED**

LRE Water is assuming the Project will be authorized by the LPNNRD in December 2025 allowing for Project kickoff to occur in January 2026. The Project is expected to take up to six months with a presentation to the Water Committee and Board of Directors. A detailed schedule will be established and shared with the LPNNRD at the kick-off meeting.

**5. PAYMENT**

The estimated time and materials fee to complete the Project outlined below will not exceed \$26,200. The estimated distribution of compensation is outlined in the table below. The costs include LRE Water’s labor and expenses, which include mileage, lodging, and meals.

<b>PROJECT TASKS</b>		<b>COST</b>
1	Scoring Sheets	\$12,000
2	Revised Criteria for Establishing Quantity Management Areas	\$13,000
3	GWMP Resubmission Report	\$1,200
<b>TOTAL (3 TASKS)</b>		<b>\$26,200</b>



**Platte-Colfax SQS #2 Reevaluation**

● Spring/Fall Observation Well  
◆ Dedicated Observation Well  
 Platte-Colfax SQS Boundary  
 NRD Boundary

Notes:  
 Observation wells with minimal data were excluded

N  
 0 3 Miles  
 IRE WATER  
 CONNECTING WATER TO LIFE  
 LOWER PLATTE NORTH  
 Natural Resources District

Belwood Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri, China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community



**LOWER PLATTE NORTH**  
Natural Resources District



**Water Committee Meeting**

**Thursday, October 30, 2025 @ 9:30 AM**

**LPNNRD Office - Wahoo**

# **Special Quantity Sub Areas Reevaluation – Initial Findings**

[LREWATER.COM](http://LREWATER.COM)

ROCKY MOUNTAIN | MIDWEST | SOUTHWEST | TEXAS

# A QUICK UPDATE

- Same team
- Enhanced services
- New name
- After January 1, formal switch to Spheros

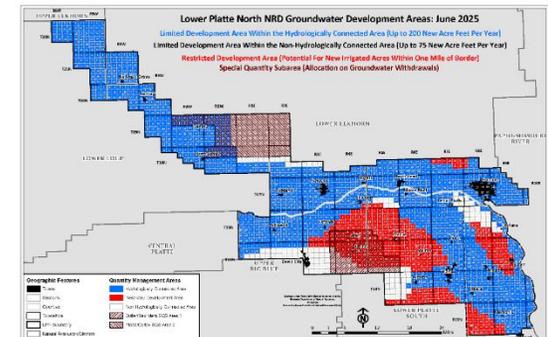
LRE Water is now  
**Spheros Environmental**

Visit [SpherosEnvironmental.com](https://SpherosEnvironmental.com), or reach out to [jon.mohr@LREWater.com](mailto:jon.mohr@LREWater.com)



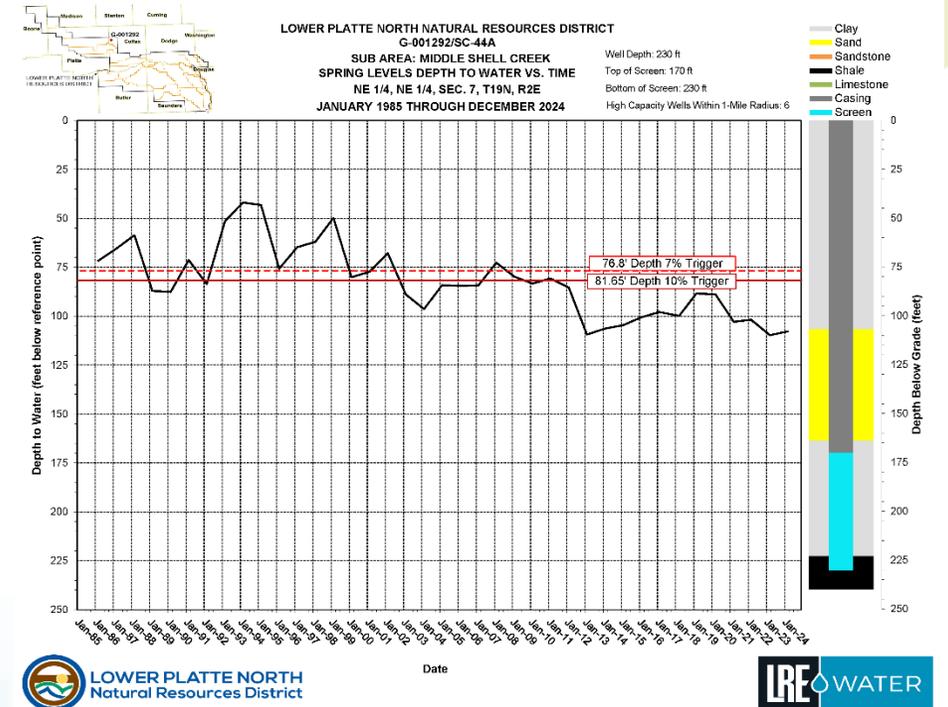
# PROJECT PURPOSE

- 1) Research the justification for the SQS boundaries
- 2) Conduct a desktop review of historical and recent water levels within 5-miles
- 3) Integrate LRE Water 2022 - 2023 Hydrogeologic Assessment data
- 4) Obtain and review pumping data
- 5) Reviewed the Water Resources Inventory Report (Ollson, 2015)



# PROJECT PURPOSE

- 6) Review the 2022 UNL Study on the Platte/Colfax SQS Area
- 7) Develop a GIS map to visualize historical groundwater level changes
- 8) Provide a report with findings, data gaps, and recommendations to guide potential boundary adjustments



# AGENDA

1

Establishment of  
the SQS Areas

2

Key Data  
Sources

3

Key Findings

4

Recommendations

# **ESTABLISHMENT OF SQS AREAS**

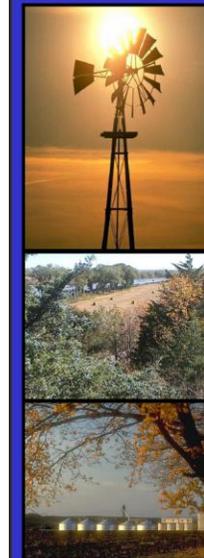
# ESTABLISHMENT OF SQS AREAS

- The flash drought of 2012 leading to well interference complaints throughout the District
- Challenges with confined aquifers of variable thicknesses, extents, and hydraulic connections
- Relative high density of high-capacity wells leads to larger drawdown or pumping influence in confined aquifers
- February 10, 2014 - LPNNRD created the Butler/Saunders SQS #1 & Platte/Colfax SQS Area #2

# ESTABLISHMENT OF SQS AREAS

- SQS areas were delineated using data from the Water Resources Inventory Report (Olsson Associates)
  - Based upon the Public Hearing Presentation from January 13, 2014
- Significant seasonal declines had been documented by LPNNRD
- Both Platte-Colfax and Butler-Saunders SQS areas didn't meet the trigger requirements for a Phase II Quantity Control Area

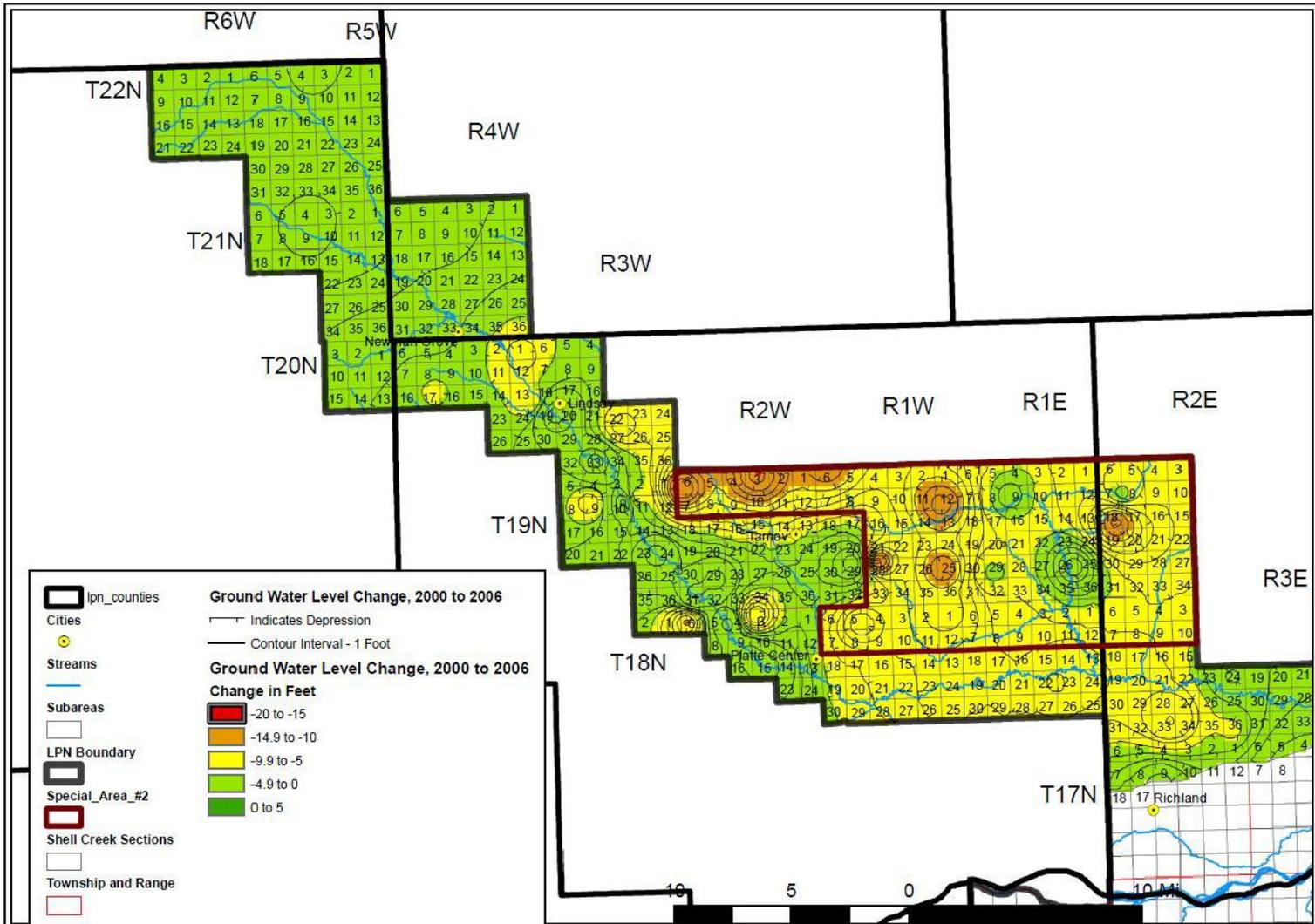
# ESTABLISHMENT OF SQS AREAS



Lower Platte  
North NRD

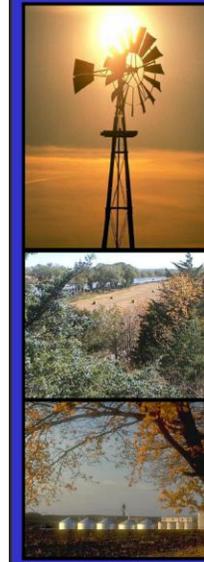
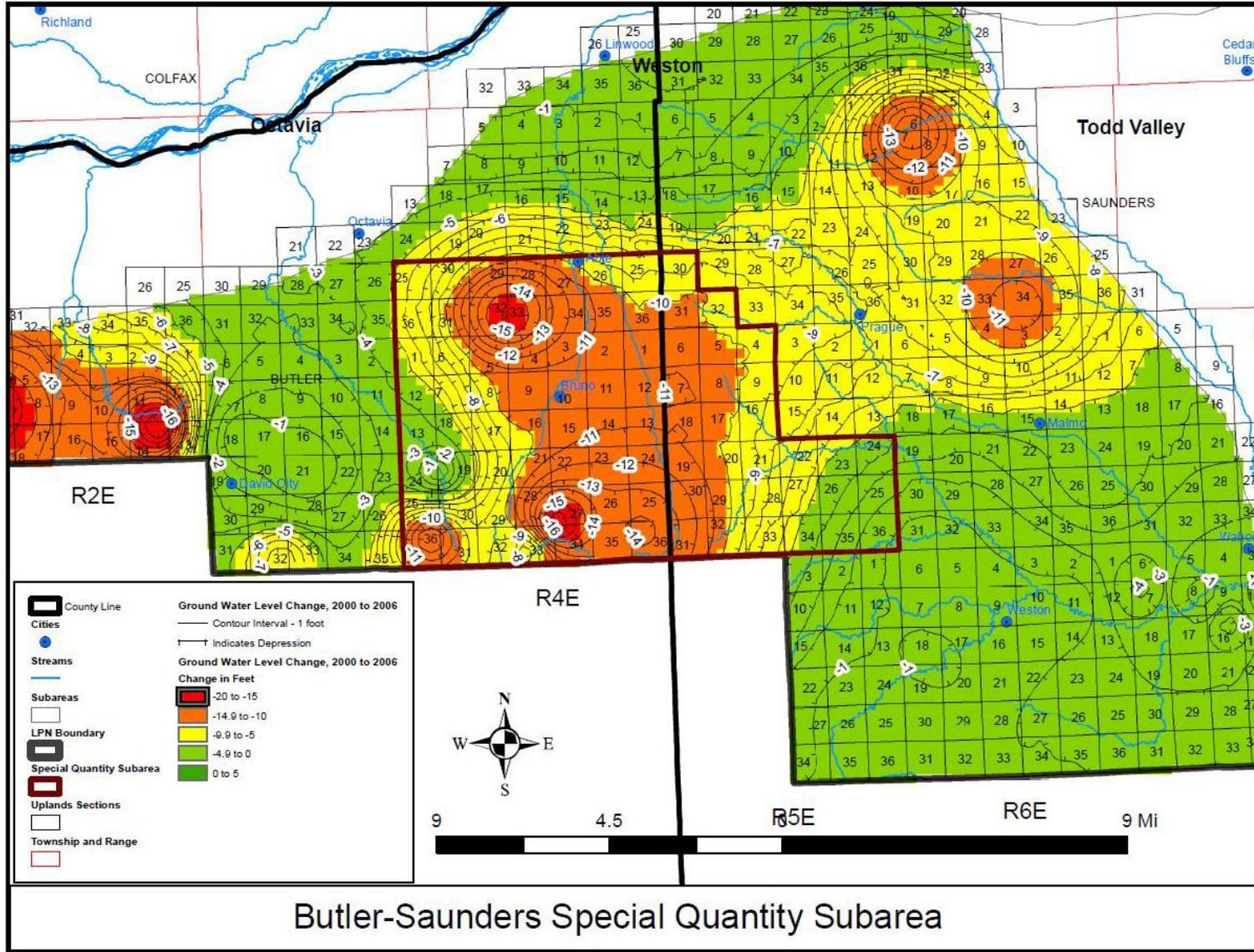
*Special Quantity Ground  
Water Management  
Areas*

LPNNRD Public Hearing  
January 13, 2014



Platte-Colfax Special Quantity Subarea

# ESTABLISHMENT OF SQS AREAS



Lower Platte  
North NRD

Special Quantity Ground  
Water Management  
Areas

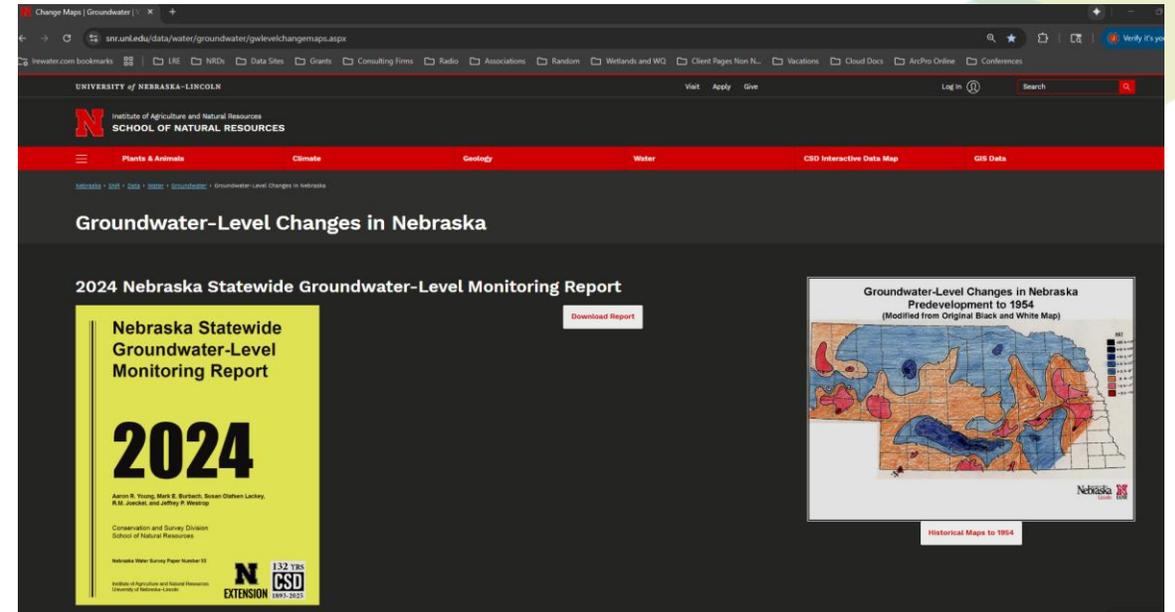
LPNNRD Public Hearing  
January 13, 2014



# **DATA SOURCES**

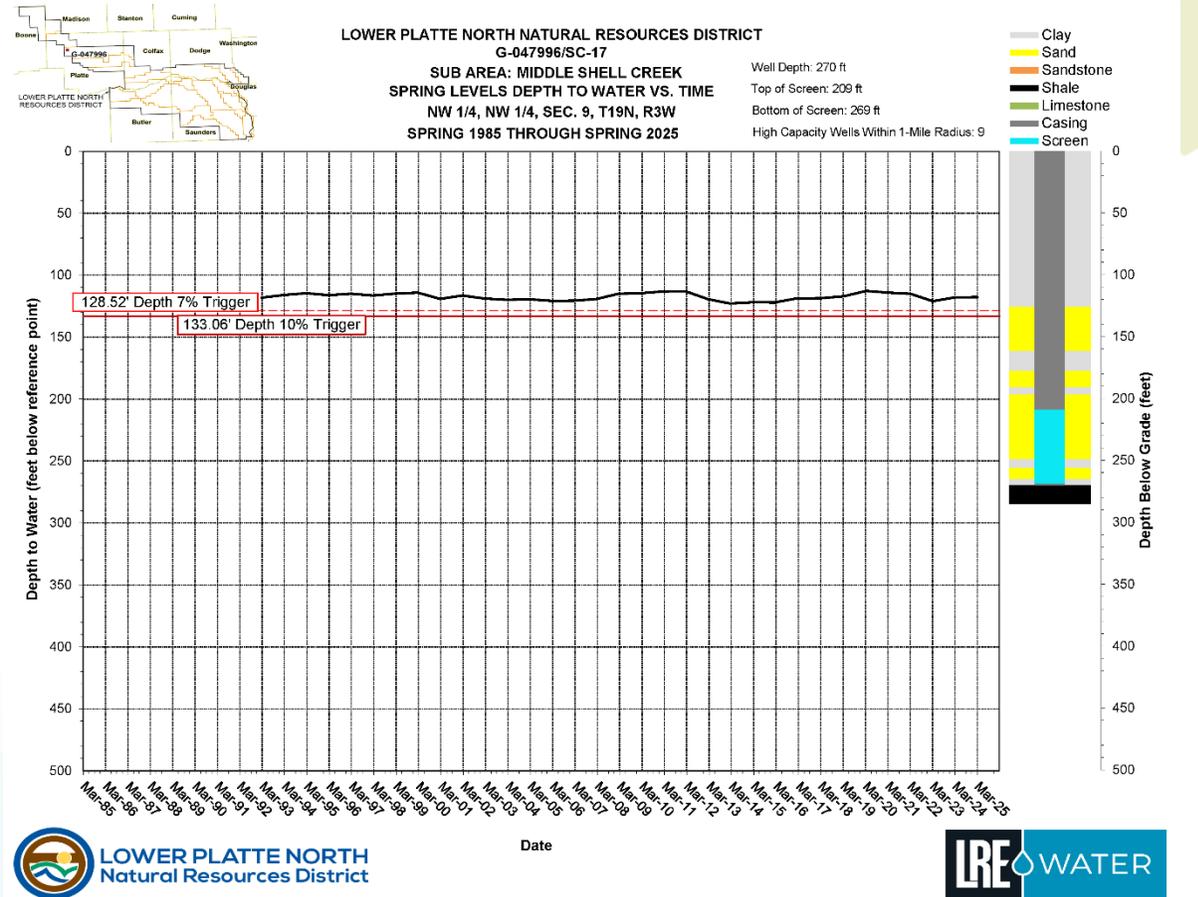
# DATA SOURCES

- Hydrogeologic Evaluation and Subarea Delineation
  - Olsson Associates, 2009
- Hydrogeologic Assessment Report
  - LRE Water, 2022 - 2023
  - Transmissivity, saturated sand, risk map, etc.
- UNL Institute of Agriculture and Natural Resources
  - Groundwater-Level Changes in Nebraska



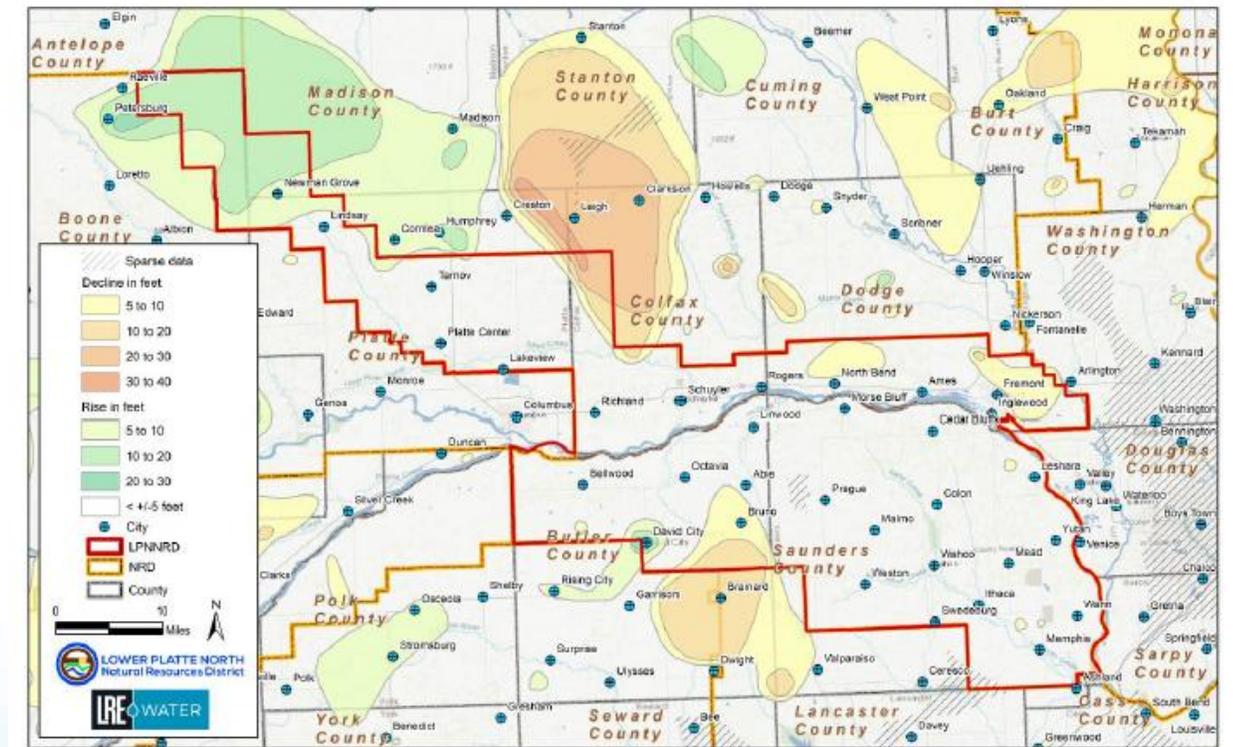
# DATA SOURCES

- UNL Conservation and Survey Division
  - “Multiple-point statistical model of 3D glacial aquifer heterogeneity for improve groundwater management”  
– Final Paper, June 2023
- GIS-based Water Level Maps (LRE)
- Spring/Fall & Dedicated Observation Wells
- Hydrographs created by LRE Water in 2025



# DATA SOURCES

- LPNNRD Special Quantity Groundwater Management Area Public Hearing Presentation – January 13, 2014
- Order of Designation – Rules Amendment February 10, 2014



# KEY FINDINGS

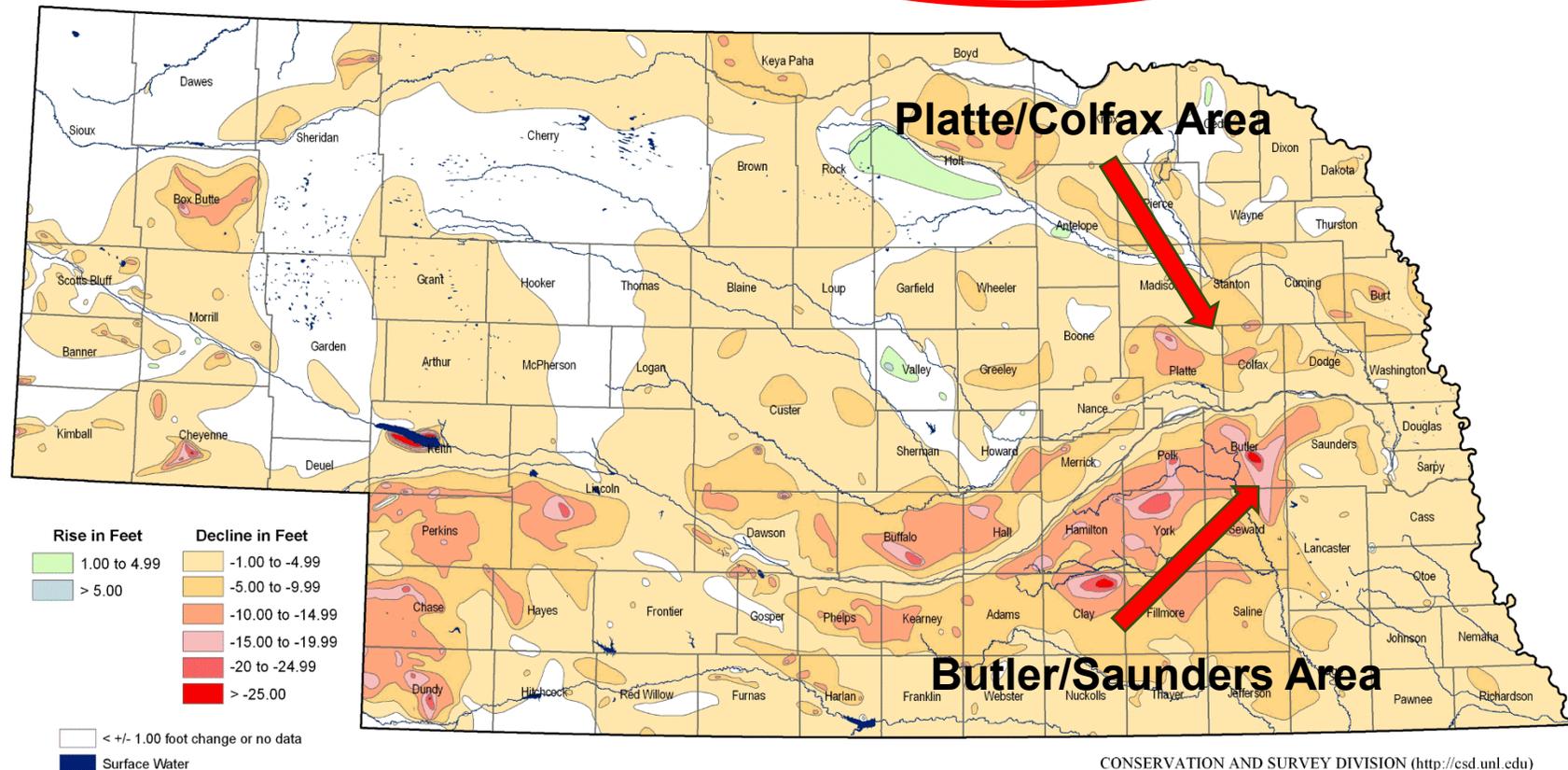
## SHORT VS. LONG-TERM DECLINES

# #1 – SHORT VS. LONG-TERM DECLINES

- The 2000 to 2006 drought conditions accelerated groundwater declines, but groundwater levels recovered in the following years as drought conditions subsided.
- The region has not experienced similar drought conditions in the past 20 years, and portions of the SQS Areas' groundwater levels remain stable.
- Long-term declines are present in the eastern one-third of the Platte/Colfax SQS and the majority of the Butler/Saunders SQS

# #1 – SHORT VS. LONG-TERM DECLINES

Groundwater-level Changes in Nebraska - Spring 2000 to Spring 2006



CONSERVATION AND SURVEY DIVISION (<http://csd.unl.edu>)  
 School of Natural Resources (<http://snr.unl.edu>)  
 Institute of Agriculture and Natural Resources/College of Arts and Sciences  
 University of Nebraska-Lincoln

U.S. Geological Survey  
 Water Resources Division - Nebraska District

Nebraska Natural Resources Districts

Central Nebraska Public Power and Irrigation District

Mark Burbach, Water Levels Coordinator, CSD



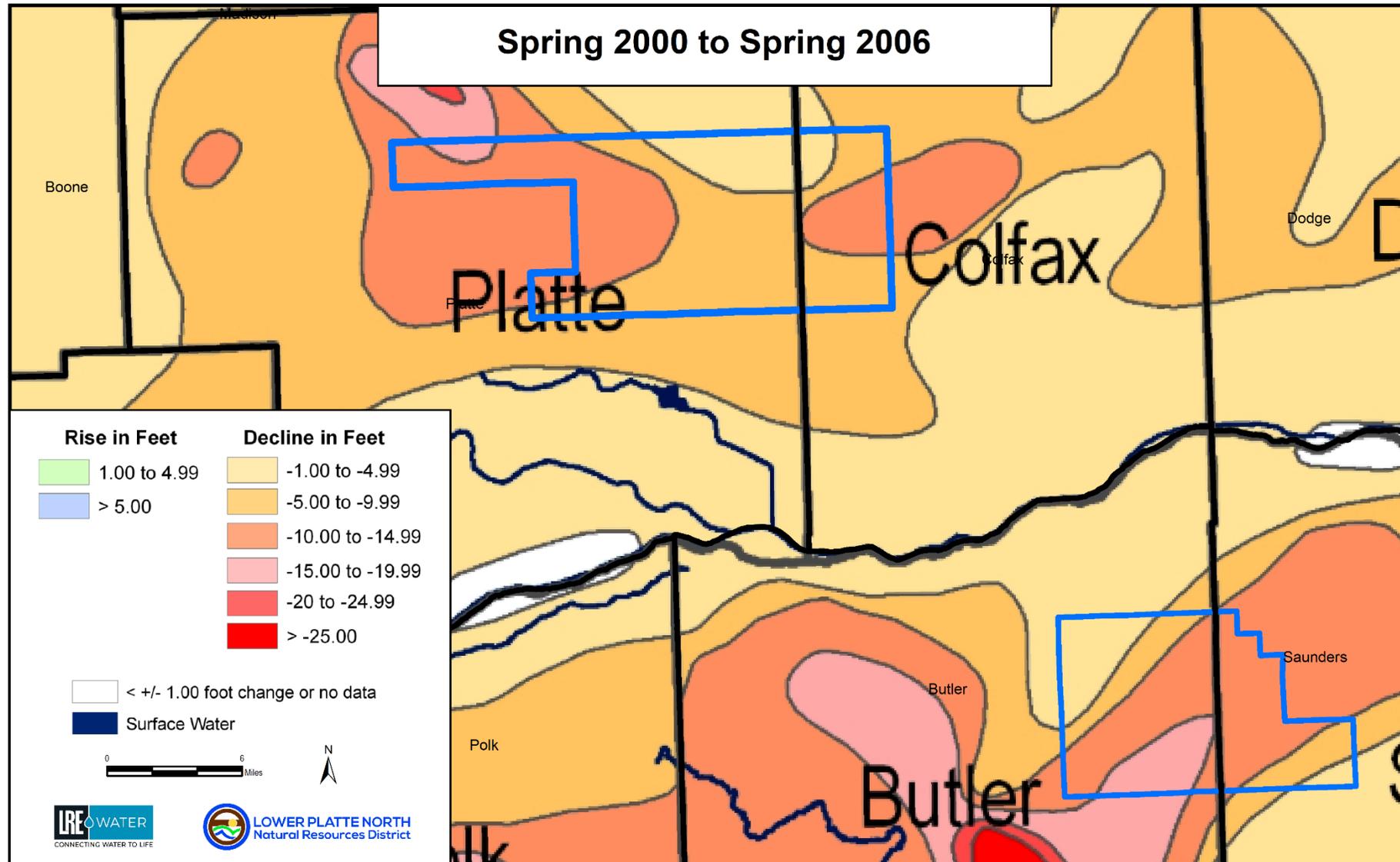
The University of Nebraska-Lincoln is an equal opportunity educator and employer with a comprehensive plan for diversity.



# #1 – SHORT VS. LONG-TERM DECLINES

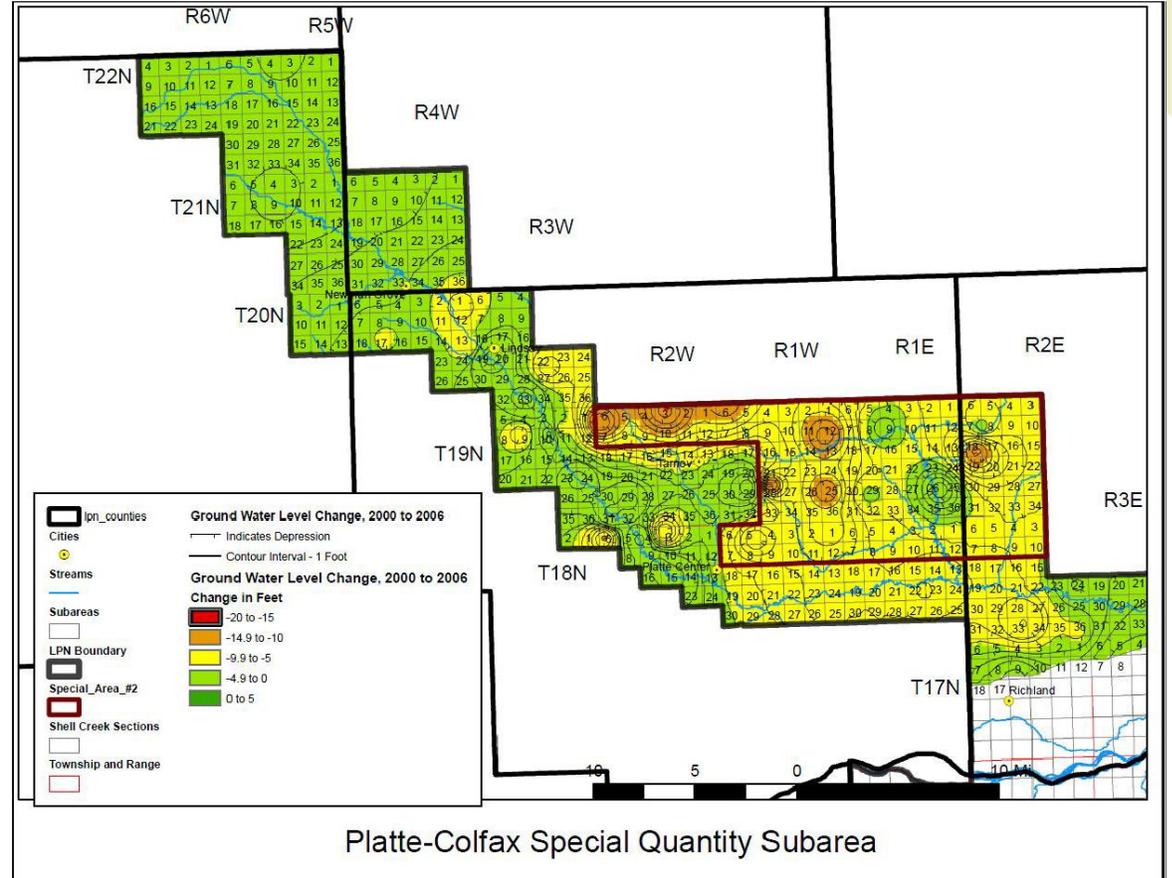
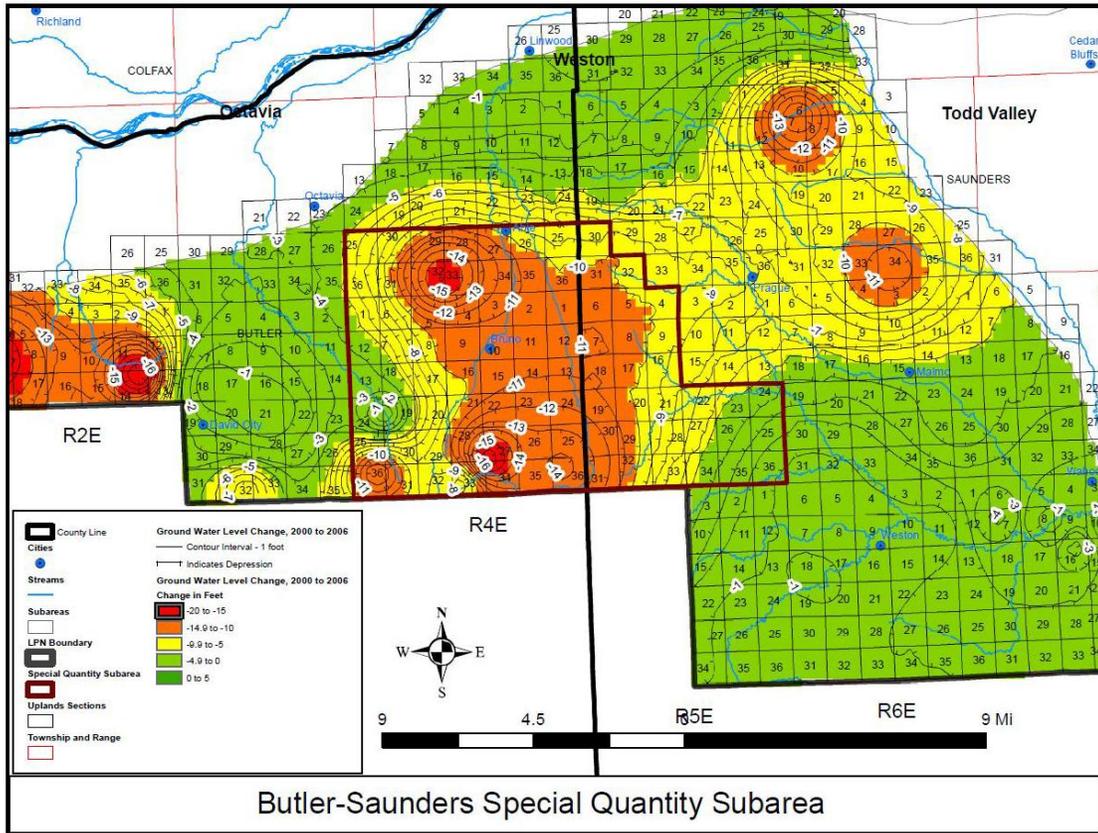
- Eastern Nebraska was in a prolonged drought starting in 1999, with intensification through 2002-2004
  - Groundwater levels dropped significantly throughout the state
  - Many areas questioned long-term aquifer sustainability
- By 2009, groundwater levels returned in the western two-thirds of the Platte/Colfax SQS

# #1 – SHORT VS. LONG-TERM DECLINES



Source: UNL Institute of Agriculture & Natural Resources

# #1 – SHORT VS. LONG-TERM DECLINES



Groundwater Changes 2000-2006 (Olsson Study, 2009)

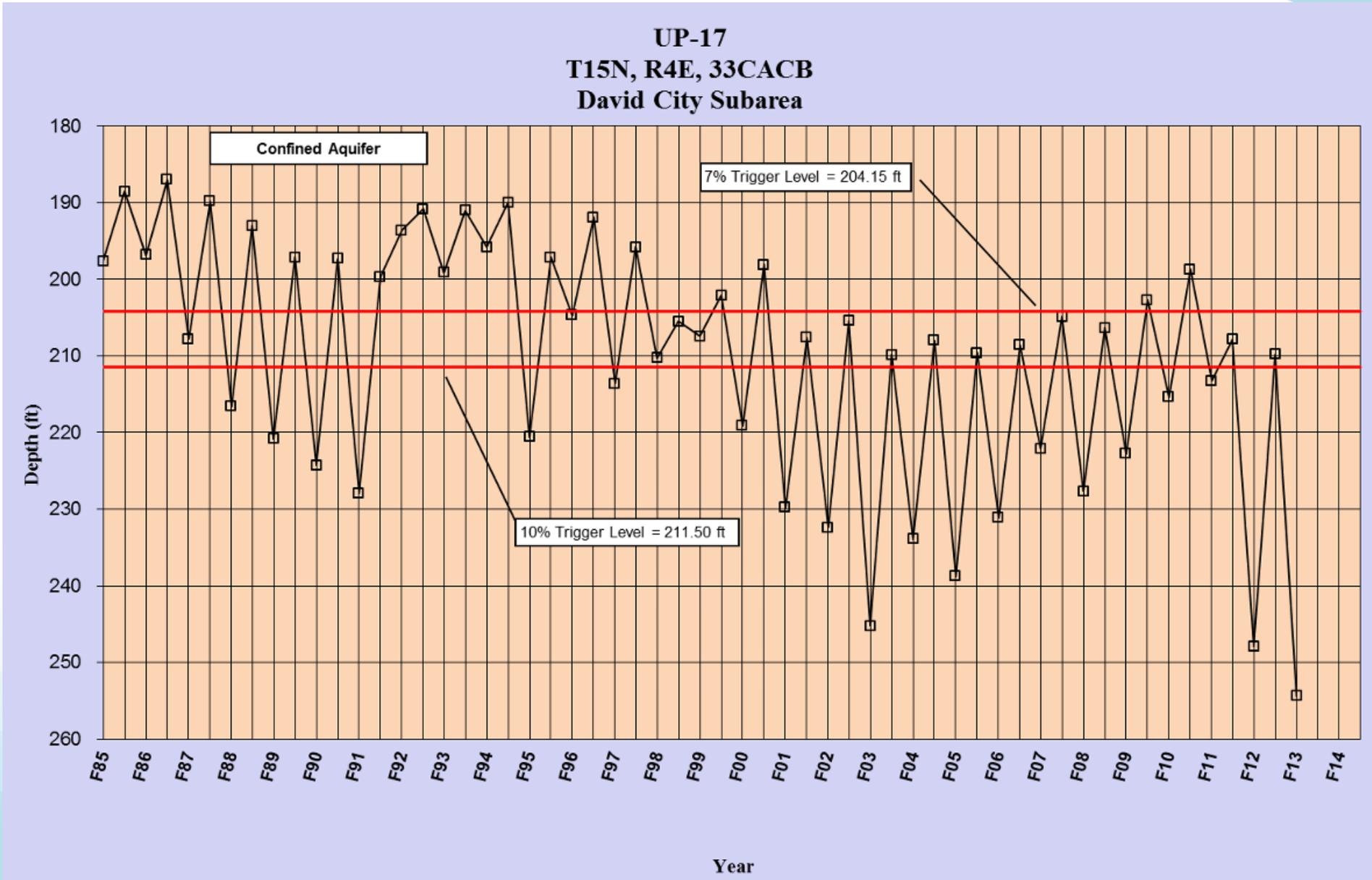
# KEY FINDINGS

**BUTLER-SAUNDERS SQS**

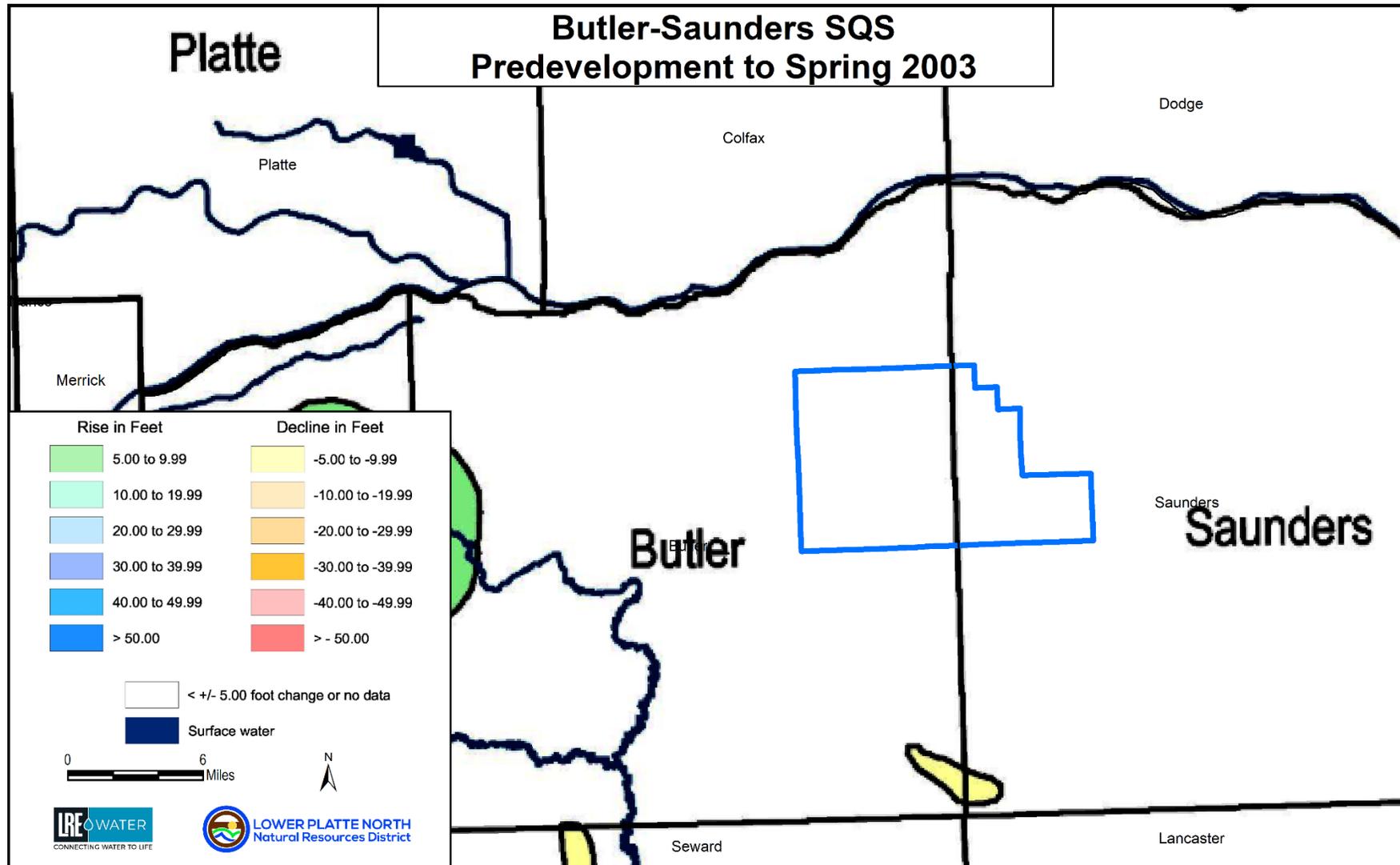
## #2 – BUTLER/SAUNDERS SQS AREA

- Long-term groundwater declines are present and remain to be an issue across the majority of the area
- Groundwater declines are the result of over pumping, complexity and variability of the confined aquifers, and are exacerbated by drought
- UNL groundwater declines AND LRE Water groundwater decline data (1987-2025) are generally in agreement

# HYDROGRAPH 4 MILES SOUTH OF BRUNO

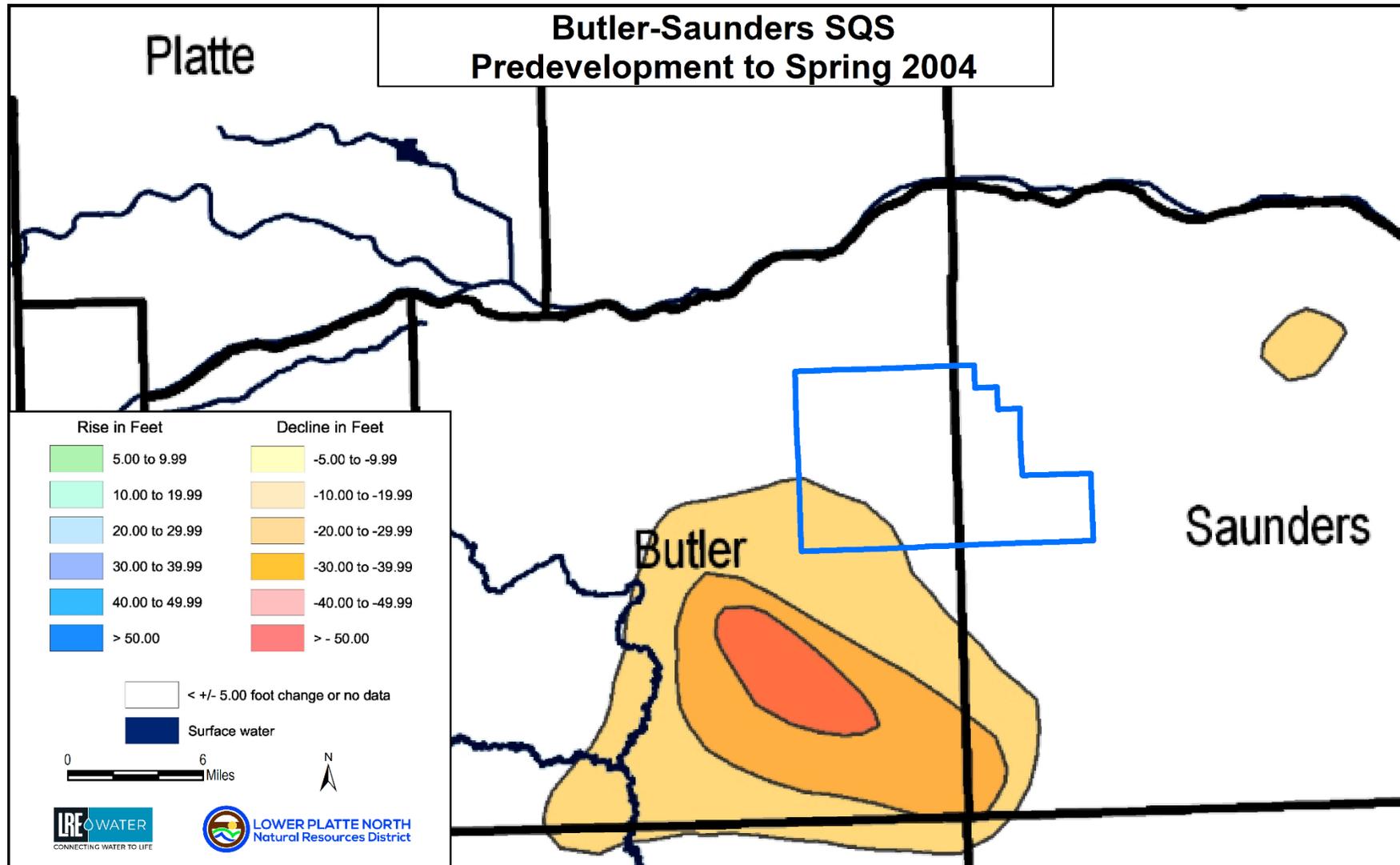


# #2 – BUTLER/SAUNDERS SQS AREA



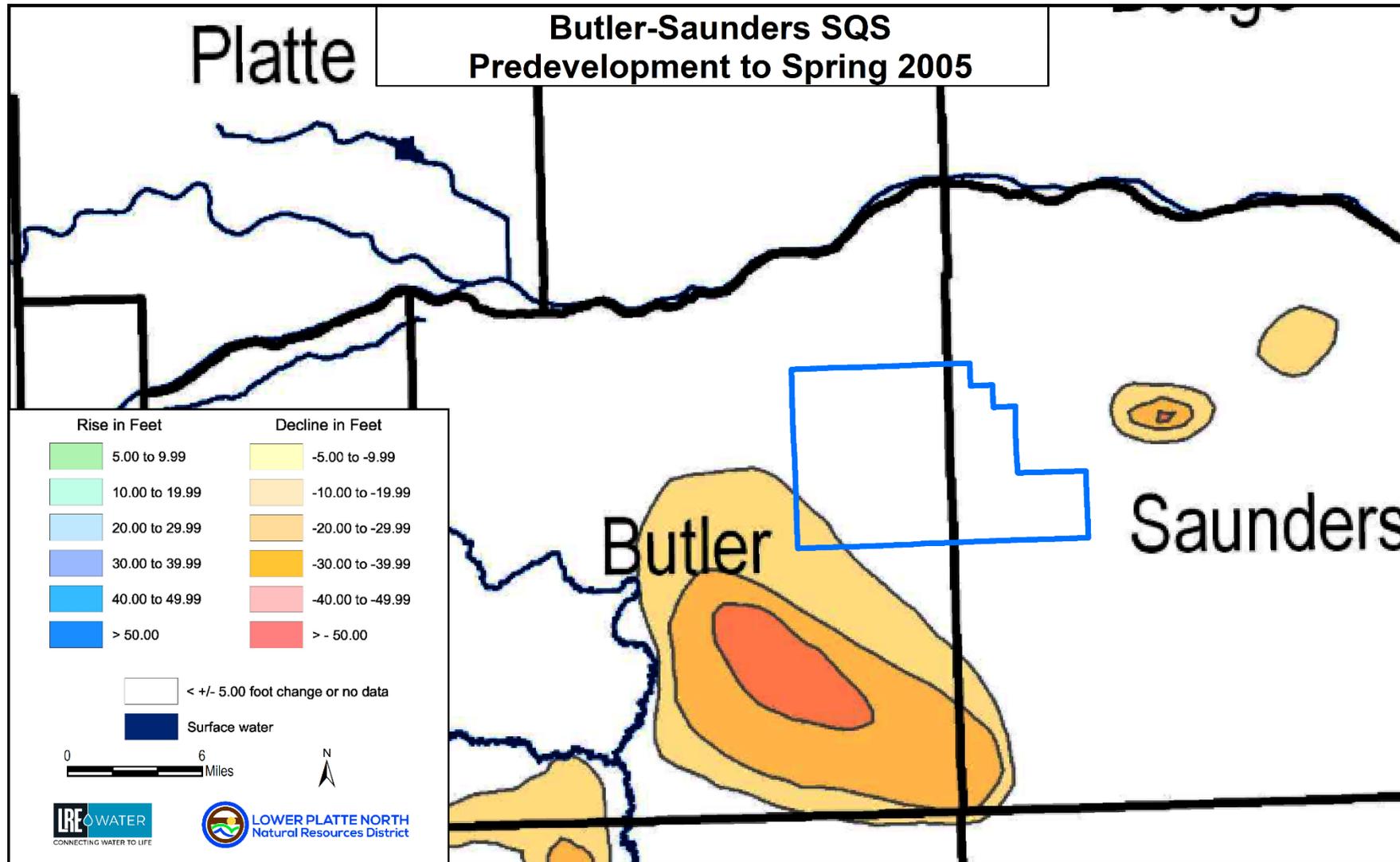
Source: UNL Institute of Agriculture & Natural Resources

# #2 – BUTLER/SAUNDERS SQS AREA



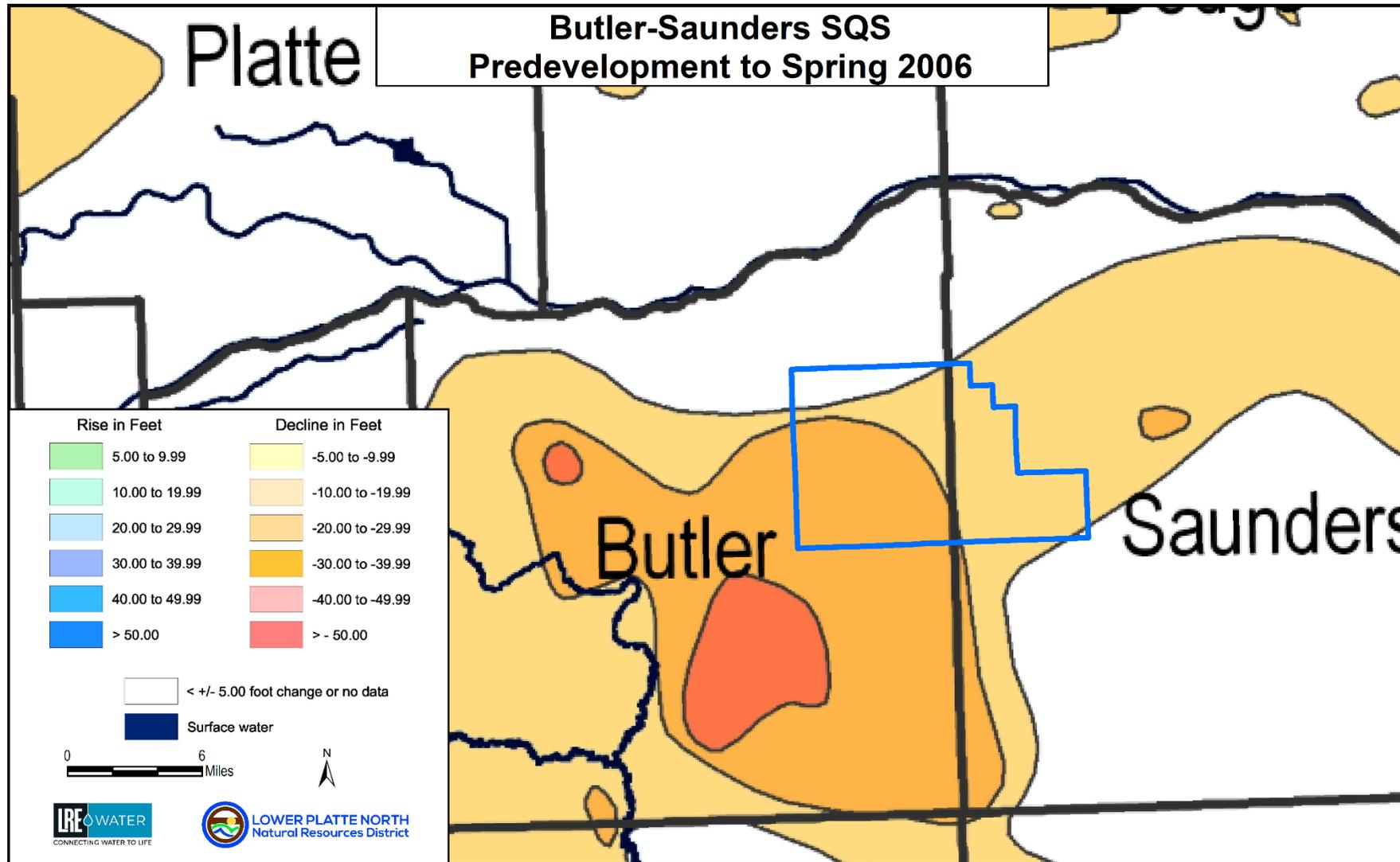
Source: UNL Institute of Agriculture & Natural Resources

# #2 – BUTLER/SAUNDERS SQS AREA



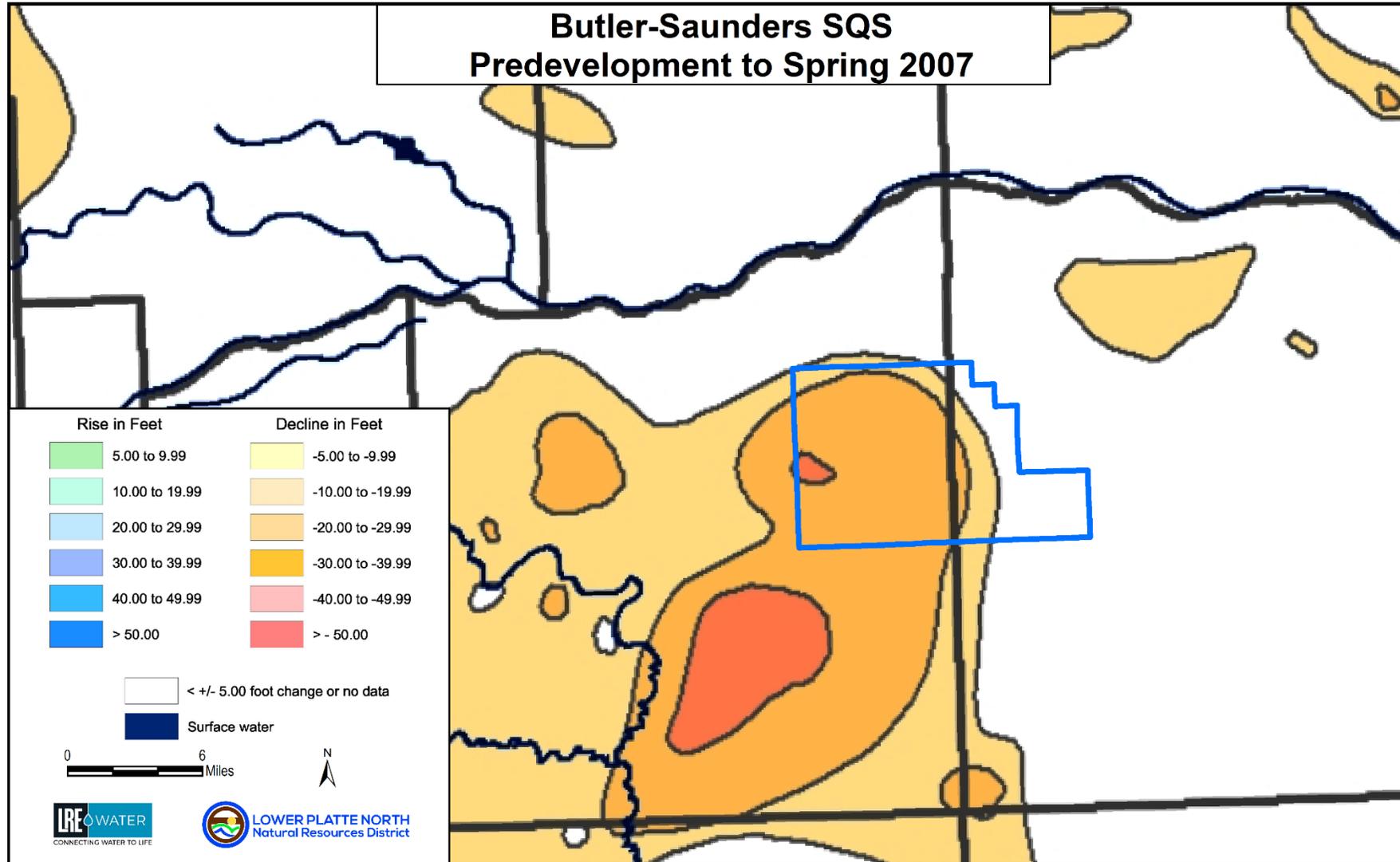
Source: UNL Institute of Agriculture & Natural Resources

# #2 – BUTLER/SAUNDERS SQS AREA



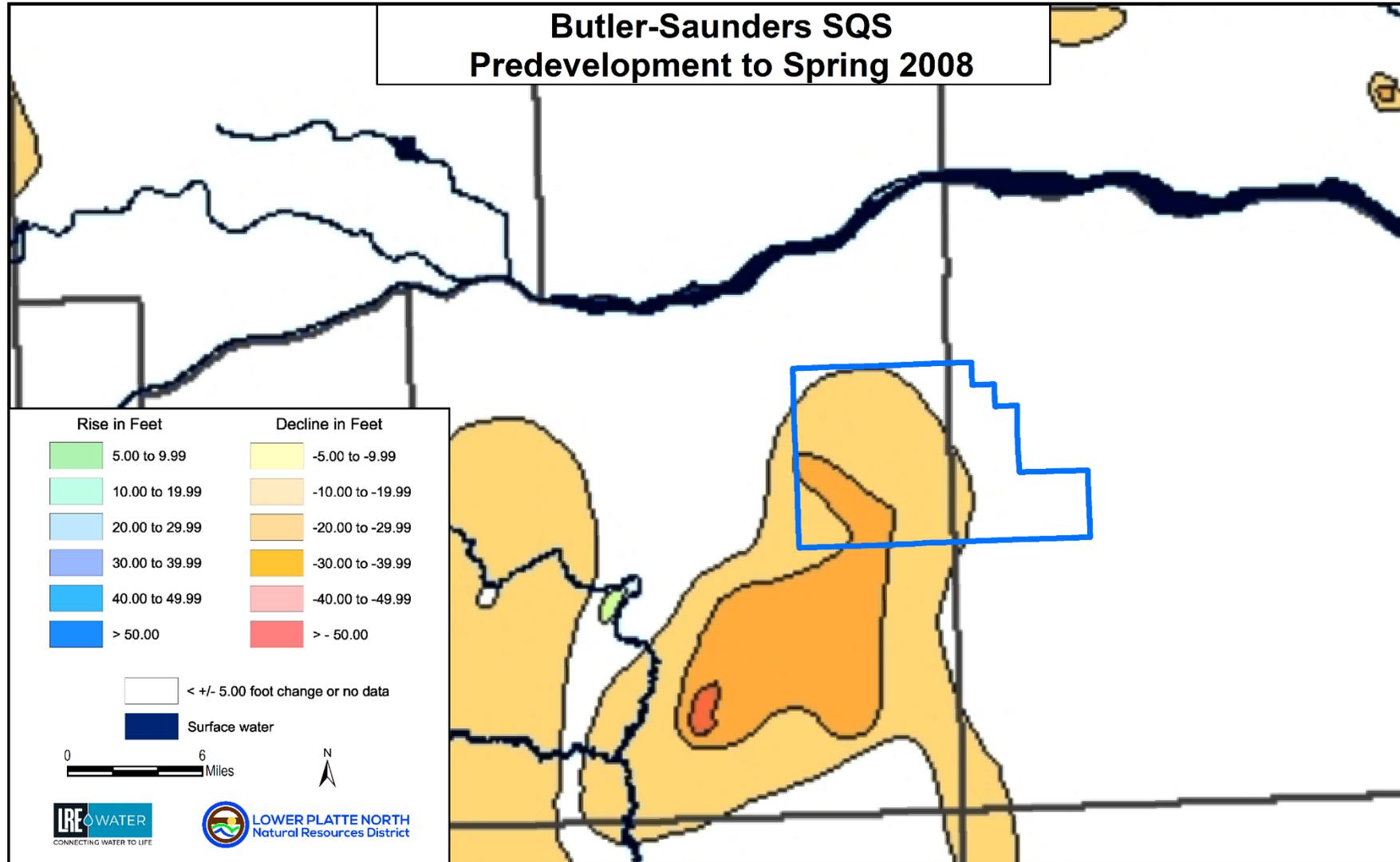
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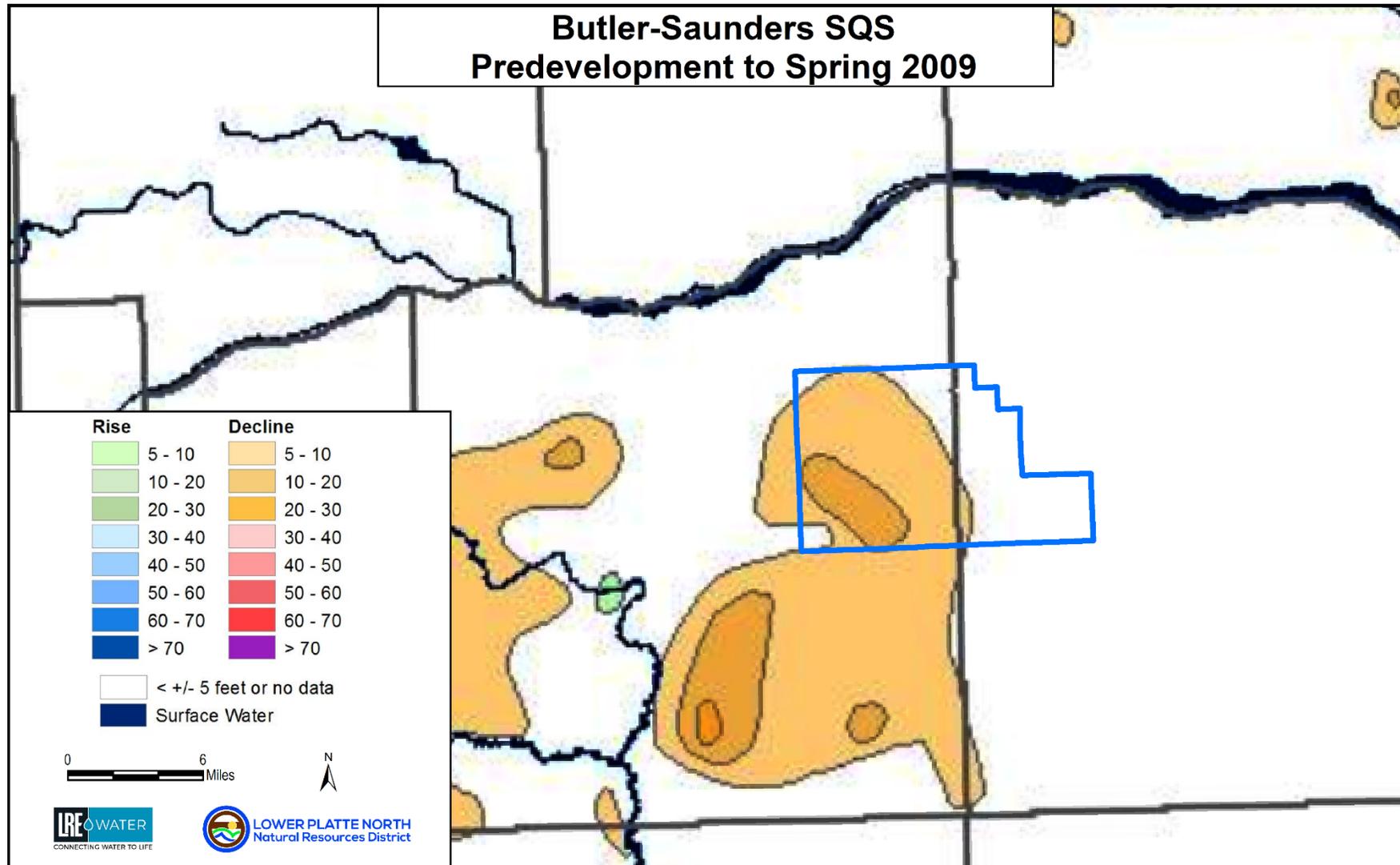
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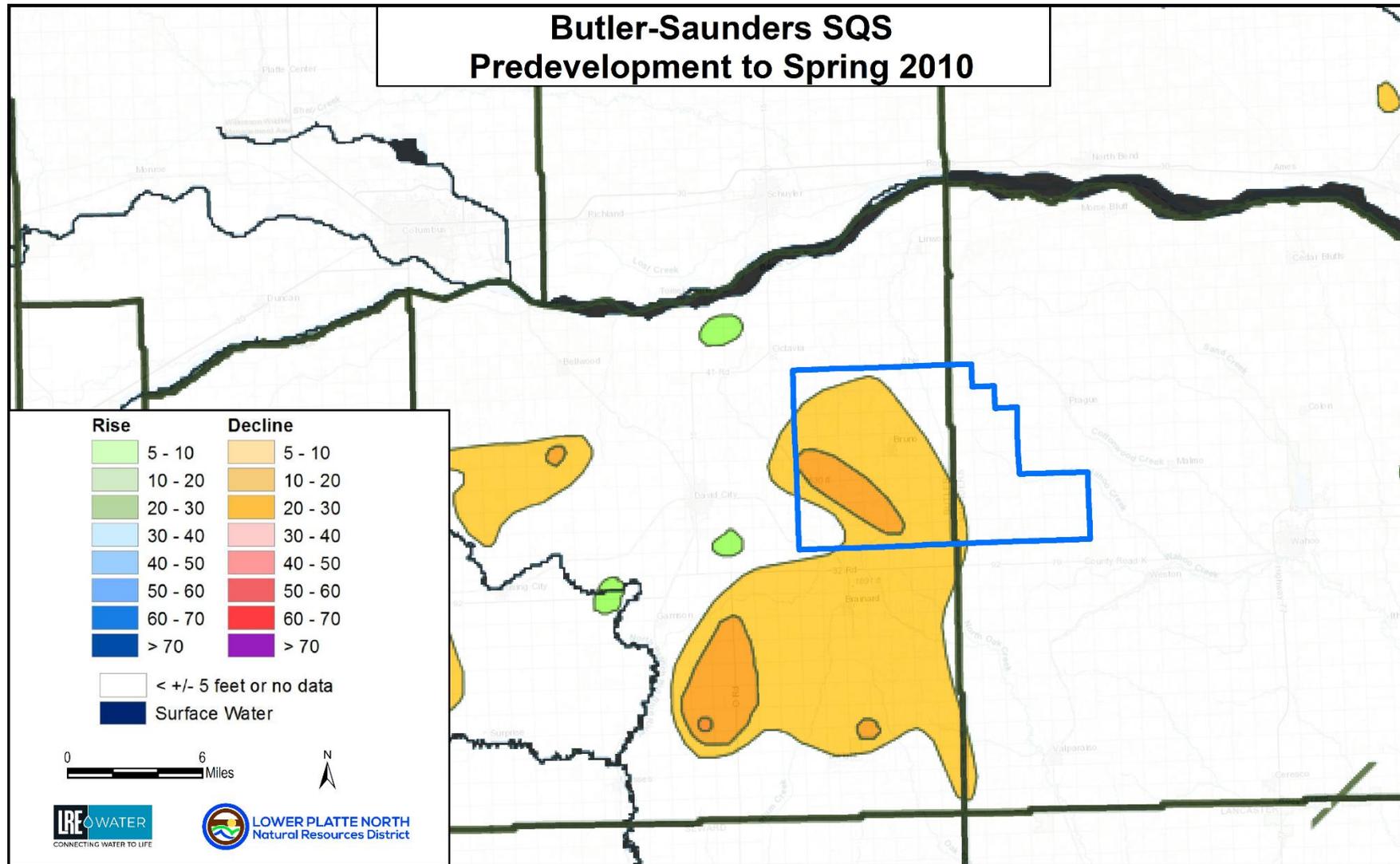
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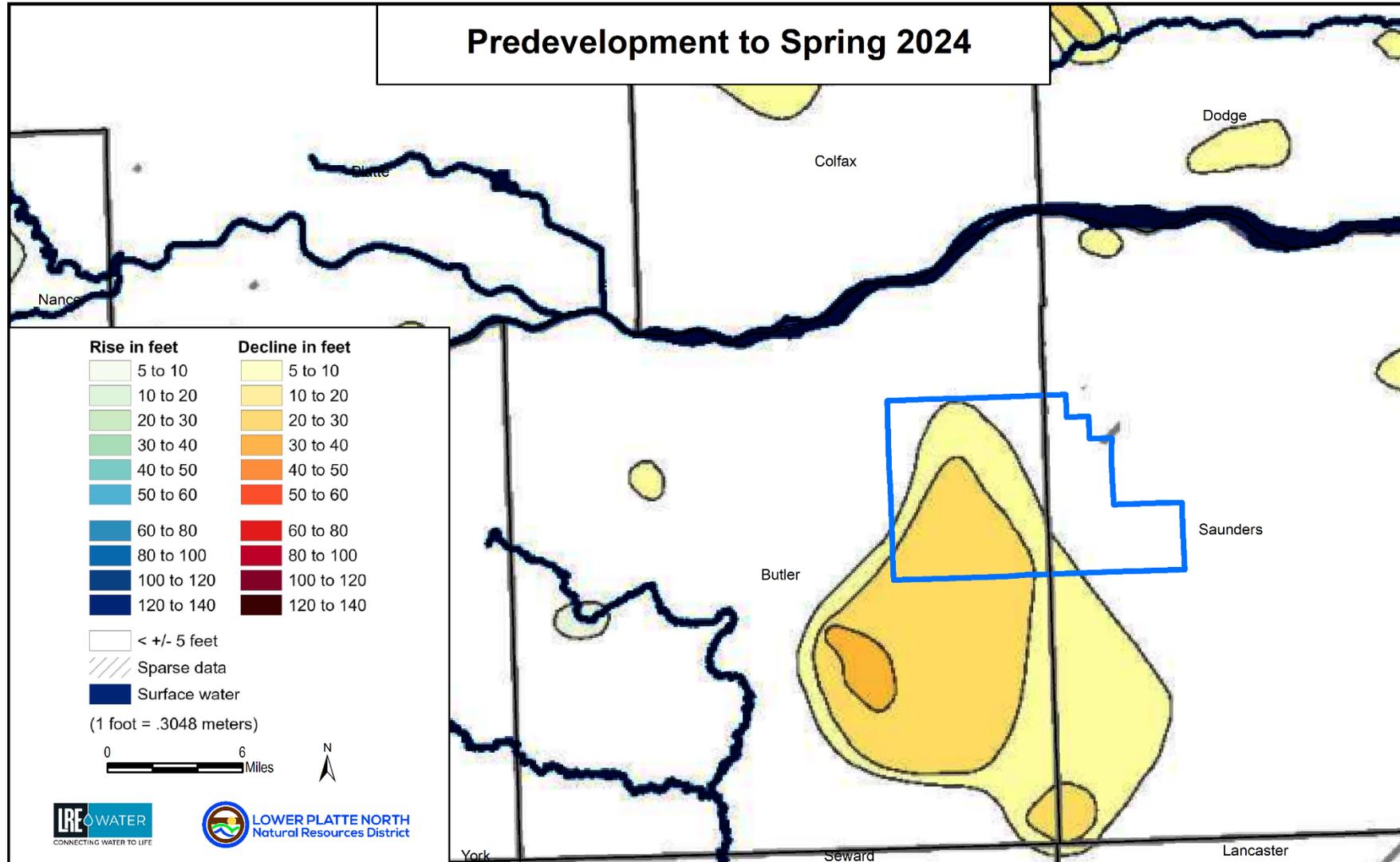
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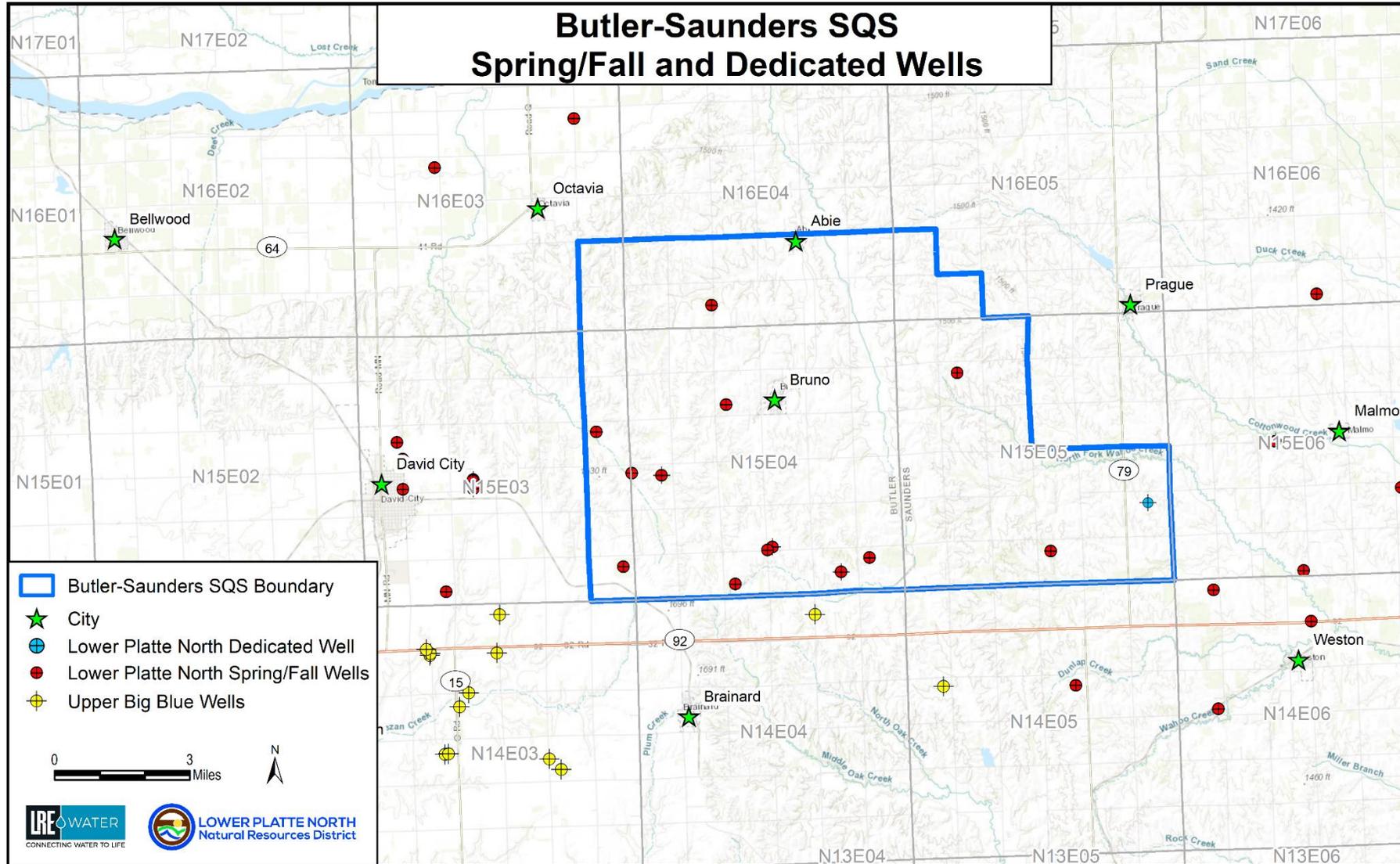
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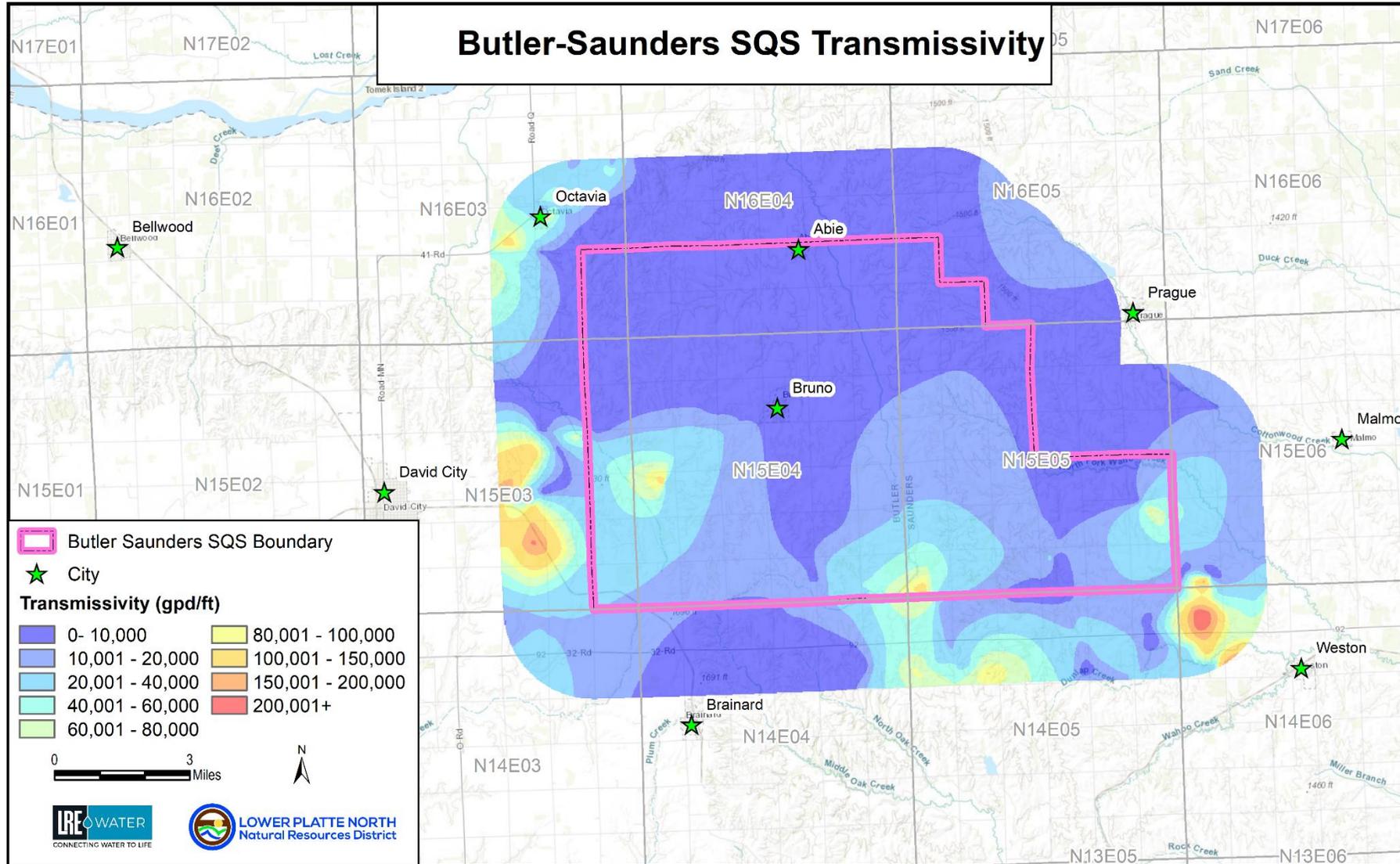


Source: UNL Institute of Agriculture & Natural Resources

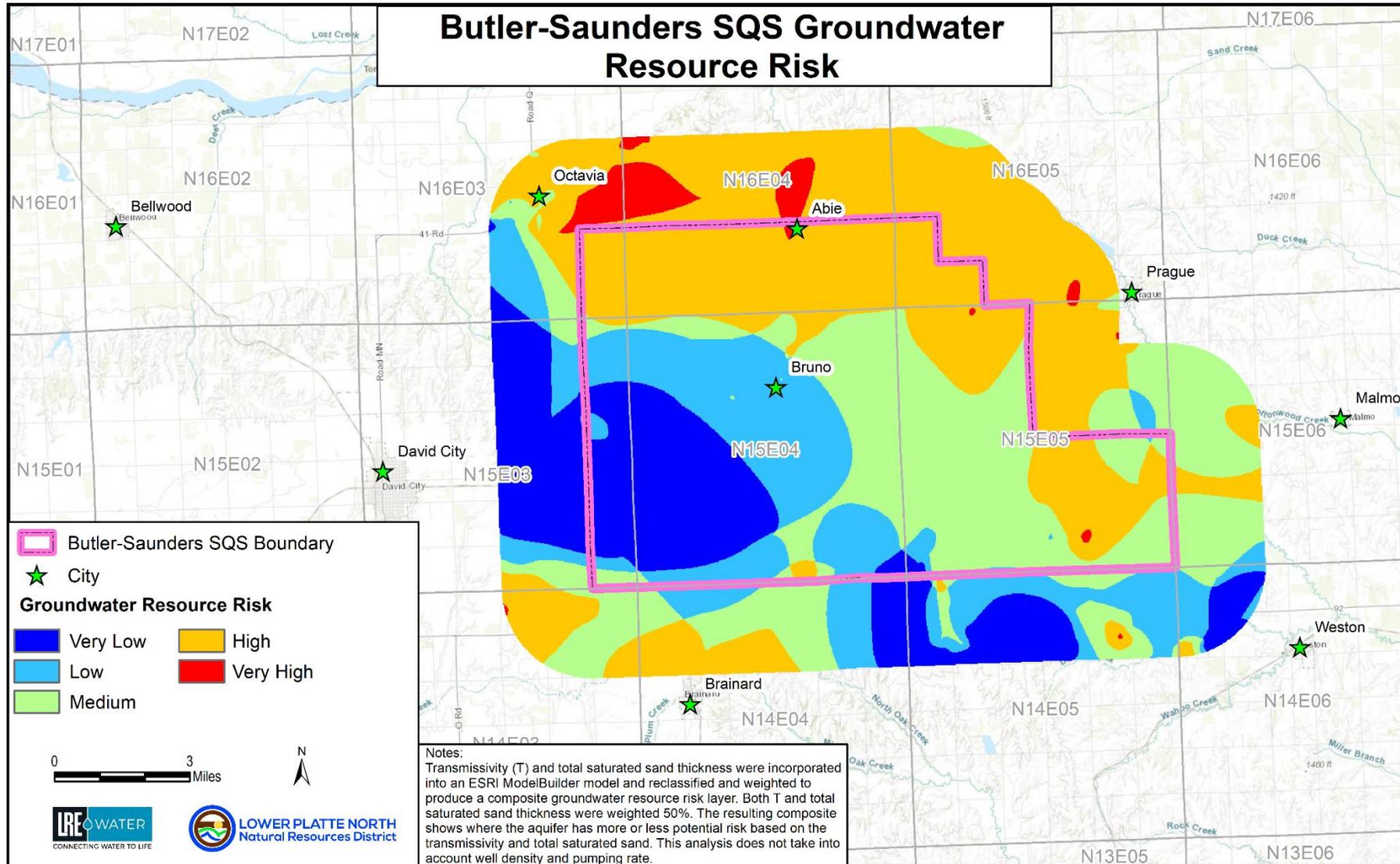
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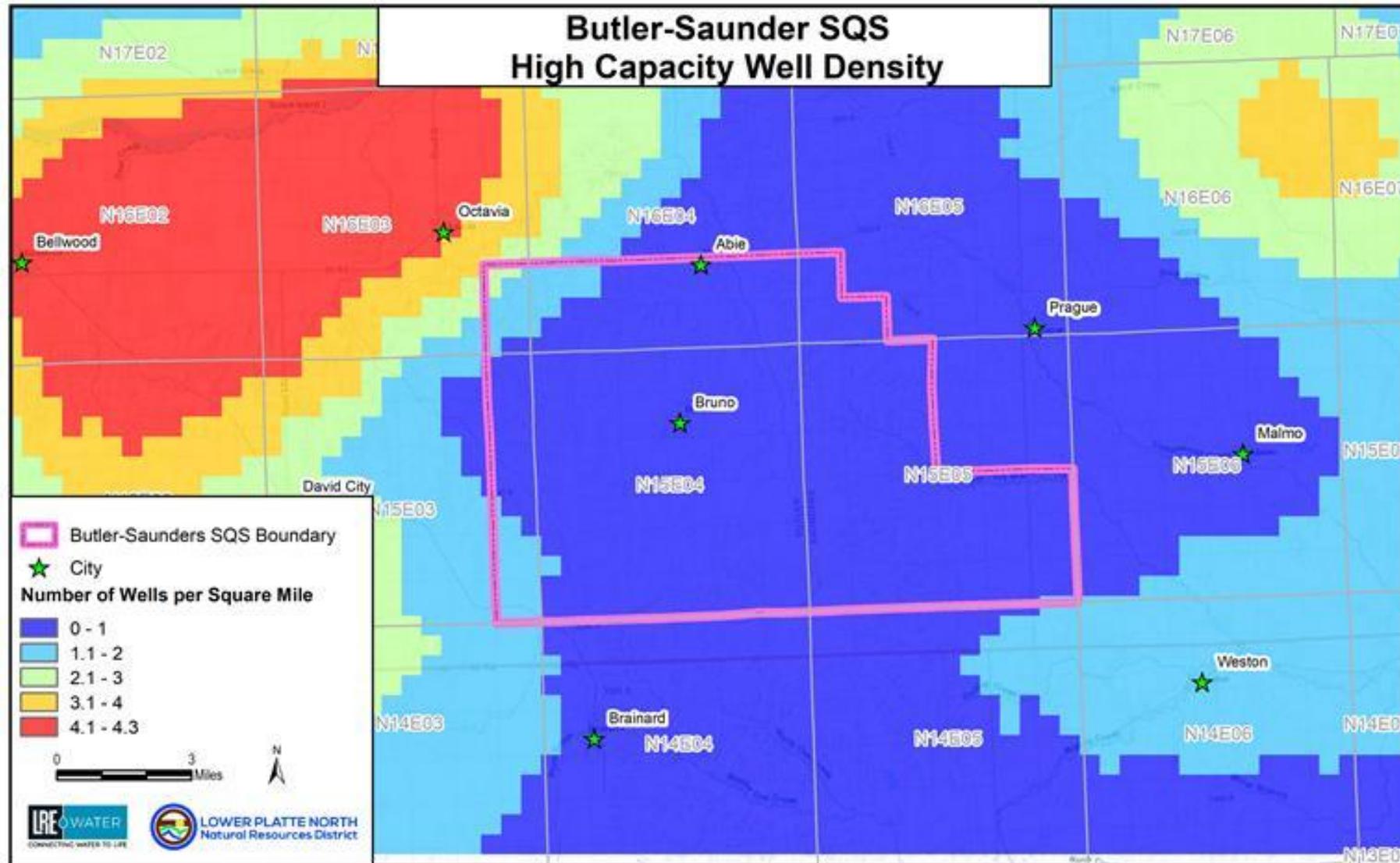
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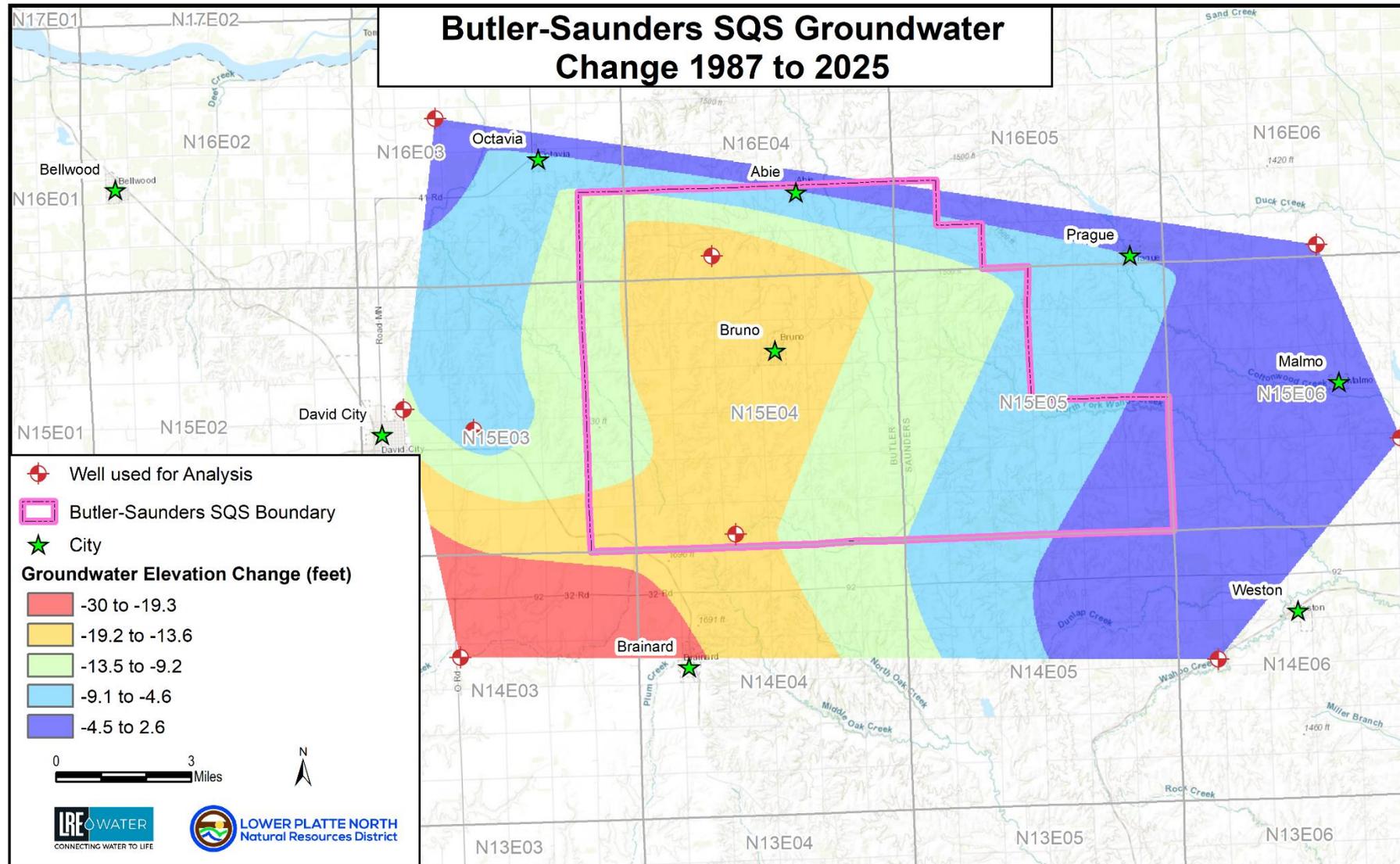
# #2 – BUTLER/SAUNDERS SQS AREA



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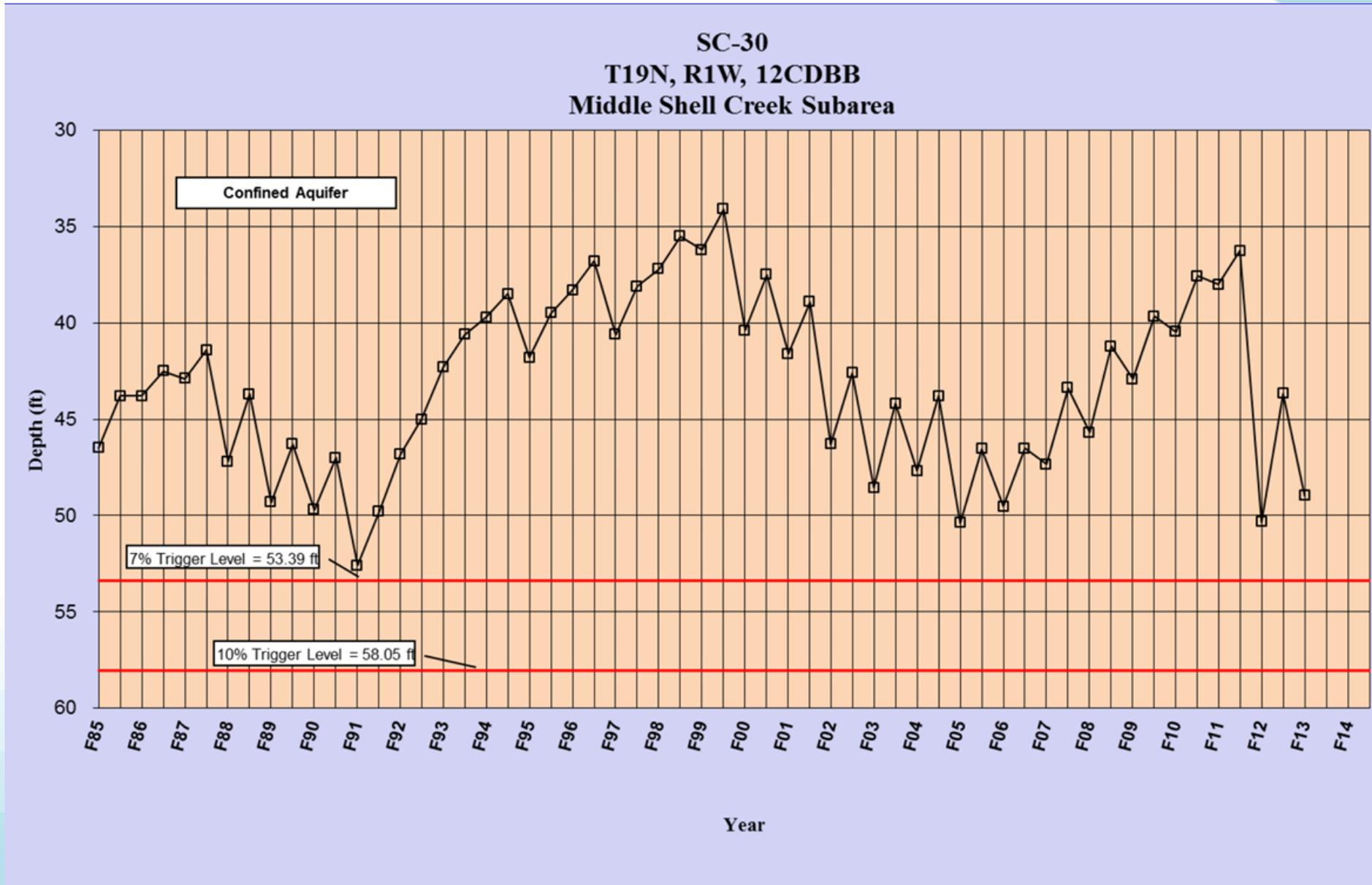
# KEY FINDINGS

**PLATTE-COLFAX SQS**

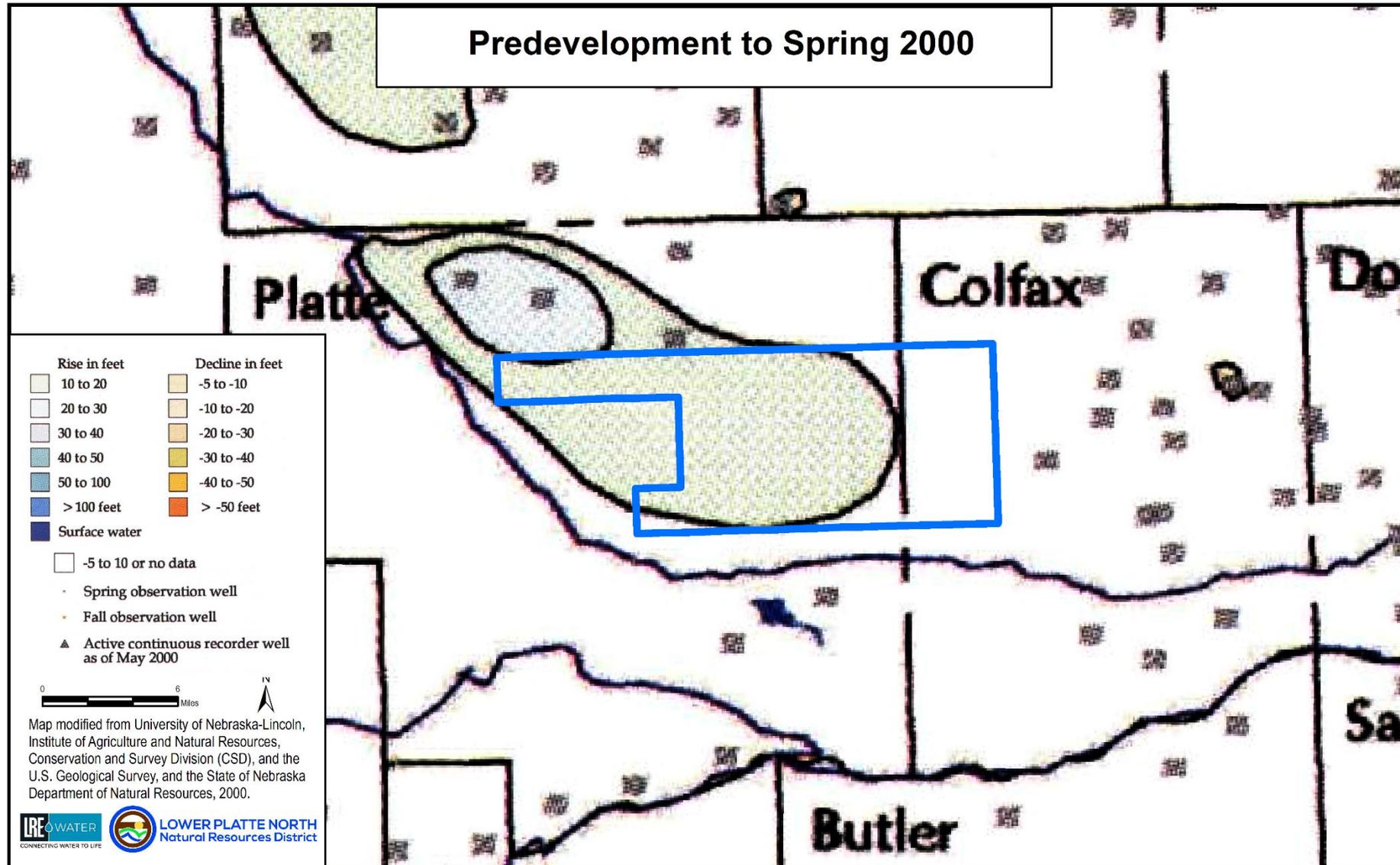
## #3 – PLATTE/COLFAX SQS AREA

- In general, the eastern one-third of the SQS shows historical and continued declines
- Some portions of the aquifer have transitioned from confined to unconfined due to over pumping combined with drought conditions
- The area experiencing the most issues aligns with LRE Water's Risk Map and UNL's Management Zone 6
- Groundwater levels in the western two-thirds show relatively stable levels

# HYDROGRAPH 8 MILES NE OF PLATTE CENTER

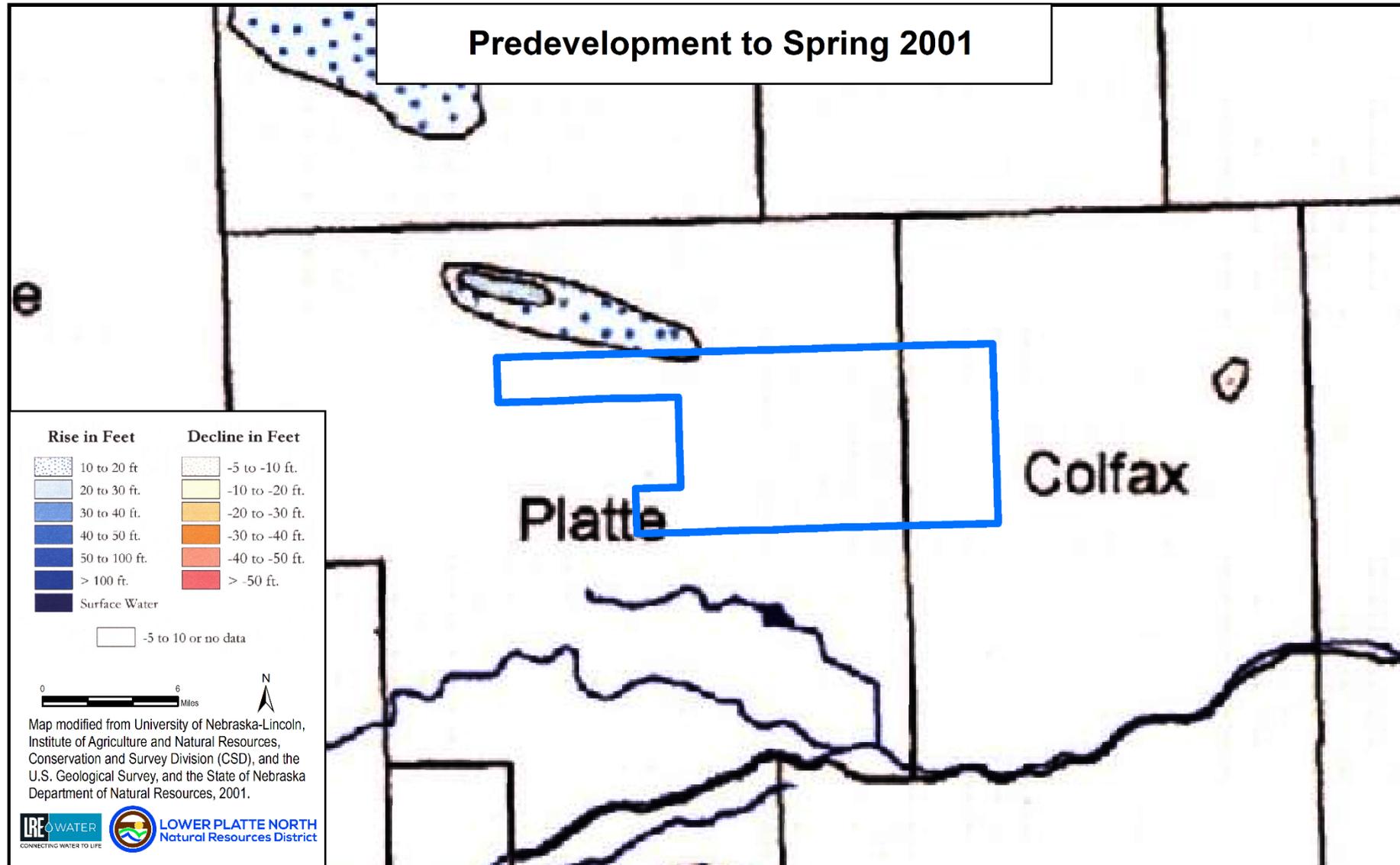


# #3 – PLATTE/COLFAX SQS AREA



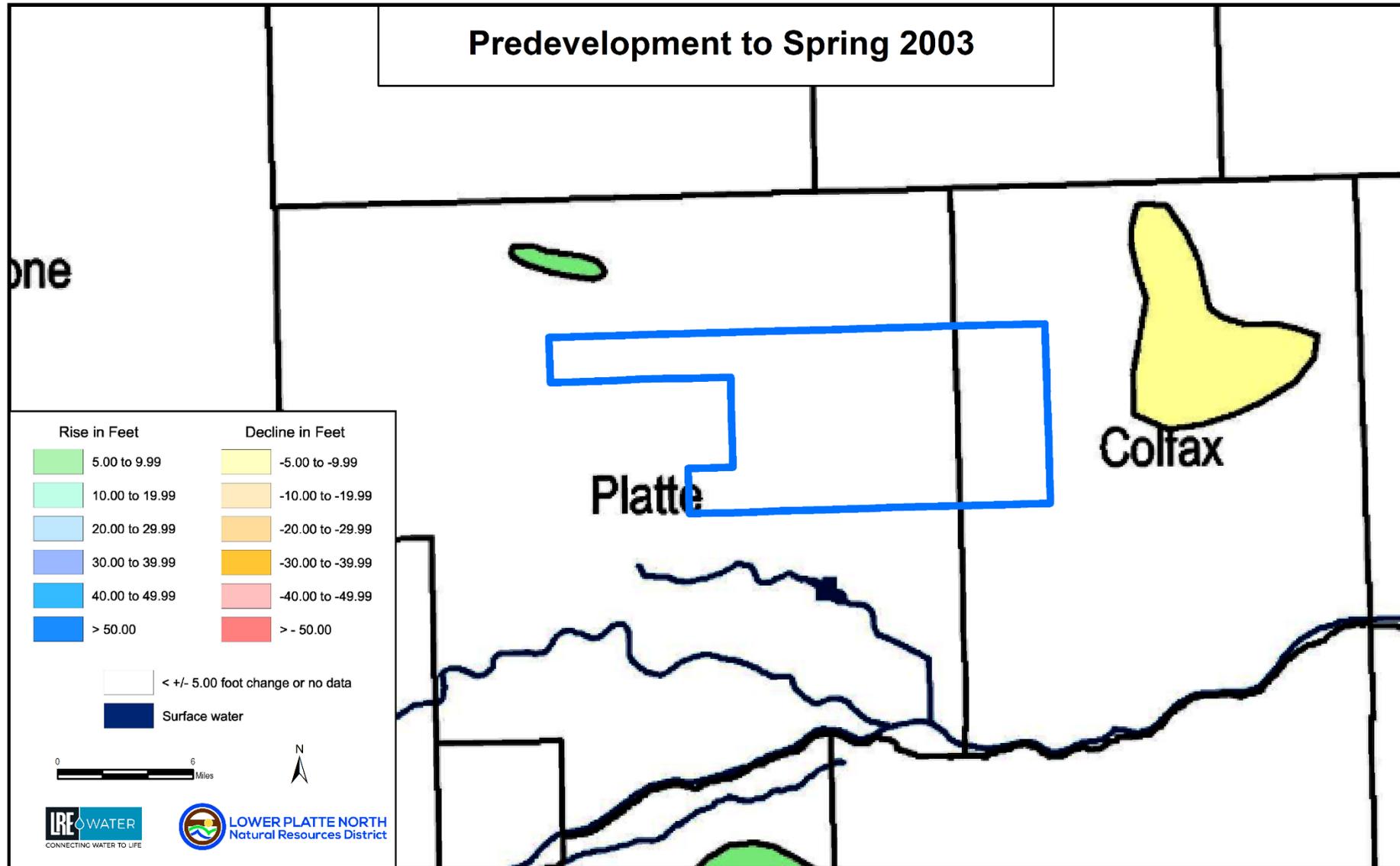
Source: UNL Institute of Agriculture & Natural Resources

# #3 – PLATTE/COLFAX SQS AREA



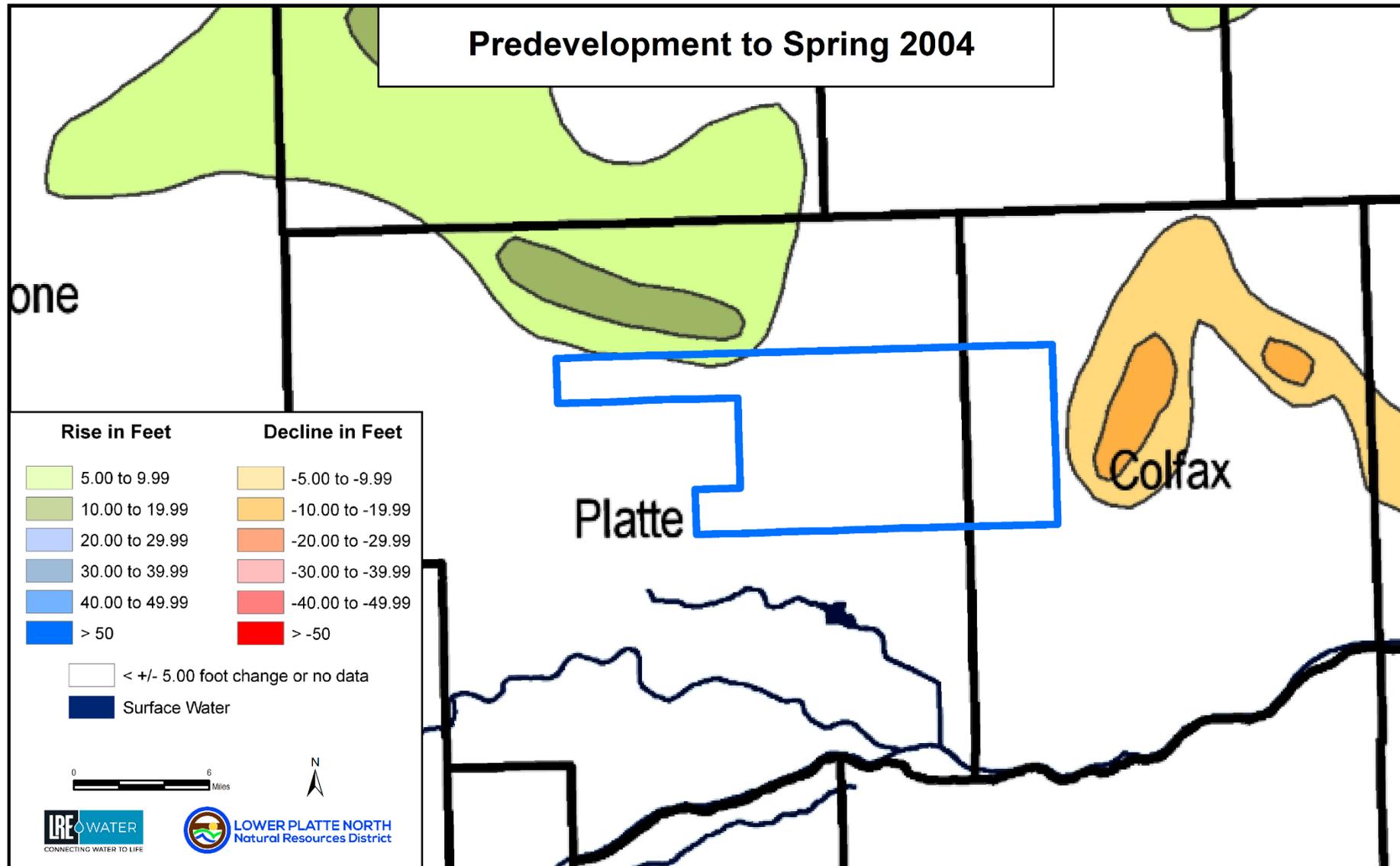
Source: UNL Institute of Agriculture & Natural Resources

# #3 – PLATTE/COLFAX SQS AREA



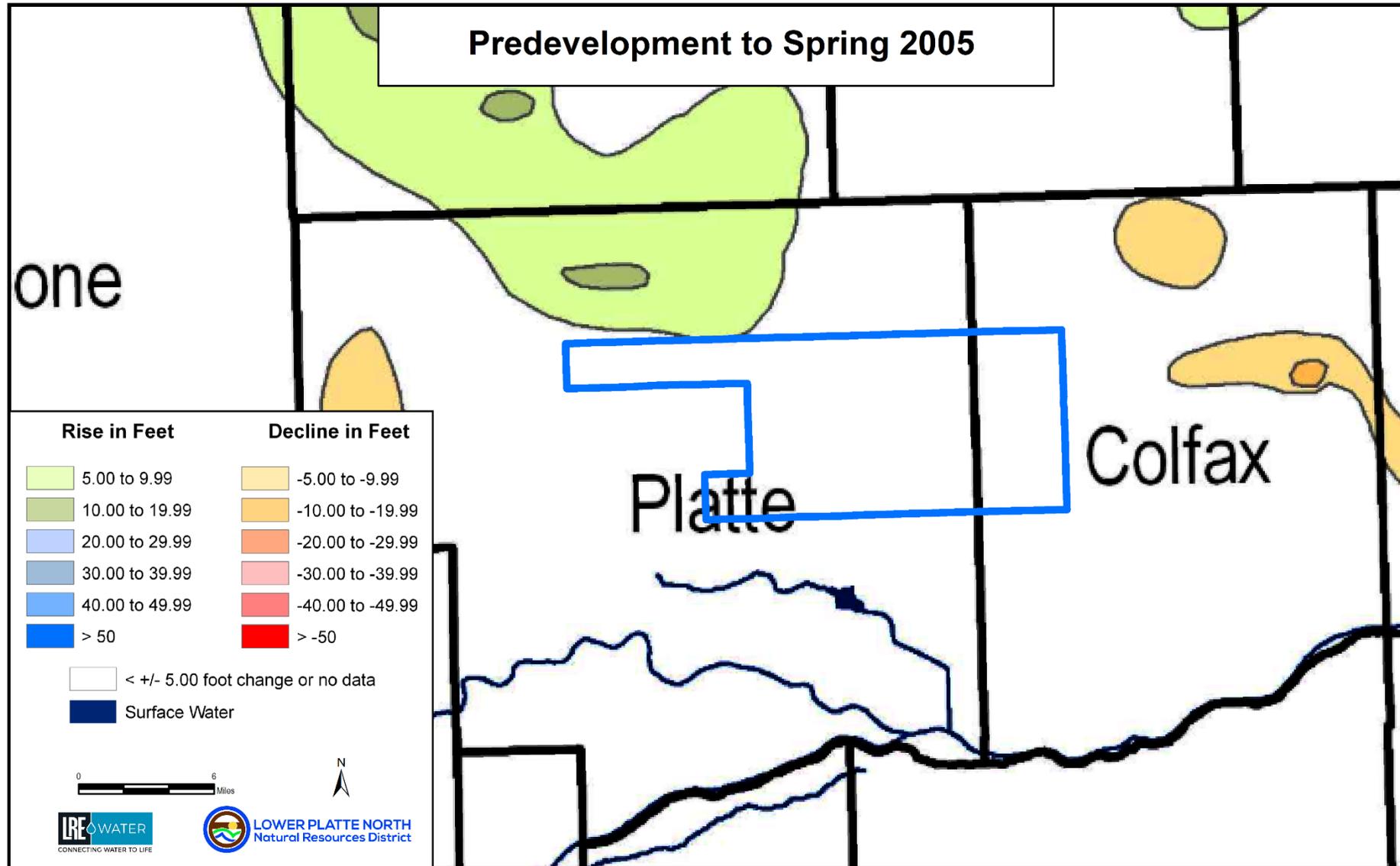
Source: UNL Institute of Agriculture & Natural Resources

# #3 – PLATTE/COLFAX SQS AREA



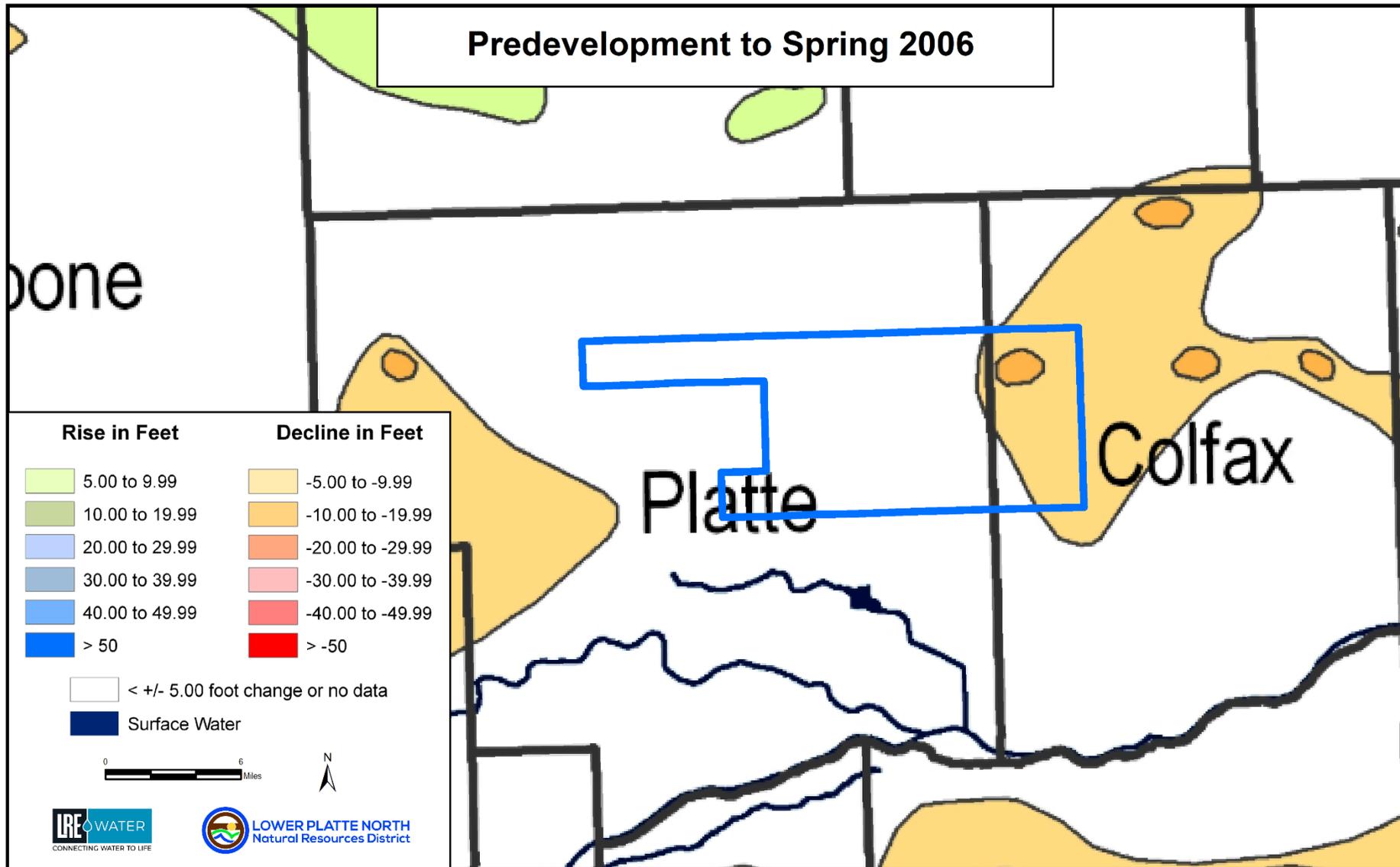
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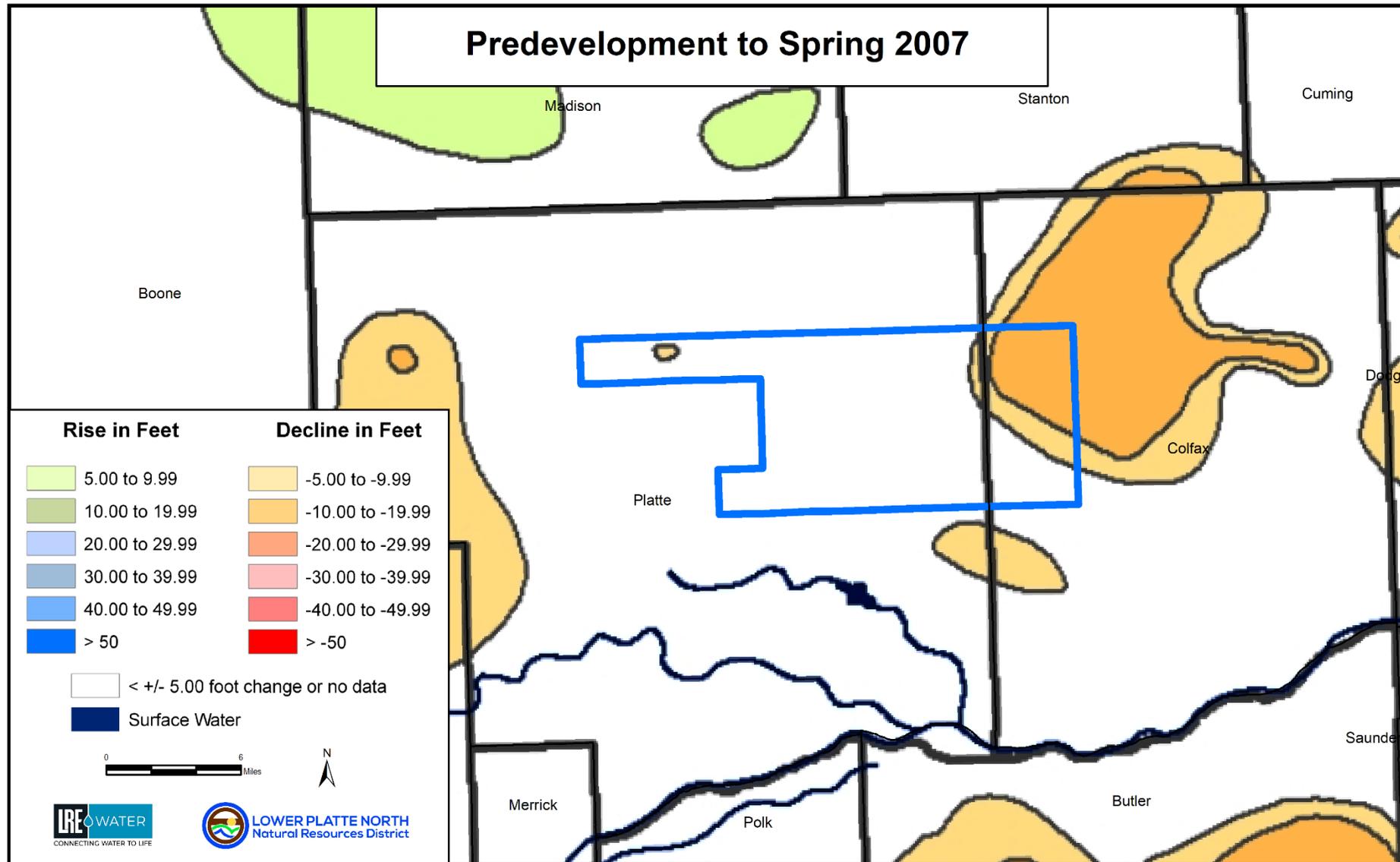
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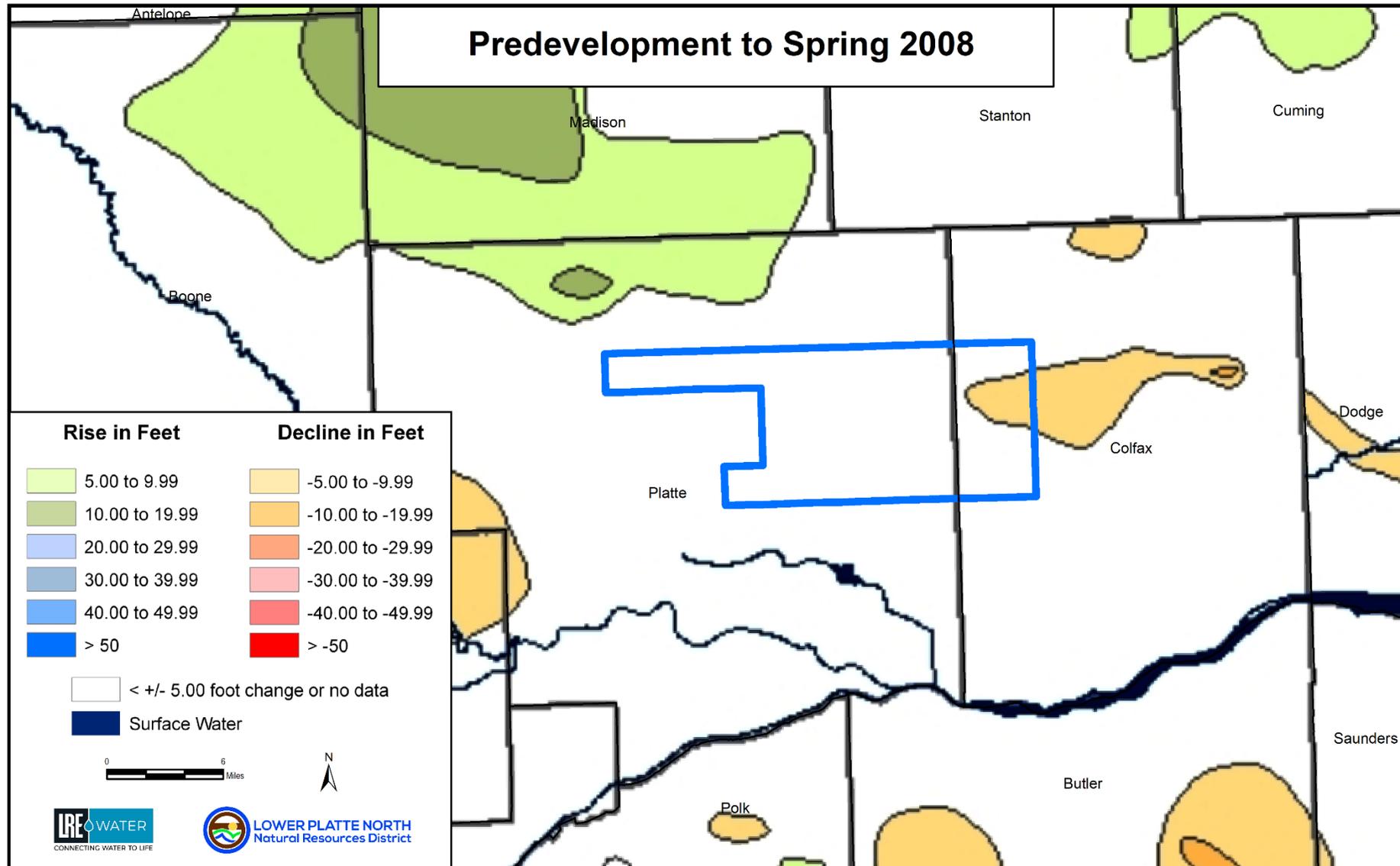
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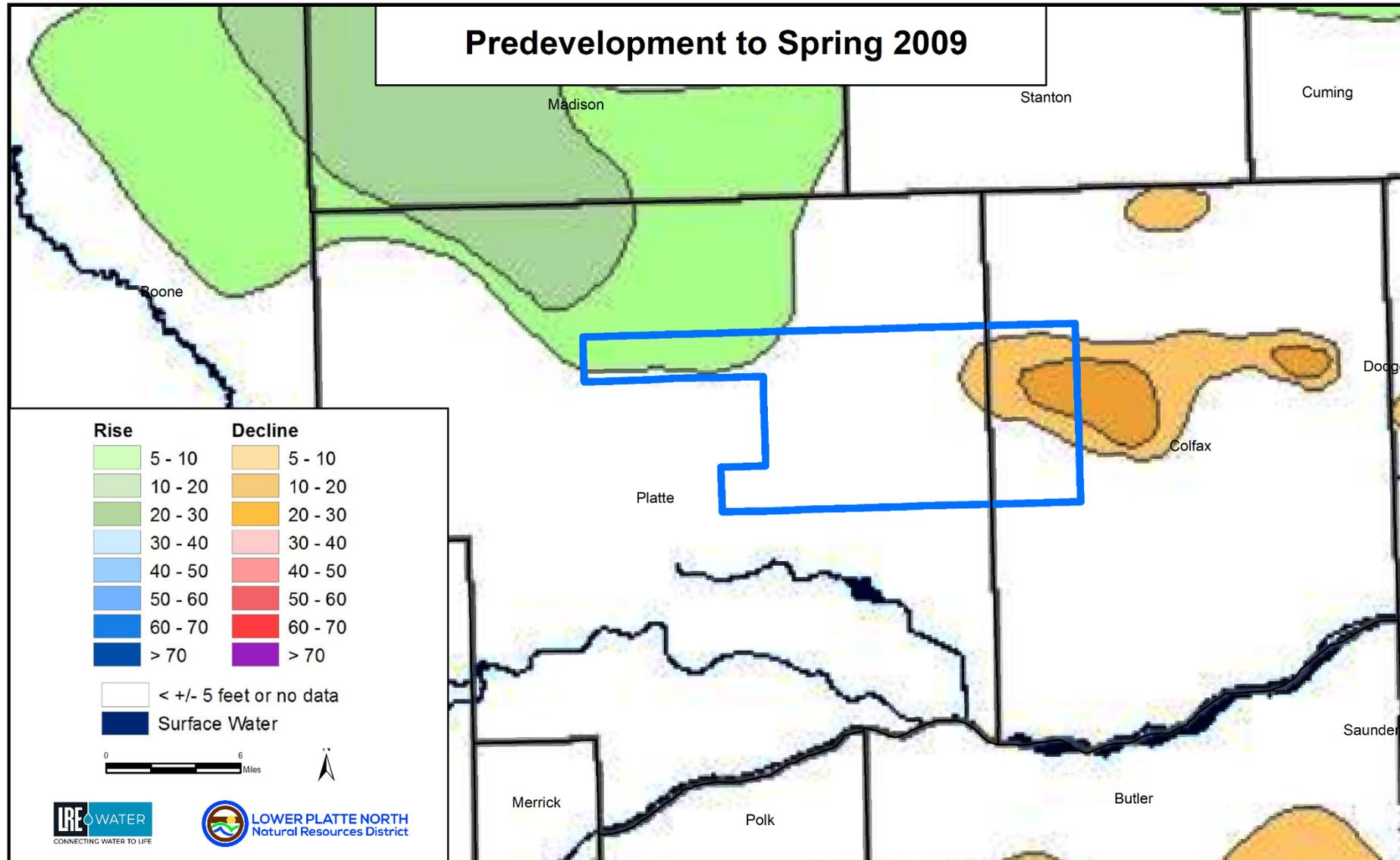
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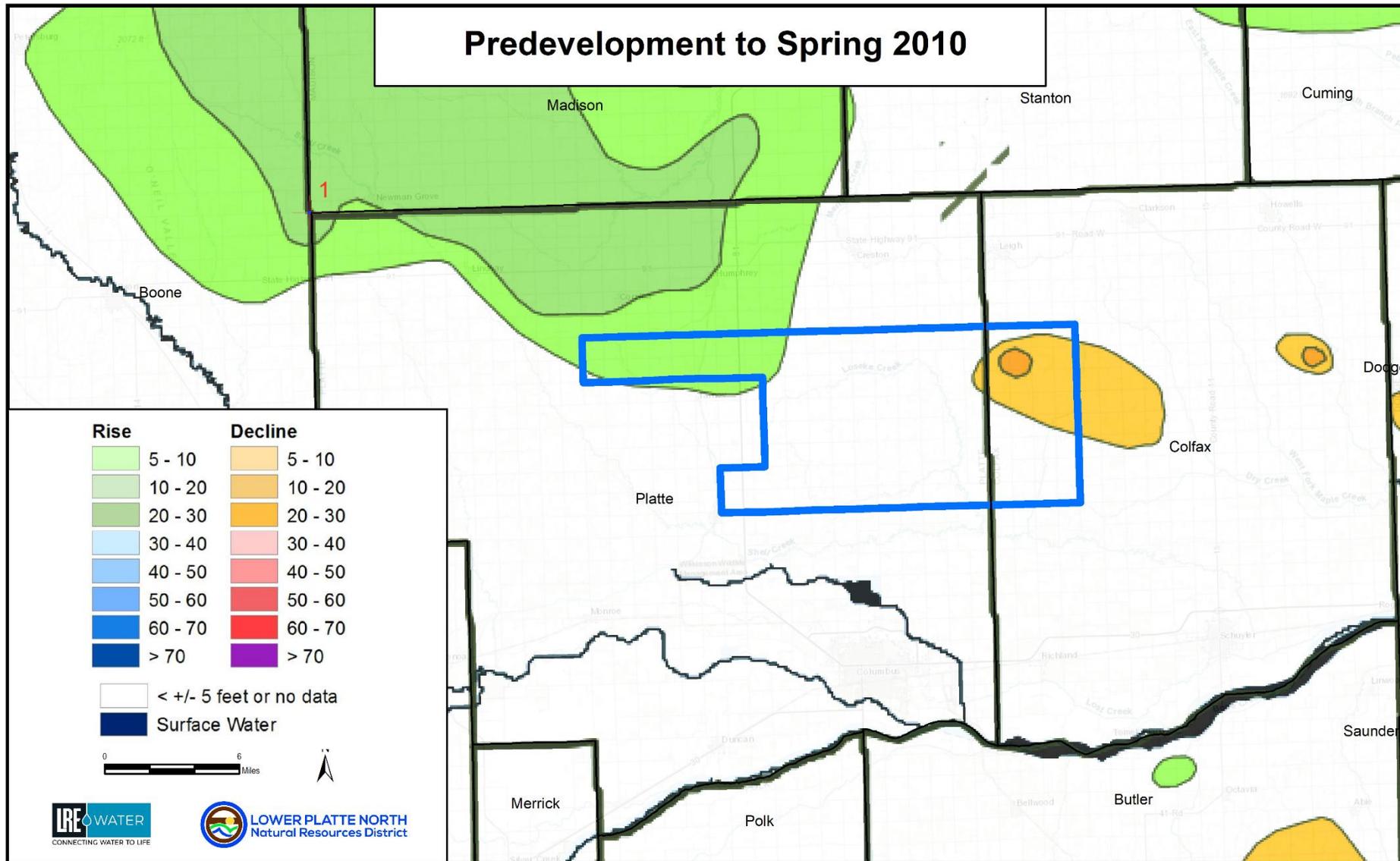
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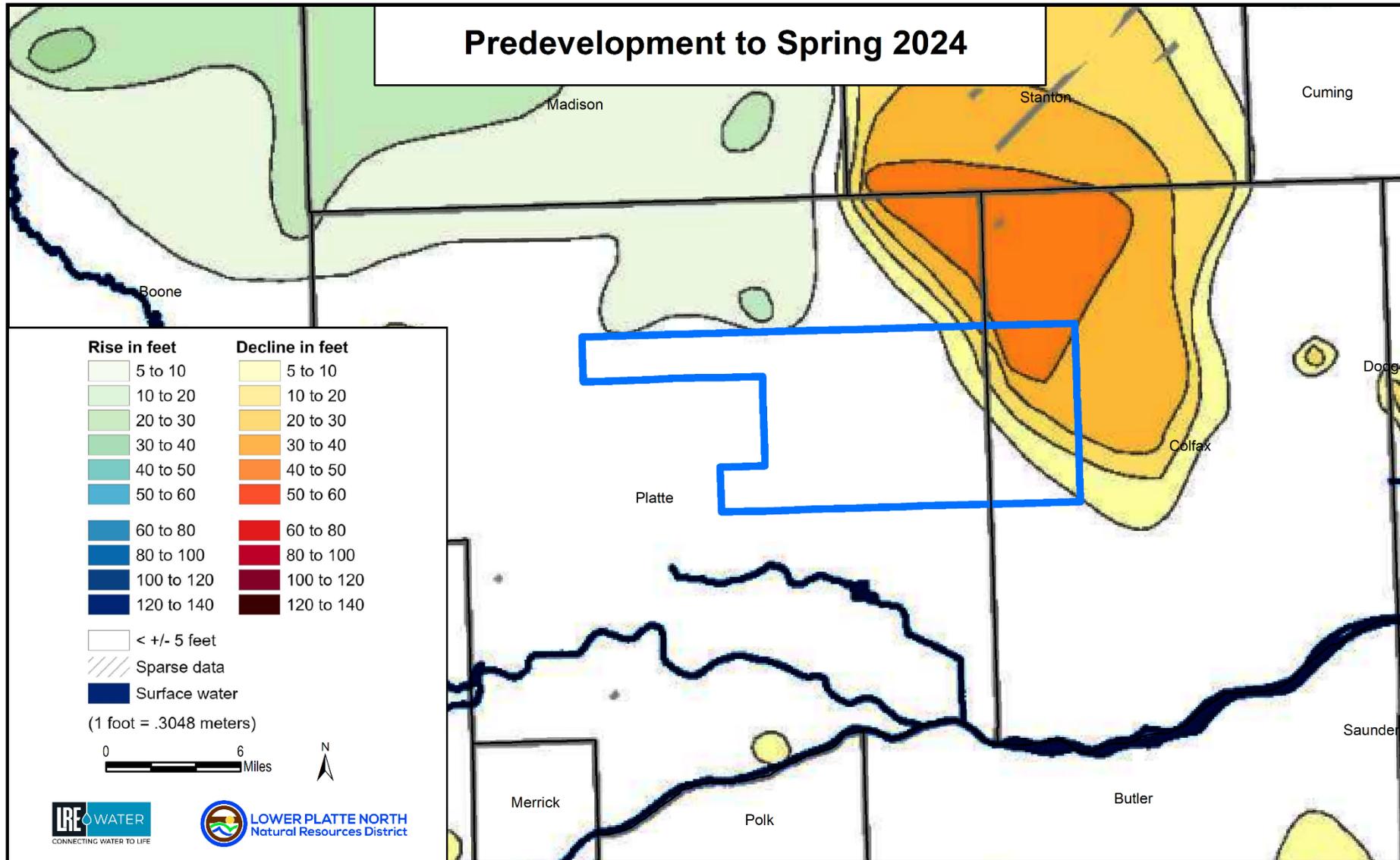
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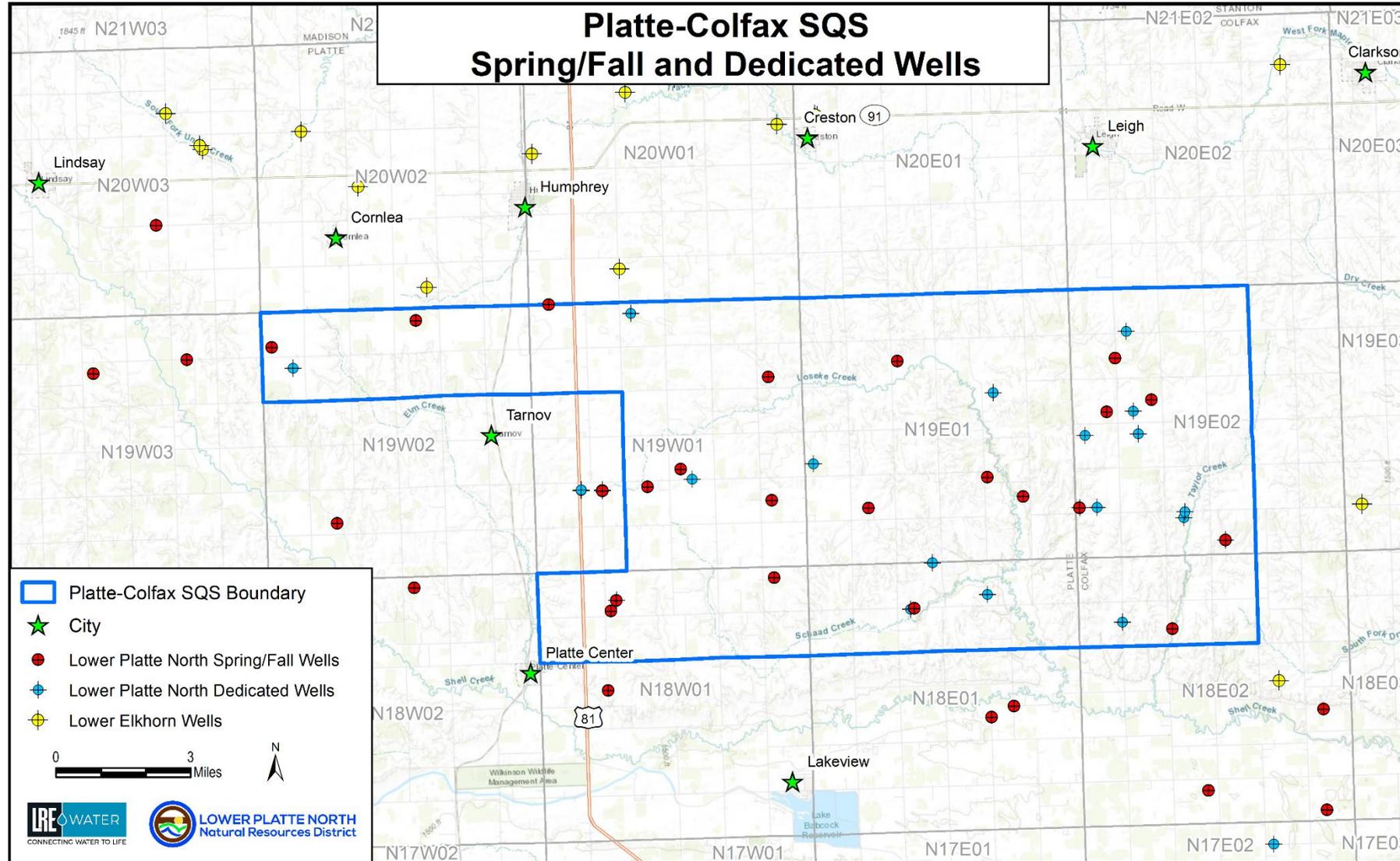
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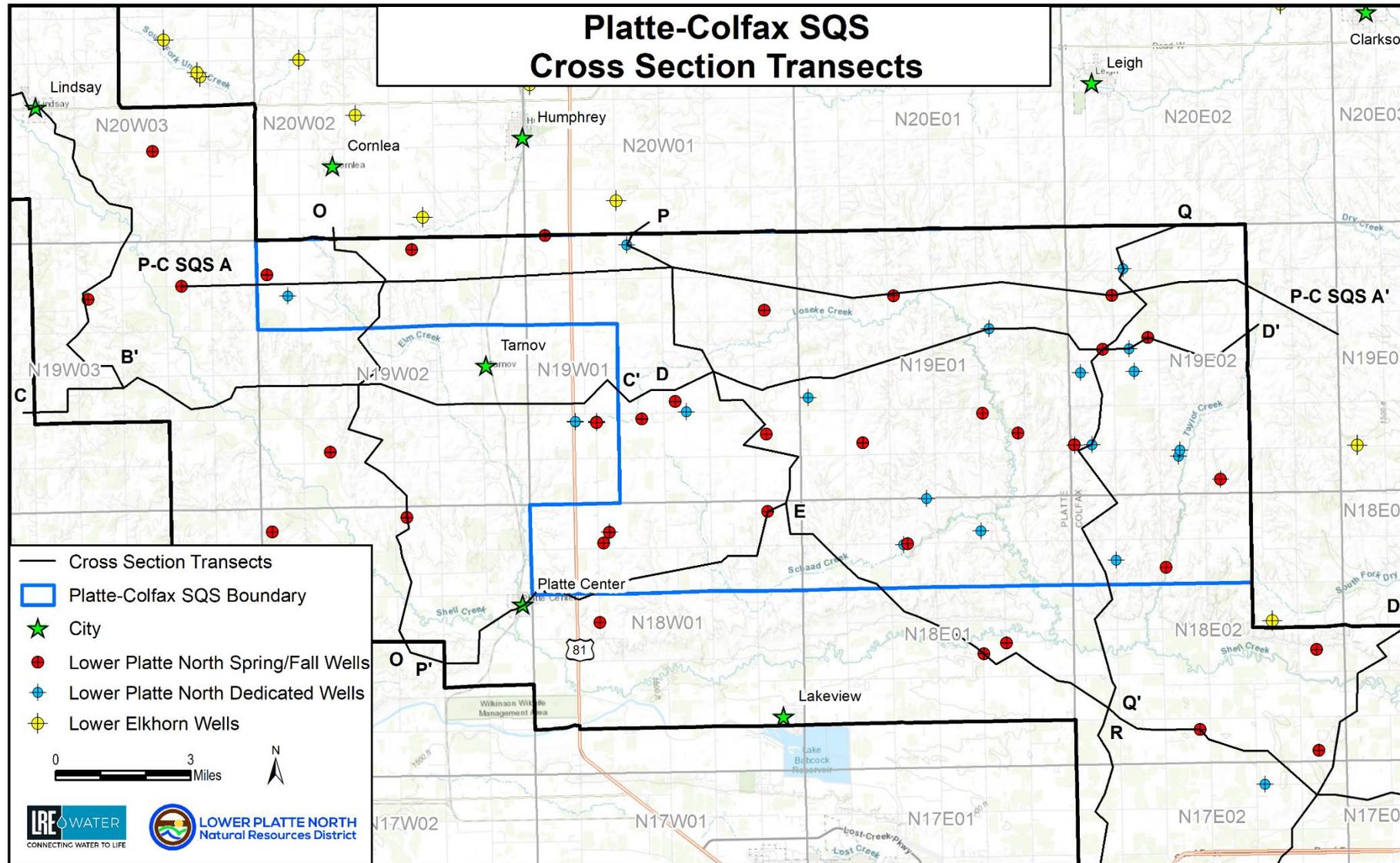


Source: UNL Institute of Agriculture & Natural Resources

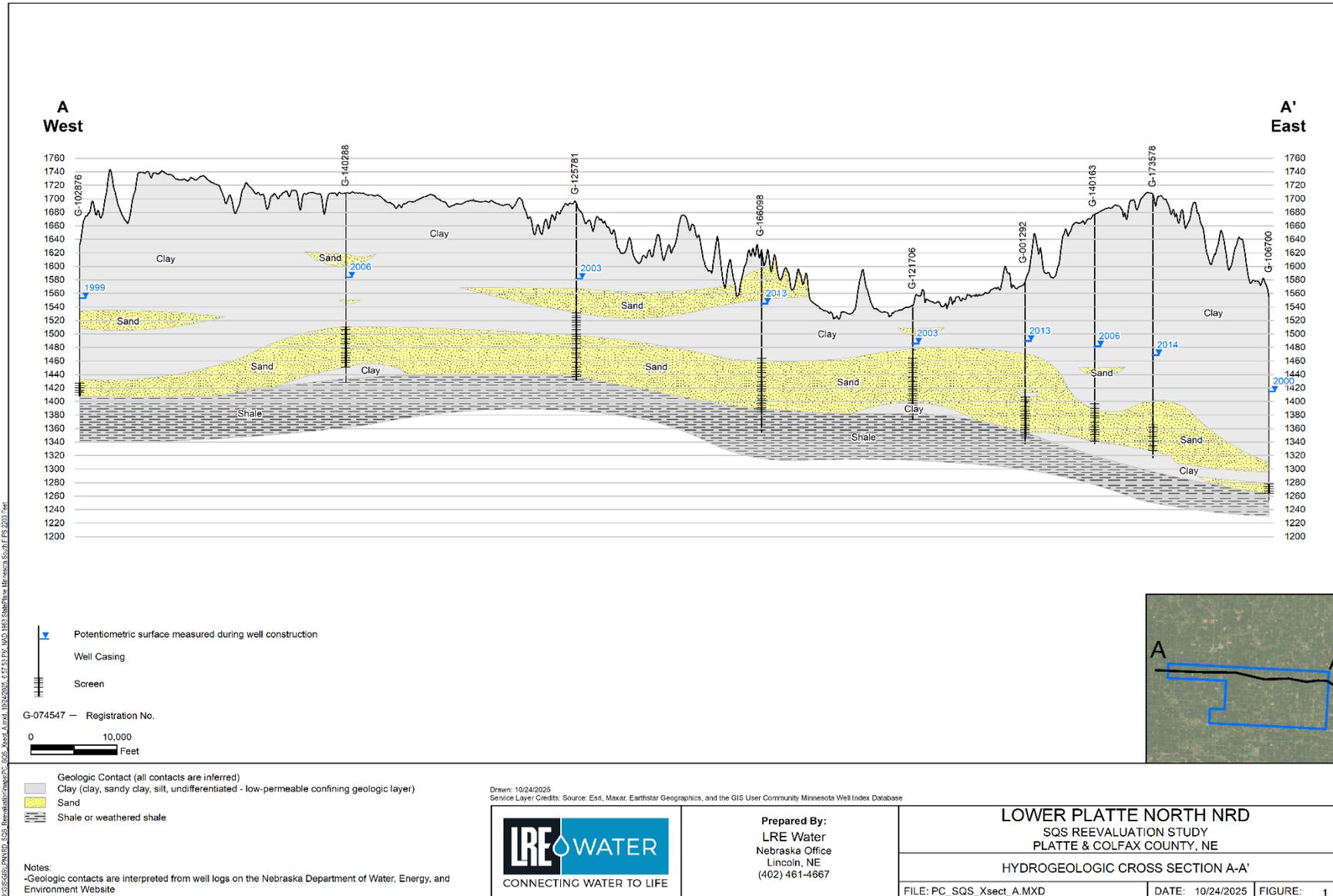
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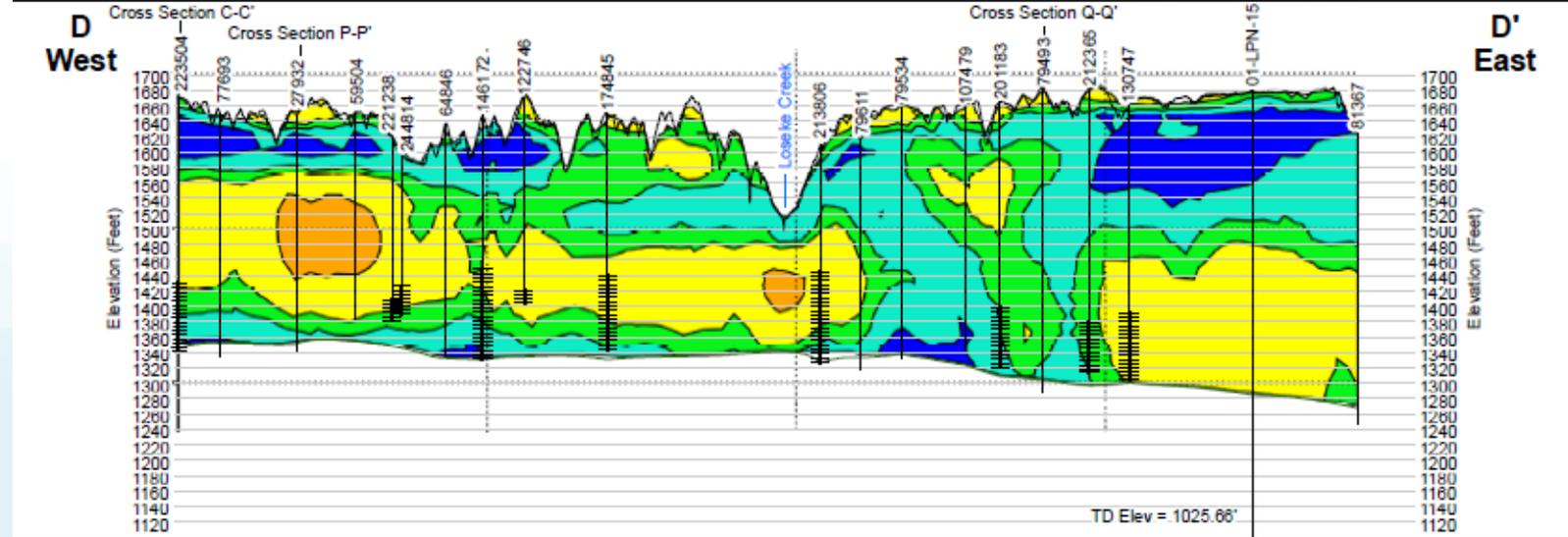
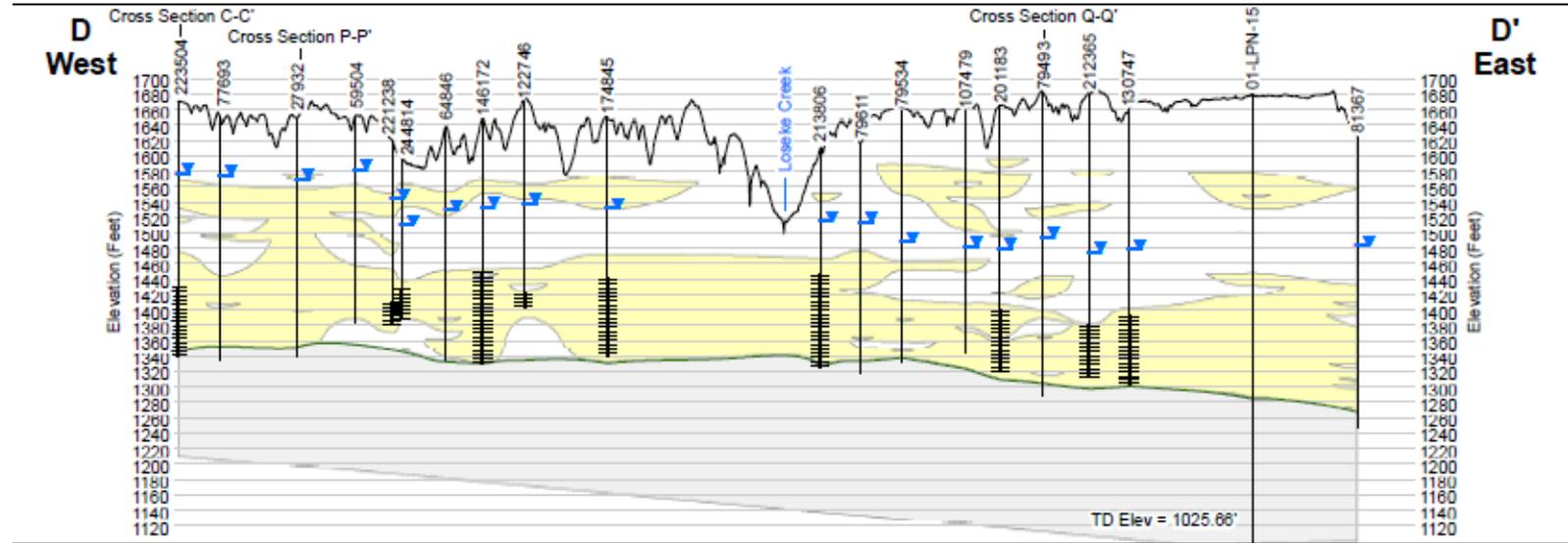
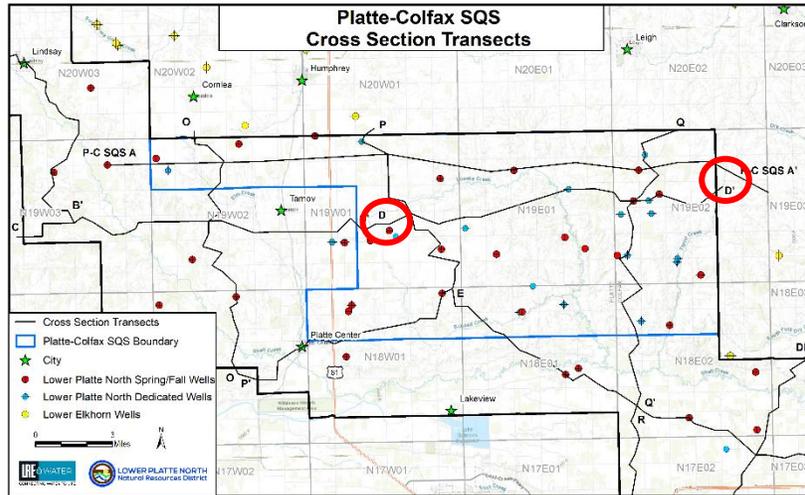
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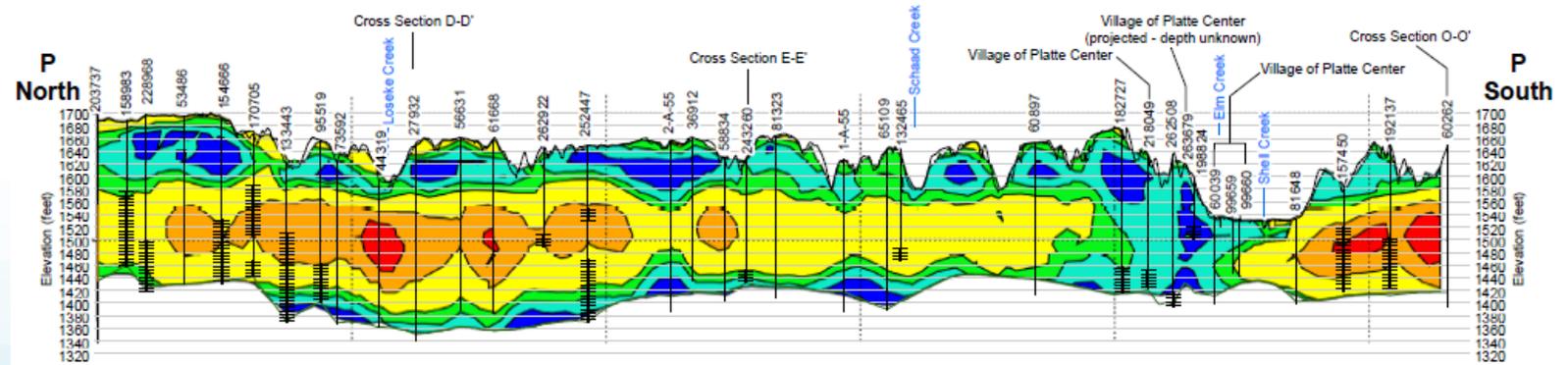
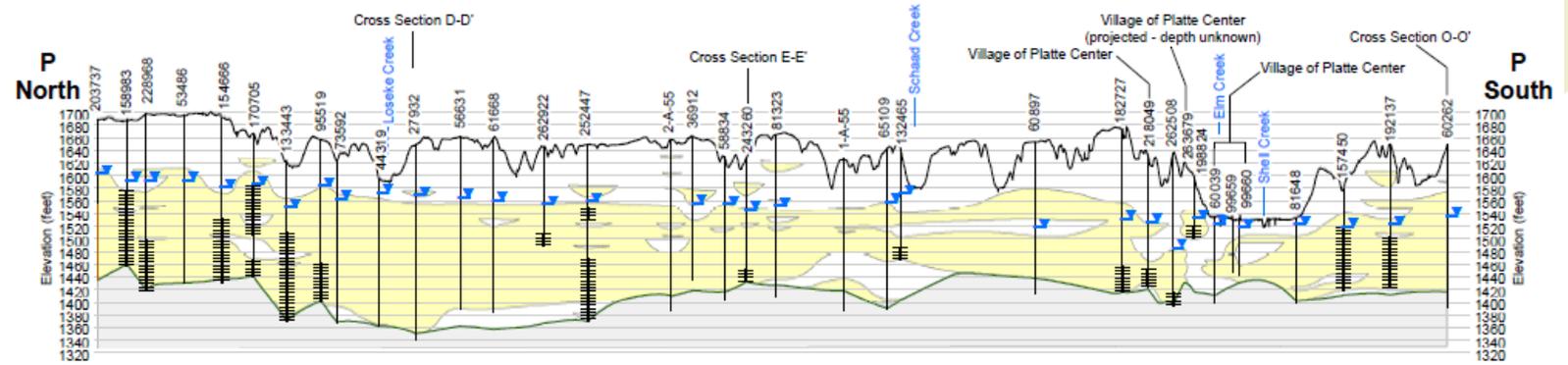
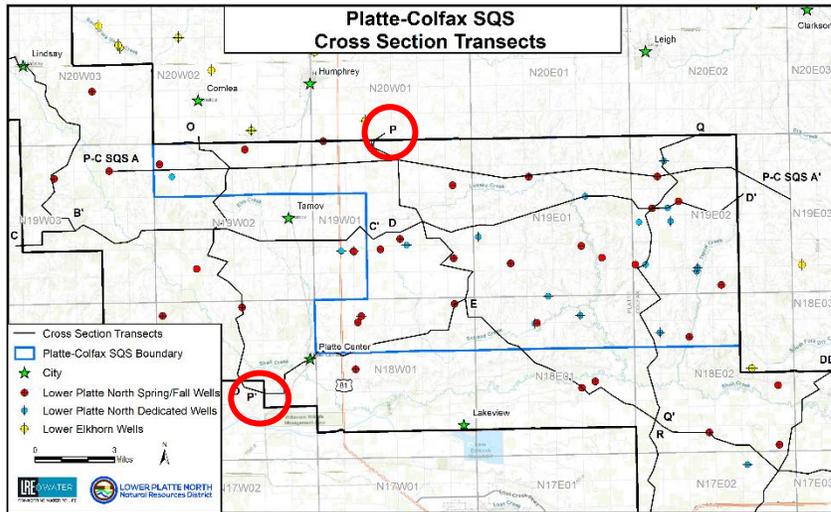
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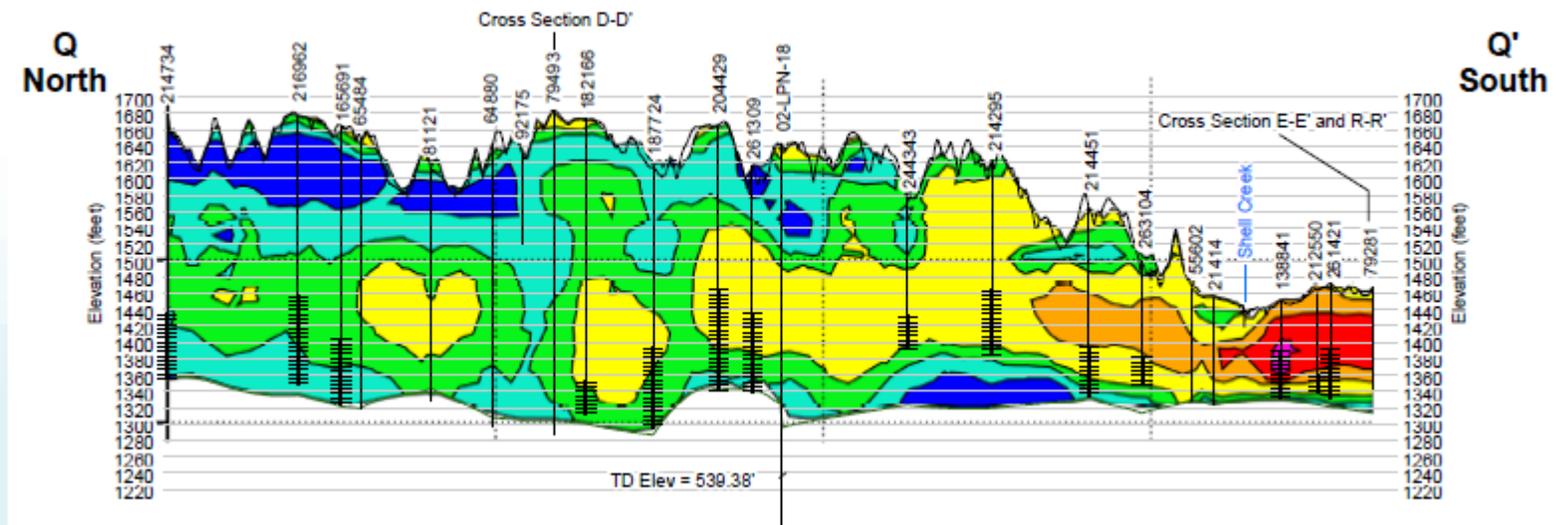
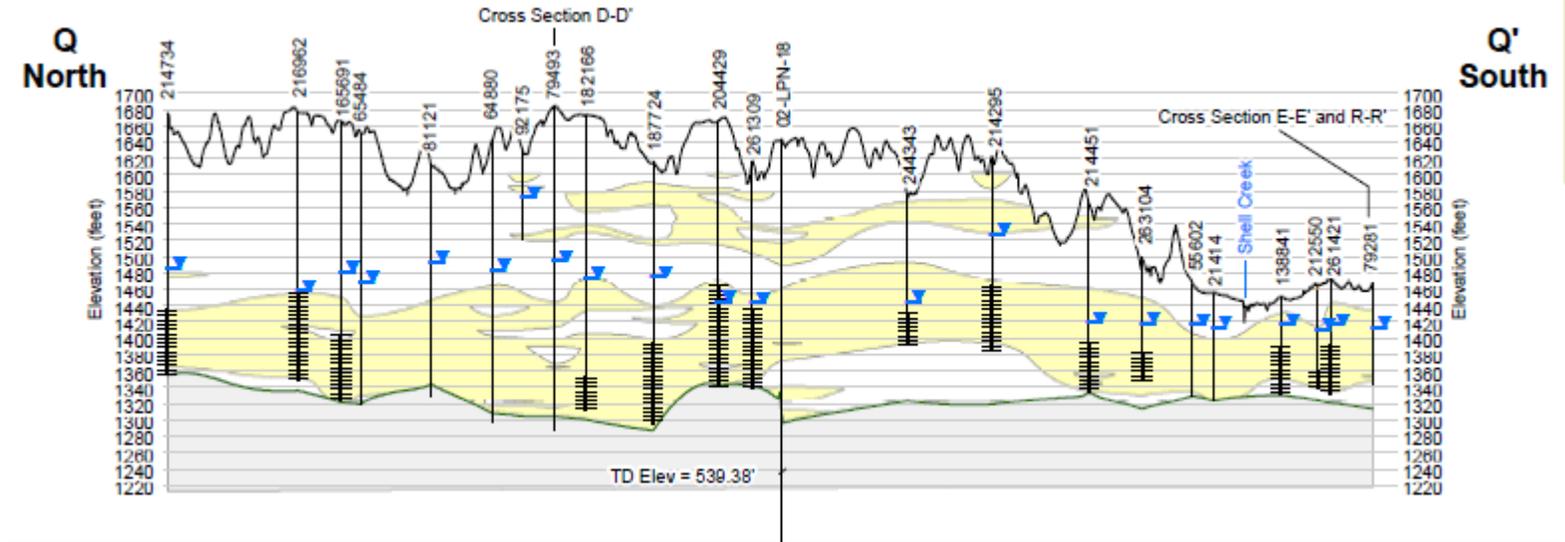
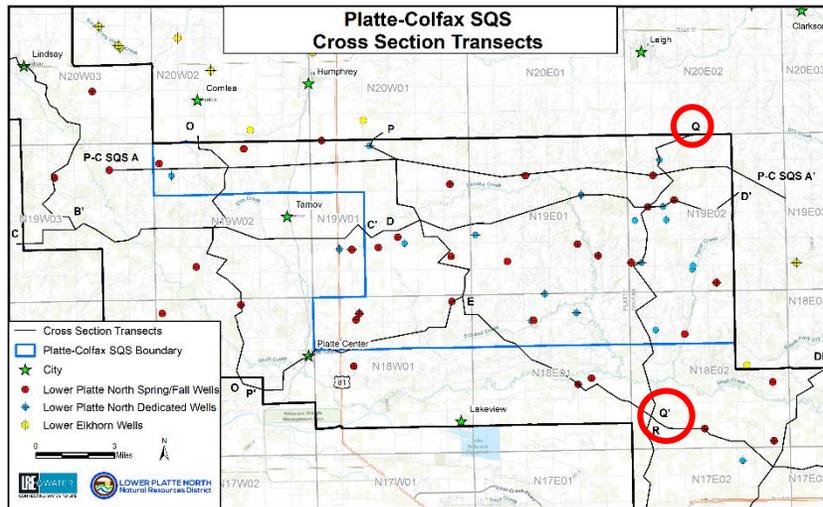
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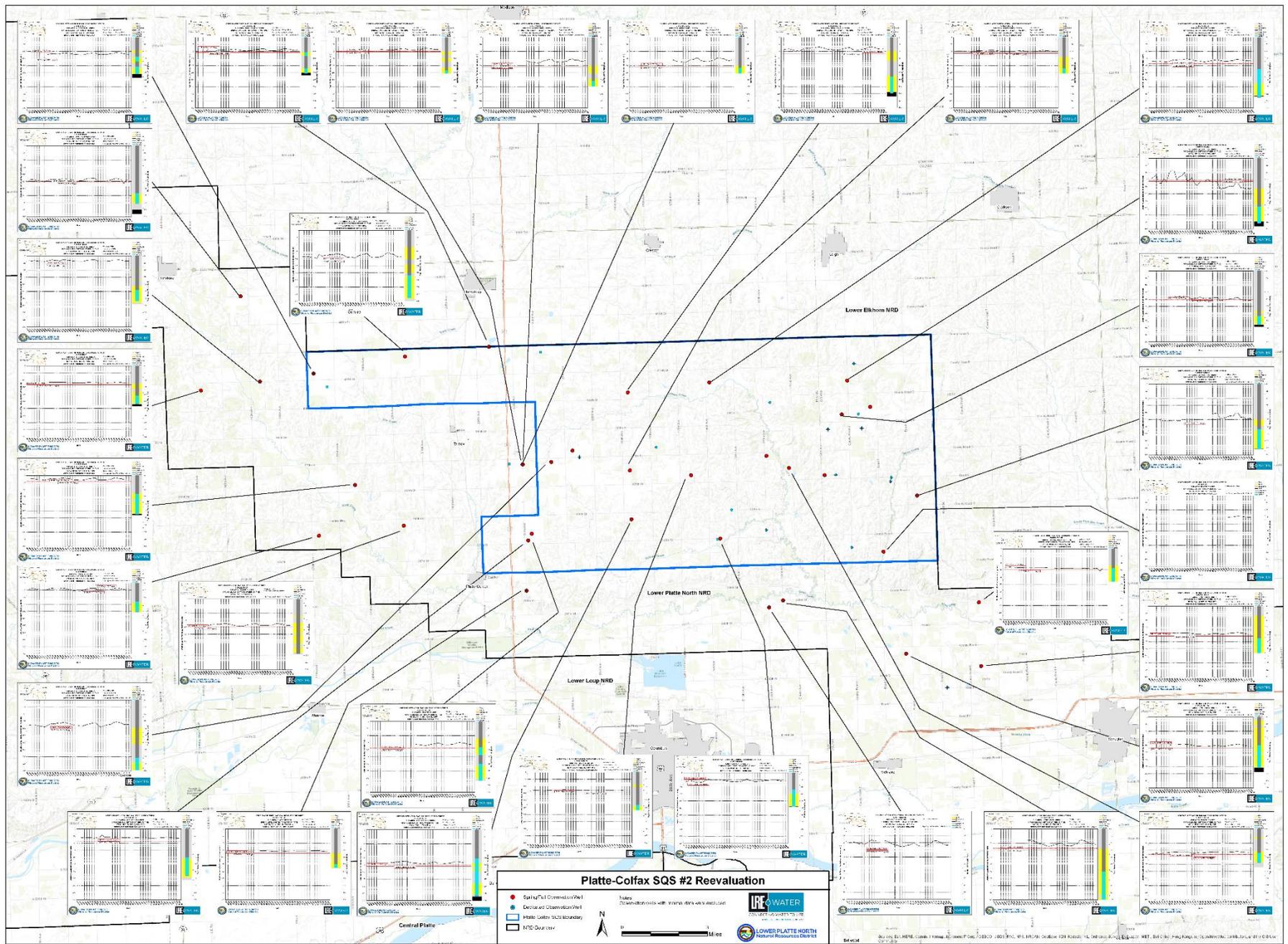


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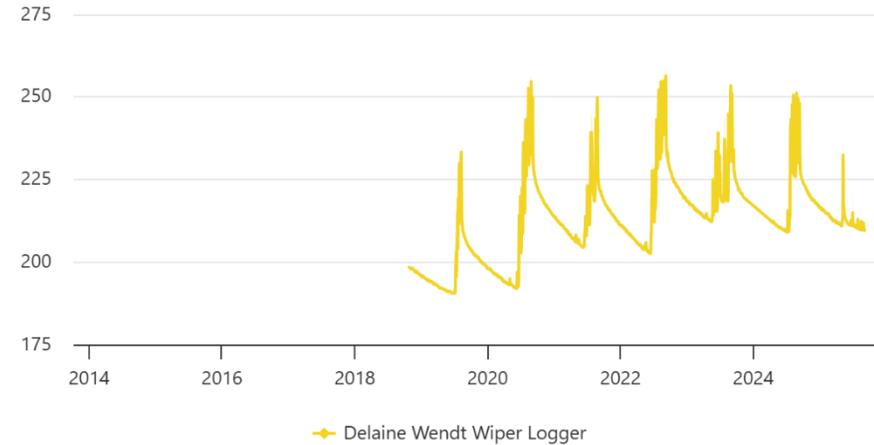




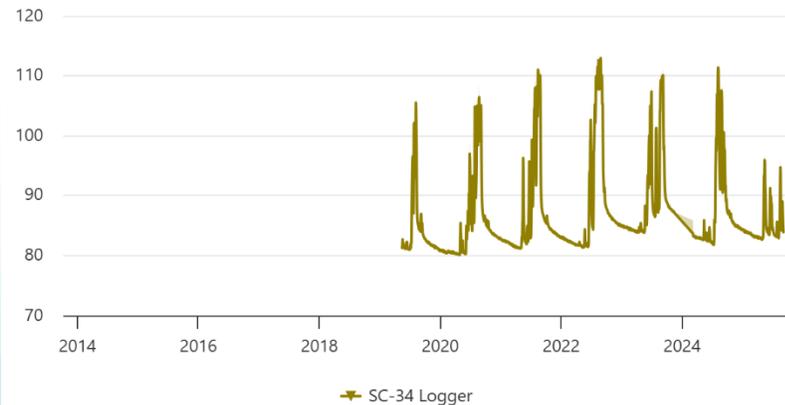
# #3 – PLATTE/COLFAX SQS AREA

- Dedicated well hydrographs show seasonal declines
- Data was reviewed as part of the assessment

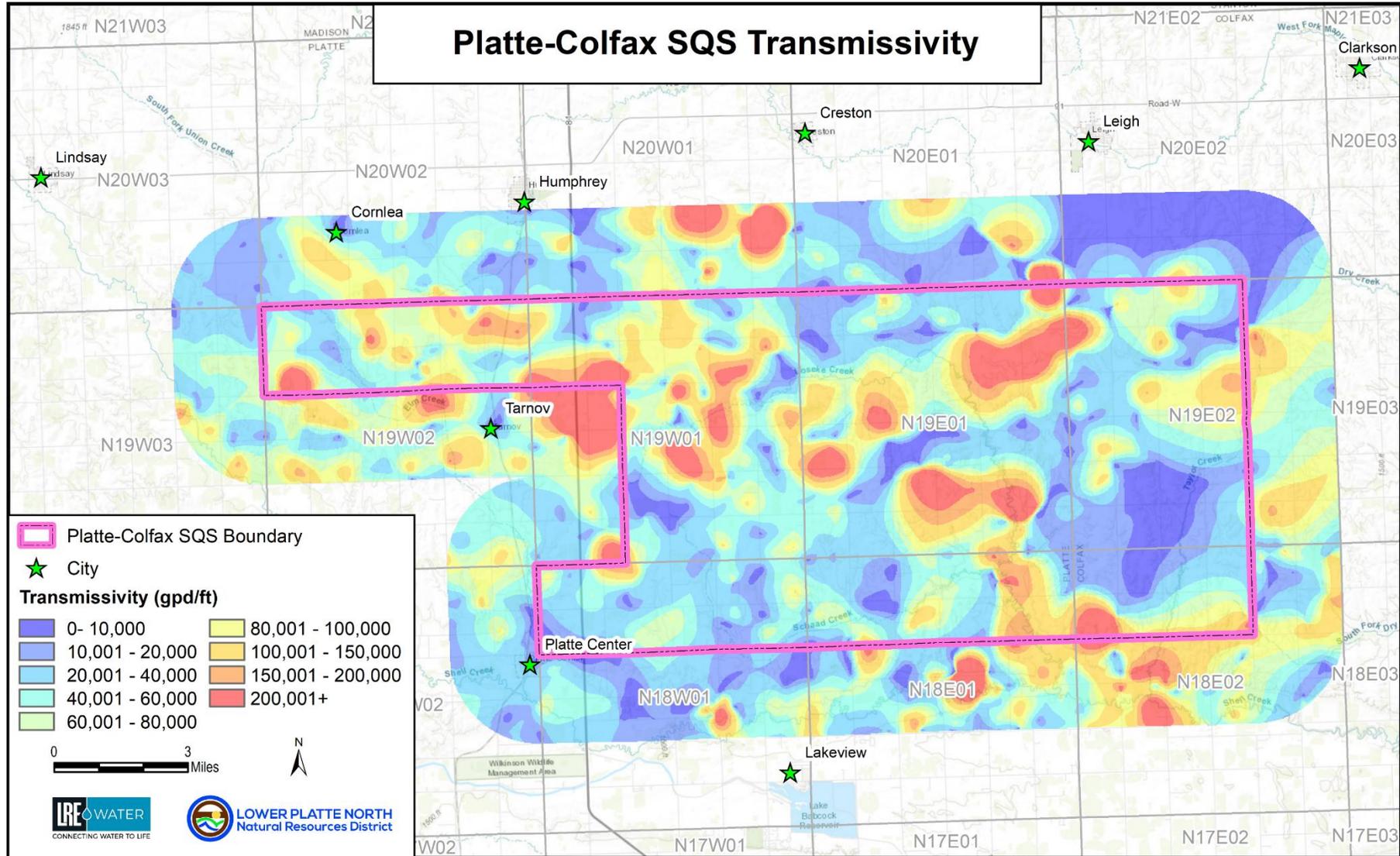
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Jan 1, 2014 6:00 AM - Sep 5, 2025 3:03 PM



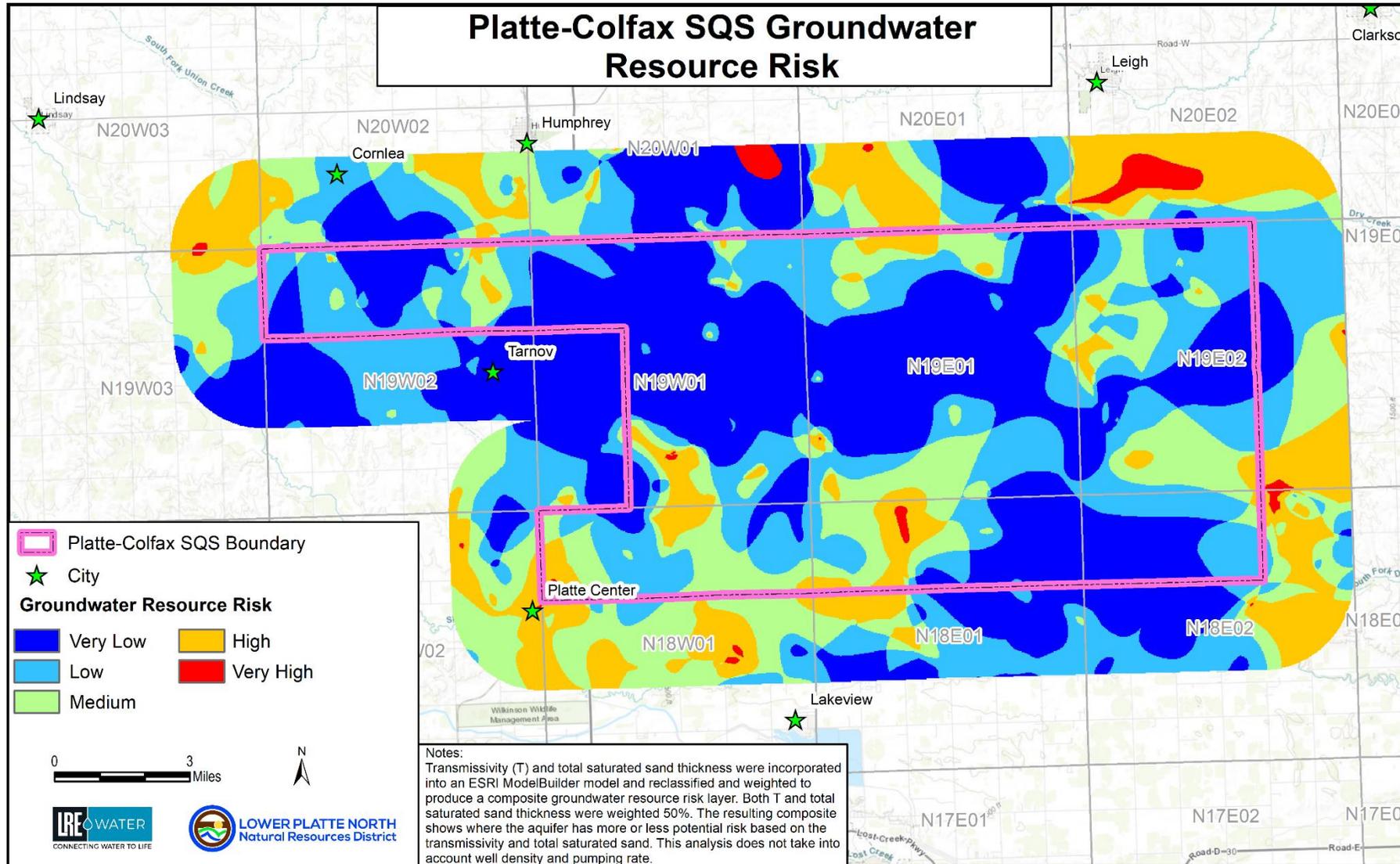
Level: Depth to Water (ft)  
Jan 1, 2014 6:00 AM - Sep 5, 2025 3:03 PM



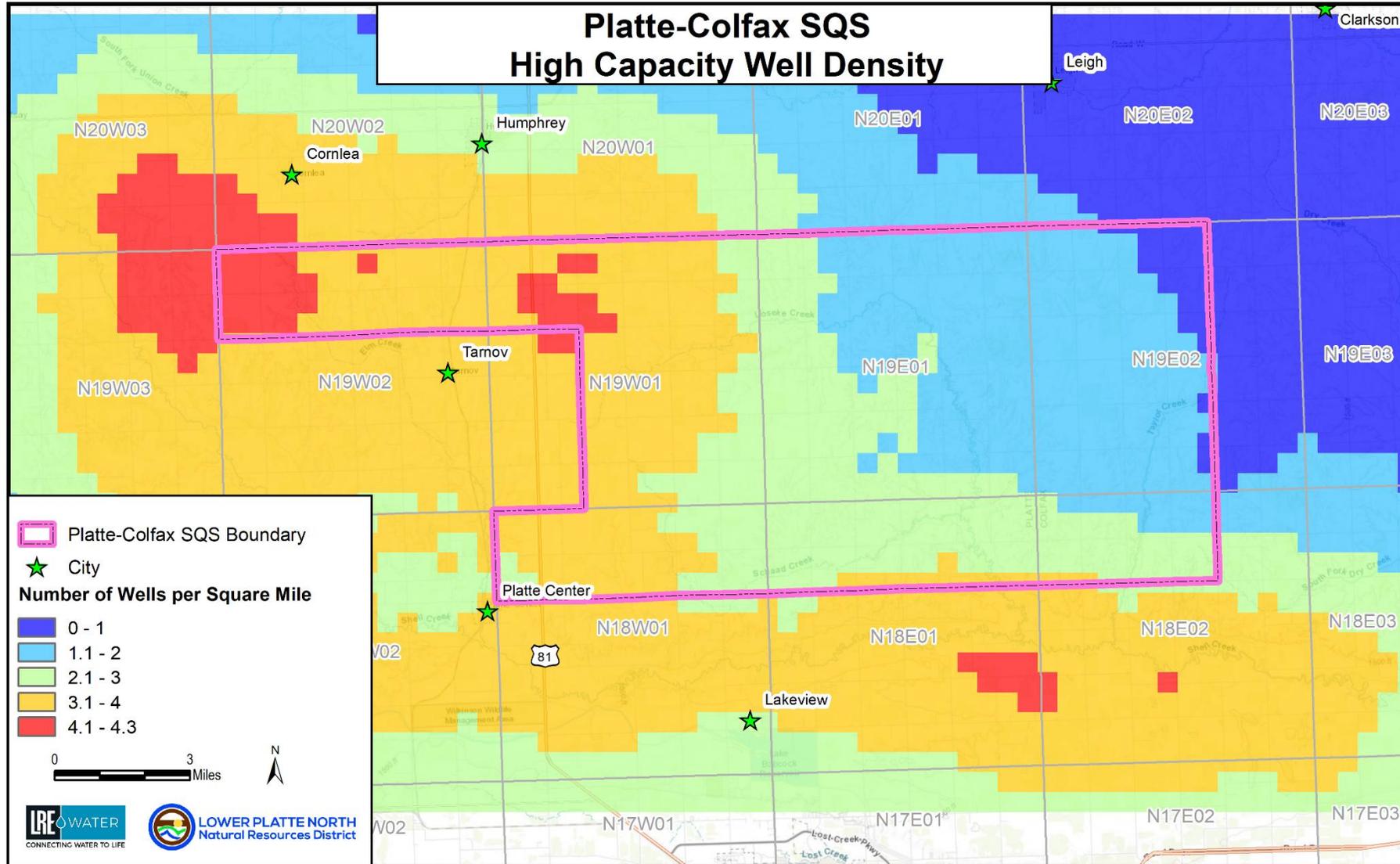
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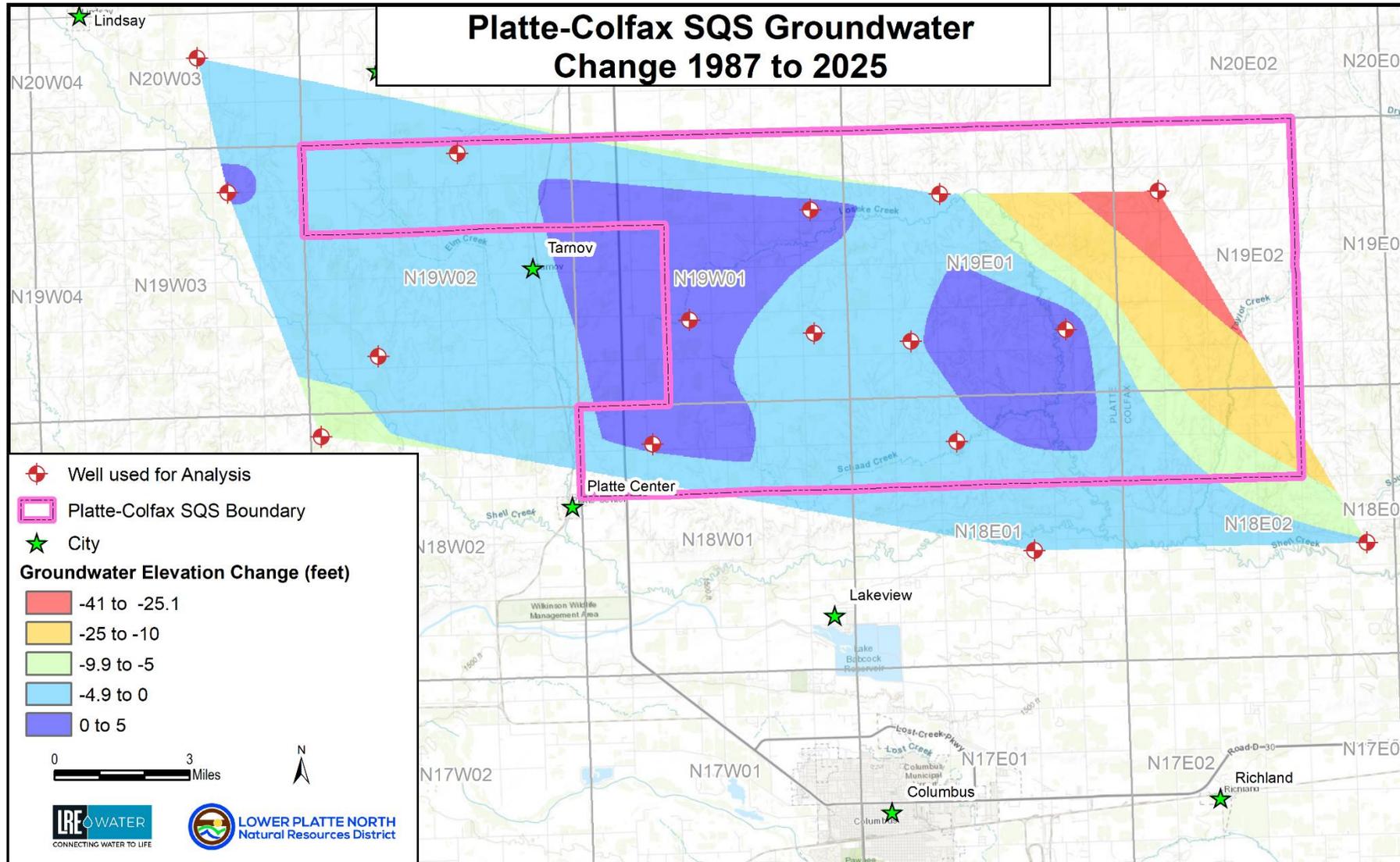
# #3 – PLATTE/COLFAX SQS AREA



# #3 – PLATTE/COLFAX SQS AREA



# #3 – PLATTE/COLFAX SQS AREA



# RECOMMENDATIONS

**BULTER-SAUNDERS SQS**

# RECOMMENDATIONS – BUTLER/SAUNDERS

## 1) Maintain Current Boundary Designation

- Current groundwater trends support continued use of the existing boundary

## 2) Monitoring Network

- Expand dedicated monitoring network infrastructure to improve seasonal trend analysis

## 3) Complaint Tracking

- Strengthen complaint documentation with standardized protocols

## 4) Outreach and Education

- Be transparent – consider the use of an online dashboard showing real-time water levels, usage trends, and conservation participation (e.g. ESRI StoryMap)

# RECOMMENDATIONS – BUTLER/SAUNDERS

## 5) Cost-Share Programs

- Expand voluntary conservation through targeted financial incentives
- Offer cost-share for soil moisture sensors, low-pressure pivot retrofits, cover crops, etc.

## 6) Well Impact Assessments

- Use localized modeling to guide smarter groundwater decisions
- Conduct localized aquifer capacity pumping tests and drawdown modeling
- Use results to guide pumping reductions, alterations to the SQS Area, or well spacing requirements

# RECOMMENDATIONS

**PLATTE-COLFAX SQS**

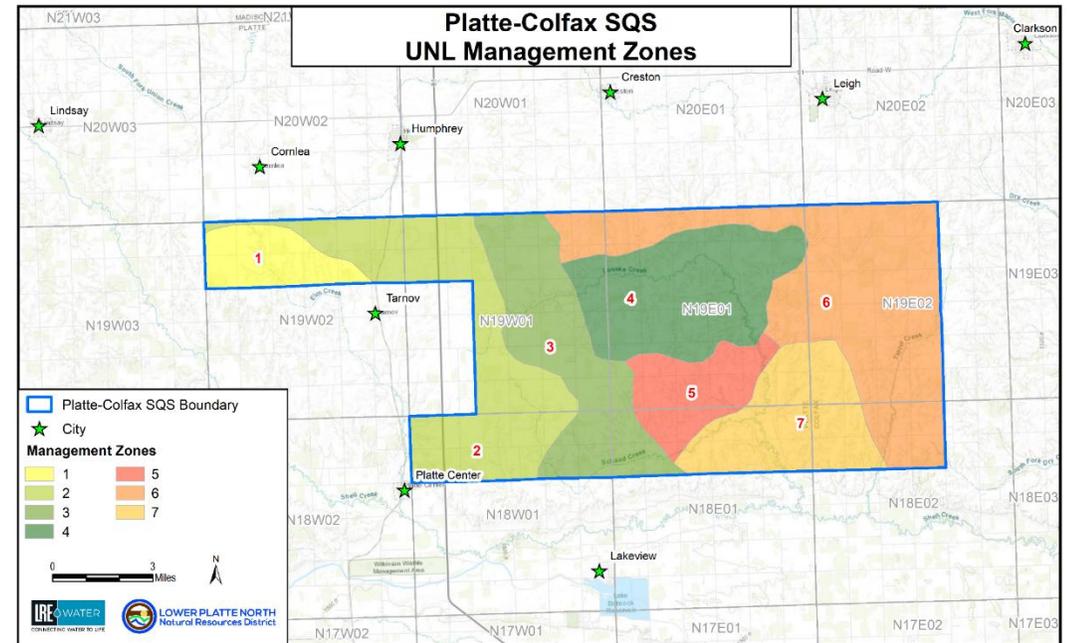
# RECOMMENDATIONS – PLATTE/COLFAX SQS

## 1) Boundary Refinement

- Consider reducing the size of the SQS to reflect long-term recovery in the western two-thirds
  - Groundwater levels have stabilized or rebounded in much of the area since 2009
  - A revised boundary would better align restrictions with current aquifer conditions

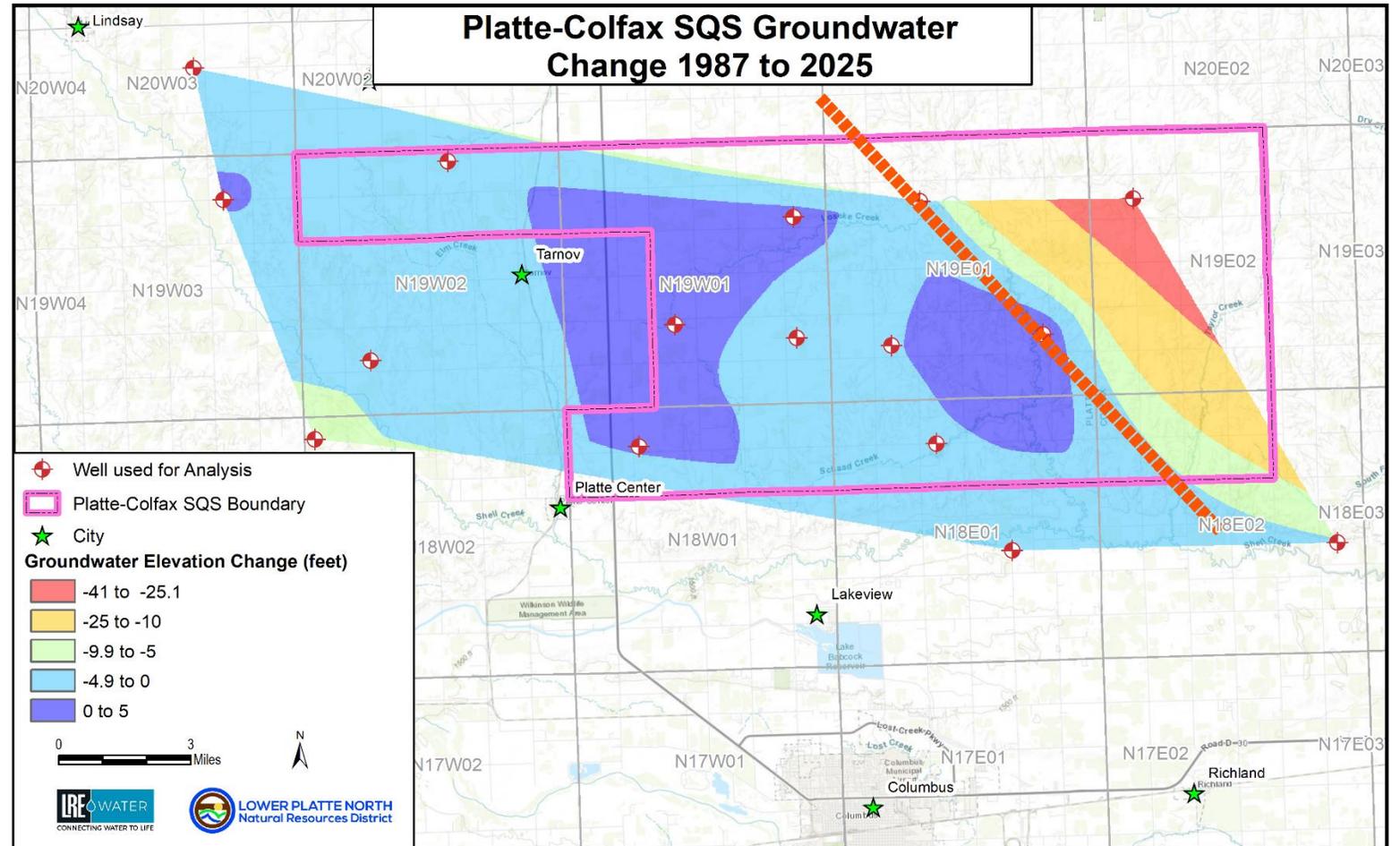
## 2) Management Adjustments

- Maintain the SQS designation in the eastern areas where chronic issues are documented
- Consider using the UNL's management zones as described in the 2022 study



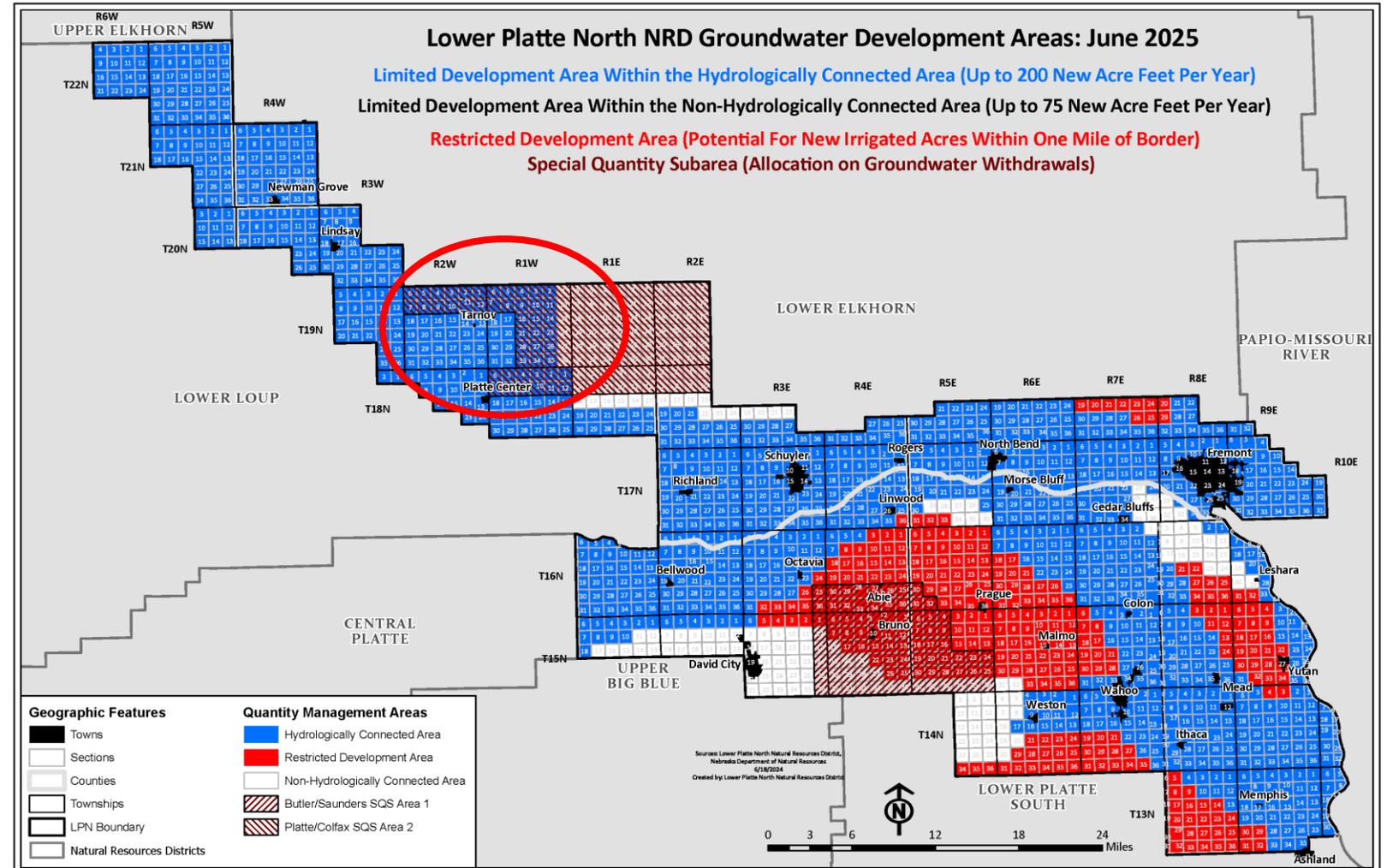
# RECOMMENDATIONS – PLATTE/COLFAX SQS

- Utilize hydrographs and groundwater decline information



# RECOMMENDATIONS – PLATTE/COLFAX SQS

- Limited Development Area in western portions



# **RECOMMENDATIONS**

## **GENERAL**

# GENERAL RECOMMENDATIONS

➔ *Move Toward a More Adaptive and Responsive Groundwater Management Framework*

## 1) Evaluate the Use of Drought Designation Zones

- Consider establishing temporary drought-responsive zones
- Zones could be activated based on defined triggers such as precipitation indices, streamflow, drought monitory intensity (e.g. severe, extreme, etc.)

# GENERAL RECOMMENDATIONS

➔ *Move Toward a More Adaptive and Responsive Groundwater Management Framework*

## 2) Refine Management Triggers Using Integrated Data\*

- Strengthen the use of water-level trends, complaint tracking, and drought forecasting tools to inform decisions
- Incorporate real-time and historic datasets to support both short-term and long-term trends

*\*LRE Water has prepared a scope to further evaluate scoring sheets and triggers*

# GENERAL RECOMMENDATIONS

➔ *Move Toward a More Adaptive and Responsive Groundwater Management Framework*

## 3) **Determination of a New Well's Impact on Aquifer and Users**

- Establish a procedure to evaluate permit applications that require additional data
- Desktop assessment, review of well logs, hydrographs, well density, etc.
- Test hole, test well, aquifer pumping test

# GENERAL RECOMMENDATIONS

➔ *Move Toward a More Adaptive and Responsive Groundwater Management Framework*

## 4) Advance Adaptive Management Principles

- Embrace a phased, science-based approach that allows for boundary adjustments
- Maintain protections where chronic depletion persists, while allowing flexibility in areas showing sustain recovery
- Continue to receive, and respond, to stakeholder input

KRACL  
CORN

## Soil Moisture Sensor Incentive Program Advanced Sensor Technology

Lower Platte North Natural Resources District  
PO Box 126, 511 Commercial Park Road  
Wahoo, Nebraska 68066-0126  
Phone (402) 443-4675  
[www.lpnnrd.org](http://www.lpnnrd.org)

Landowner/Tenant: ROBINSON MEADOWBROOK G.P. Date 9/3/25

Address: 24909 W. MAPLE RD. City WATERLOO Zip NE 68069

Phone#: 402 676 0609 Email: CSchuler@robinsoncorn.com

### Field Information:

Quarter SW 1/4 Section 33 Township 18 Range 5 County DODGE

Equipment Brand CROP X

Allow LPNNRD access to information on soil moisture sensor data? Yes  No

LPNNRD Staff Approval \_\_\_\_\_ Date \_\_\_\_\_

\*(LPN Board approval is required before staff approval signature)\*

### Cost Share Assistance for Advanced Sensor Technology

The Lower Platte North NRD has limited funding available to assist growers in the purchase of soil moisture sensor technology. The assistance is limited to lands operated within the boundaries of the Lower Platte North NRD. The Lower Platte North NRD has funding to offer 50% reimbursement up to \$750 of the actual cost of the purchase of soil moisture sensors and dataloggers. There are a variety of technologies available and the Lower Platte North NRD can provide guidance in helping the grower determine which product is right for his operation.

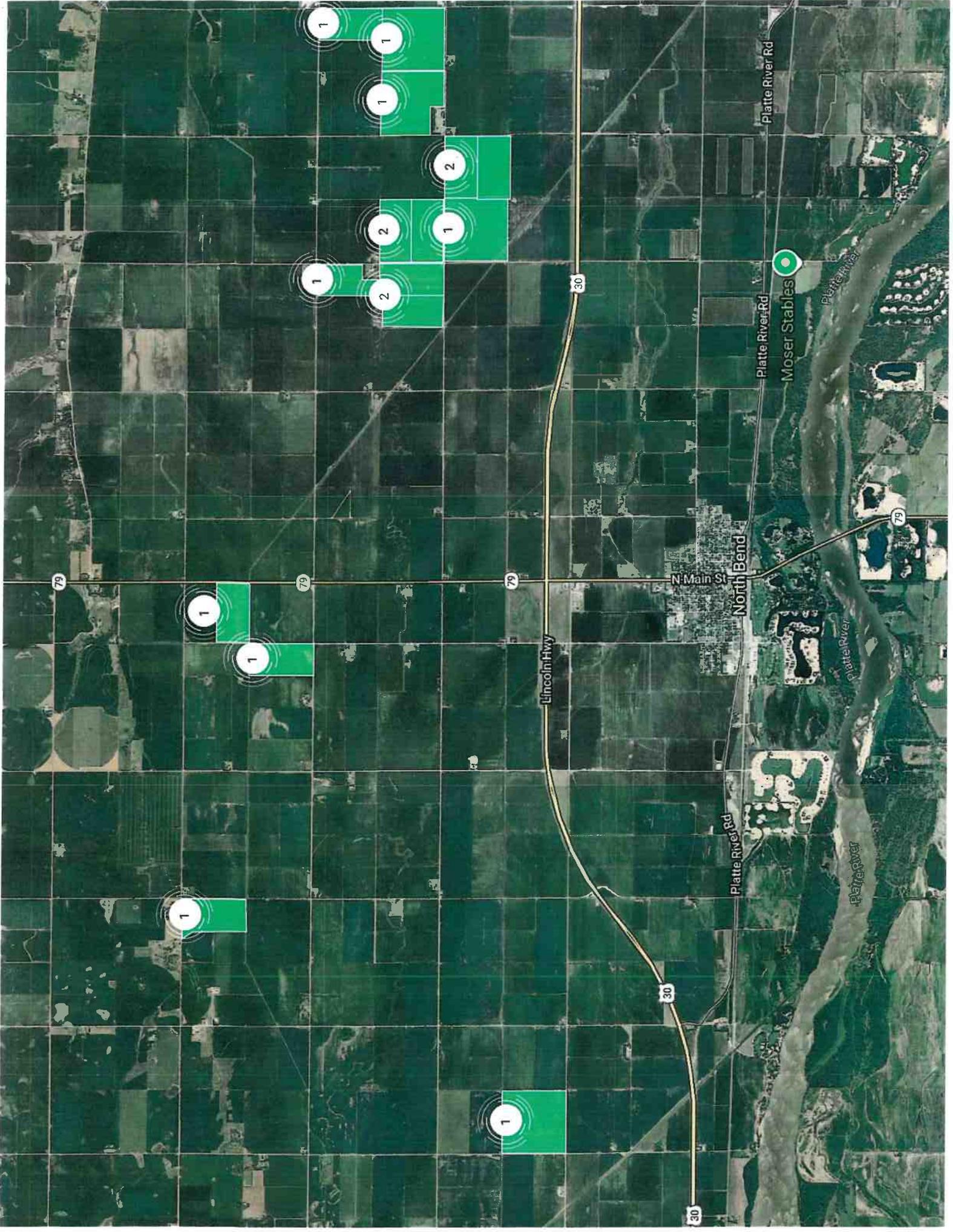
### Criteria

Application deadline will be May 1, 2026

One application per producer or entity to spread out the cost share.

- Priority Selection
  1. 1st - Special Quantity Sub-Areas
  2. 2nd - Phase Areas
  3. 3rd - District wide
- One-time cost-share
- Invoice required for cost-share money will be dispersed.

As limited funds are committed for the year, a new application if not approved is required for the following year.



	FY26	FY27	Total
CSD Field Data Acquisition, Processing and Assessment Activities <b>Service Center 2262380058</b>	roughly 5,000 acres total and 5 days each NRD	roughly 2 days each NRD	
	\$ 105,750.00	\$ 42,300.00	\$ 148,050.00
F&A 10%	\$ 10,575.00	\$ 4,230.00	\$ 14,805.00
<b>TOTALS:</b>	<b>\$ 116,325.00</b>	<b>\$ 46,530.00</b>	<b>\$ 162,855.00</b>

Opt-in: Individual NRDs could opt to fund additional TEM mapping or advanced hydrogeologic modeling (e.g. machine learning). This would be contracted separate from ENWRA.

TEM mapping opt-in: \$6,205 per day (approx. 320 acres per day).

Hi-res hydrogeo-model opt-in: estimates can be done on a case-by-case basis.

# UNLTAPS

TESTING AG PERFORMANCE SOLUTIONS



**Testing Ag Performance Solutions (TAPS)** is an innovative program developed by University of Nebraska research and extension specialists and educators. Rather than the typical teacher and student paradigm, the program facilitates a number of interactive real-life farm management competitions. These competitions bring together university scientists and extension professionals, producers, industry leaders, agriculture students, government regulators and agency personnel to become part of a highly engaged network focused on evolving profitability and input-use efficiency.

Contestants in each competition make decisions on a number of management options for their “farm”, which includes three plots equal to around a half an acre. These decisions, depending on competition, can include: crop insurance selection; hybrid selection; planting density; insecticide; marketing strategy; irrigation scheduling and quantity; and fertilizer timing, amount and method.

The program was created in 2017 at the West Central Research, Extension and Education Center at North Platte with a single sprinkler irrigated corn competition. Since then, the program has expanded and in 2024 included the sprinkler corn competition, as well as a continuous corn irrigated competition in North Platte, a sorghum competition at Grant and a soybean competition near Mead, Nebraska.

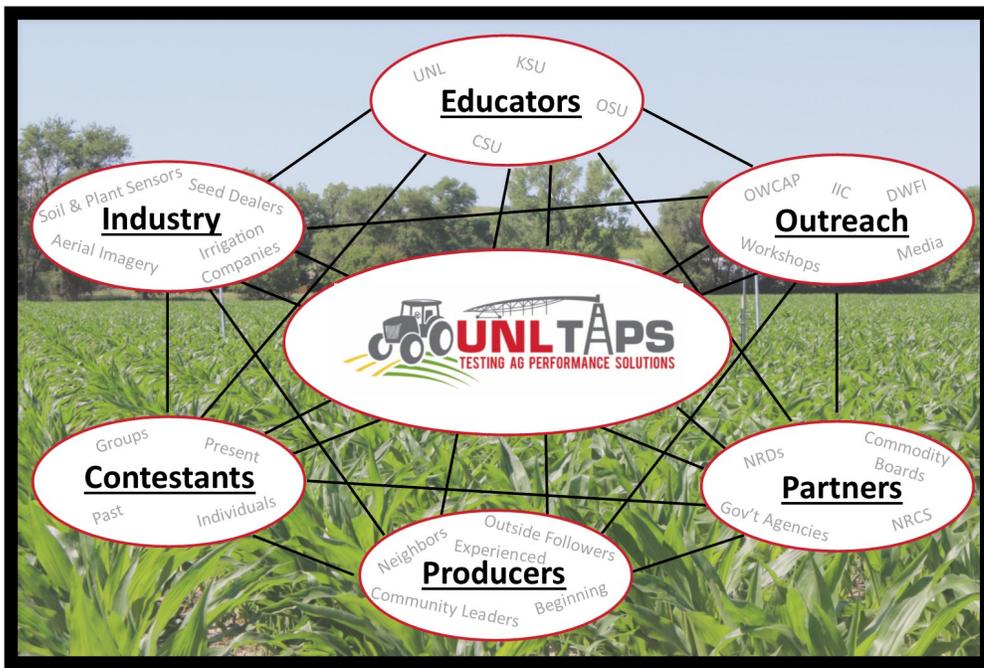
*I have not been a participant in the program but have watched it over the past few years and feel like the data/results have been a benefit to my farm. The best part about it, from my perspective, is that it's real-world decisions being made in real time by a diverse group of participants that are competing to win. When those decisions are tied to ROI and whole farm profitability, that has real value to me. When it's a "third party" trial, not a seed or chemical company, I feel the results will lack the bias that can exist in their trials. The step further of having the decisions made by participants also takes the bias out that may exist even in UNL staff. Bottom line is I appreciate the work put into TAPS and the results that have helped me in managing my family farm."*

**Jeff Huffman, Island Farms, LLC**

**75%**  
Percent of 2022 survey participants have adopted new ag technology, as a result of competing in TAPS.

**413**  
Participants involved in the TAPS program throughout 8 years, residing from 9 states, and 3 overseas countries.

**86%**  
Percent of 2022 survey participants have adopted new ag management practices, as a result of competing in TAPS.



*“Since joining the TAPS program we have applied 60 less pounds of nitrogen on our pivots without seeing a drop in yield. We put a lot more nitrogen through the pivots instead of putting it all out up front. We are hoping to get our nitrogen usage rate down even further in the years to come.”*

Brian Ballou, Producer  
Wilsonville, NE

The innovative TAPS program connects industry knowledge and Extension research to the personal experiences of growers by fostering relationships between all stakeholders in crop production. The program provides these opportunities through interaction between producers, industry leaders, university officials, and extension employees, among others.

### Technology

- This low-risk environment offers participants the ability to test a large variety of technologies, as well as gives them access to a large dataset from the competitions at the end of the year.



### Past Competition Results

- Read past TAPS competition reports on the TAPS website, [taps.unl.edu](http://taps.unl.edu) under the Media Library tab.

104

Number of agricultural industry businesses, commodity boards, financial institutions, non-profit & government organizations that have supported the program throughout the years.



Follow TAPS at:



@UNL\_TAPS



UNLTAPS



UNL TAPS



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[www.taps.unl.edu](http://www.taps.unl.edu)



402 W. State Farm Road  
North Platte, NE 69101  
taps@unl.edu  
www.taps.unl.edu

### Sponsorship Form

(Please Print)

Business Name: \_\_\_\_\_

Contact Name: \_\_\_\_\_

Address: \_\_\_\_\_

Phone Number: \_\_\_\_\_ Email Address: \_\_\_\_\_

Website: \_\_\_\_\_

Logo Provided: Yes No **Please send hi-definition logo (JPEG or PNG format) to taps@unl.edu**

#### **YES, our company wishes to be a sponsor!**

- \$5,000+ (Amount \_\_\_\_\_)
- \$2,500 - \$4,999 (Amount \_\_\_\_\_)
- \$1,000 - \$2,499 (Amount \_\_\_\_\_)
- \$500 - \$999 (Amount \_\_\_\_\_)
- \$0 - \$499 (Amount \_\_\_\_\_)

All funds are used to pay for costs associated with operating the TAPS competitions, including but not limited to, overhead costs of the multiple competitions, banquet & award costs, participant events & activities.

All sponsorships include a listing on our sponsors & partners page, as well as presented during all TAPS presentations & events, if logo is provided.

No other tangible benefits; this is strictly a gift to the program.

Please check appropriate sponsorship box, and return the form and check to:

West Central Research & Extension Center

% Amanda Wuehler

402 West State Farm Road

North Platte, NE 69101

**Please make checks payable to University of Nebraska Foundation.**

**Thank you for your involvement and sponsorship of the TAPS program!**



402 W. State Farm Road  
North Platte, NE 69101  
taps@unl.edu  
www.taps.unl.edu

Dear Ryan Chapman/Daryl Anderson,

The University of Nebraska's Testing Ag Performance Solutions (TAPS) program extends its sincere appreciation for your ongoing support in fostering efficiency, profitability, and sustainability within the agricultural sector through our farm management competitions.

Our program owes much of its success to the invaluable partnership and sponsorship from organizations like yours. Your commitment enables us to fulfill our primary objective of connecting both producer and non-producer participants with cutting-edge farm management innovations in a risk-free environment.

We are proud to highlight the substantial contributions from companies like yours, who have provided essential management solutions such as sensors, weather stations, imagery, and crop models for implementation across TAPS fields. Remarkably, we've been able to offer these resources to our participants at no cost, all thanks to the financial backing from dedicated companies and organizations like yours.

The pinnacle event of our program, the annual banquet, serves as a momentous occasion where participants and sponsors converge to witness the culmination of their collective efforts. It provides a delightful and congenial atmosphere for partners, sponsors, and participants to forge connections, network, and honor the achievements of our competition winners.

We extend our sincerest gratitude to each and every one of our partners, sponsors, and donors for their unwavering support, and we eagerly anticipate continuing our journey of sharing the successes of the TAPS program together. Should your business or organization wish to continue its involvement with the TAPS program, enclosed you will find a sponsorship form for your convenience. Please feel free to complete and return it in the provided self-addressed stamped envelope.

Here is a web link that you can use to go directly to the Foundation page and pay by credit card. <https://secure.nufoundation.org/give?fundid=01141250>. The Fund name is **West Central Research and Extension Irrigation Fund** and Fund # **01141250**.

For any inquiries or further assistance, please do not hesitate to contact Chuck Burr, UNL-TAPS Extension Educator, at [chuck.burr@unl.edu](mailto:chuck.burr@unl.edu).

Once again, thank you for your continued commitment to the TAPS program. Your support is instrumental in driving our shared mission forward.

Warm regards,

Chuck Burr