

# INTEGRATED MANAGEMENT PLAN

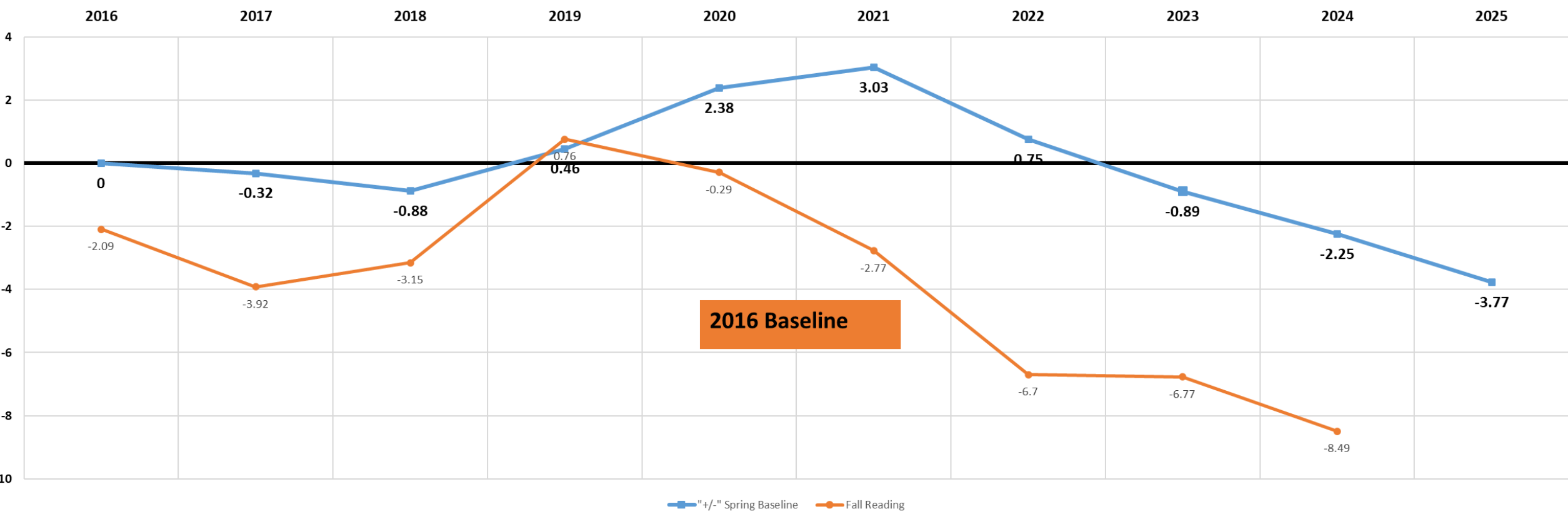
## NOVEMBER 18, 2025

## Groundwater Levels

Wells	Number of Wells	Water Level Change From Spring 2024 to Spring 2025	Water Level From Baseline
Gage County	27	-2.63	-6.23
Jefferson County	24	-2.03	-9.56
Saline County	42	-0.5	-2.36
Dedicated Monitoring Wells	47	-1.56	-3.77
Blue River Compact Wells	31	-1.00	-4.2
<b>District-Wide</b>	<b>171</b>	<b>-1.54</b>	<b>-5.22</b>

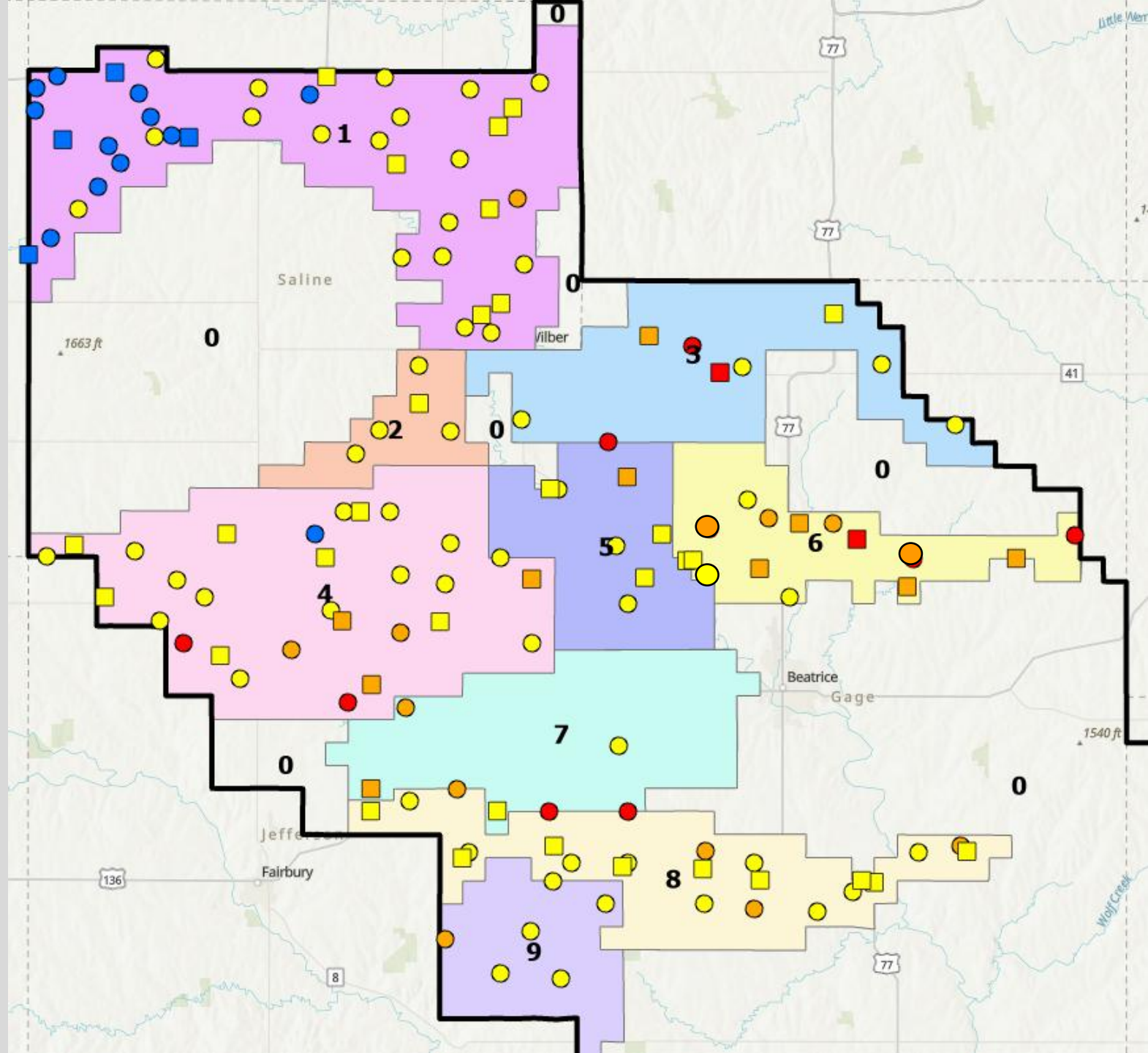
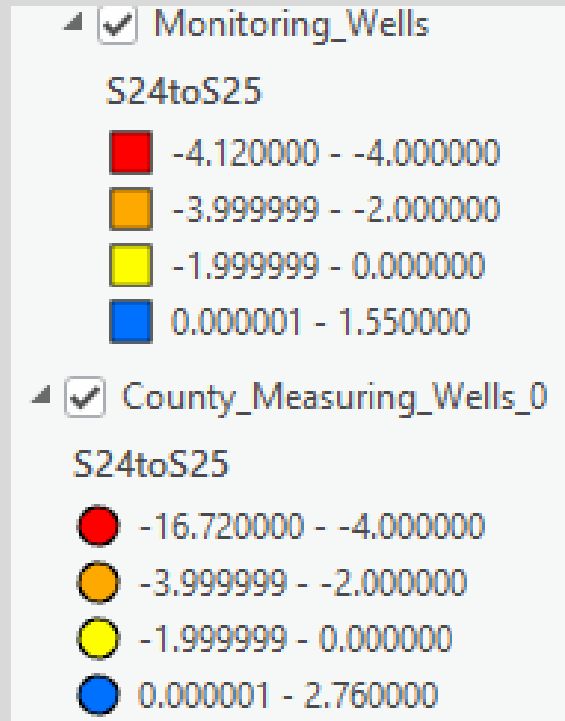


Dedicated Monitoring Well Static Water Level Average From Baseline



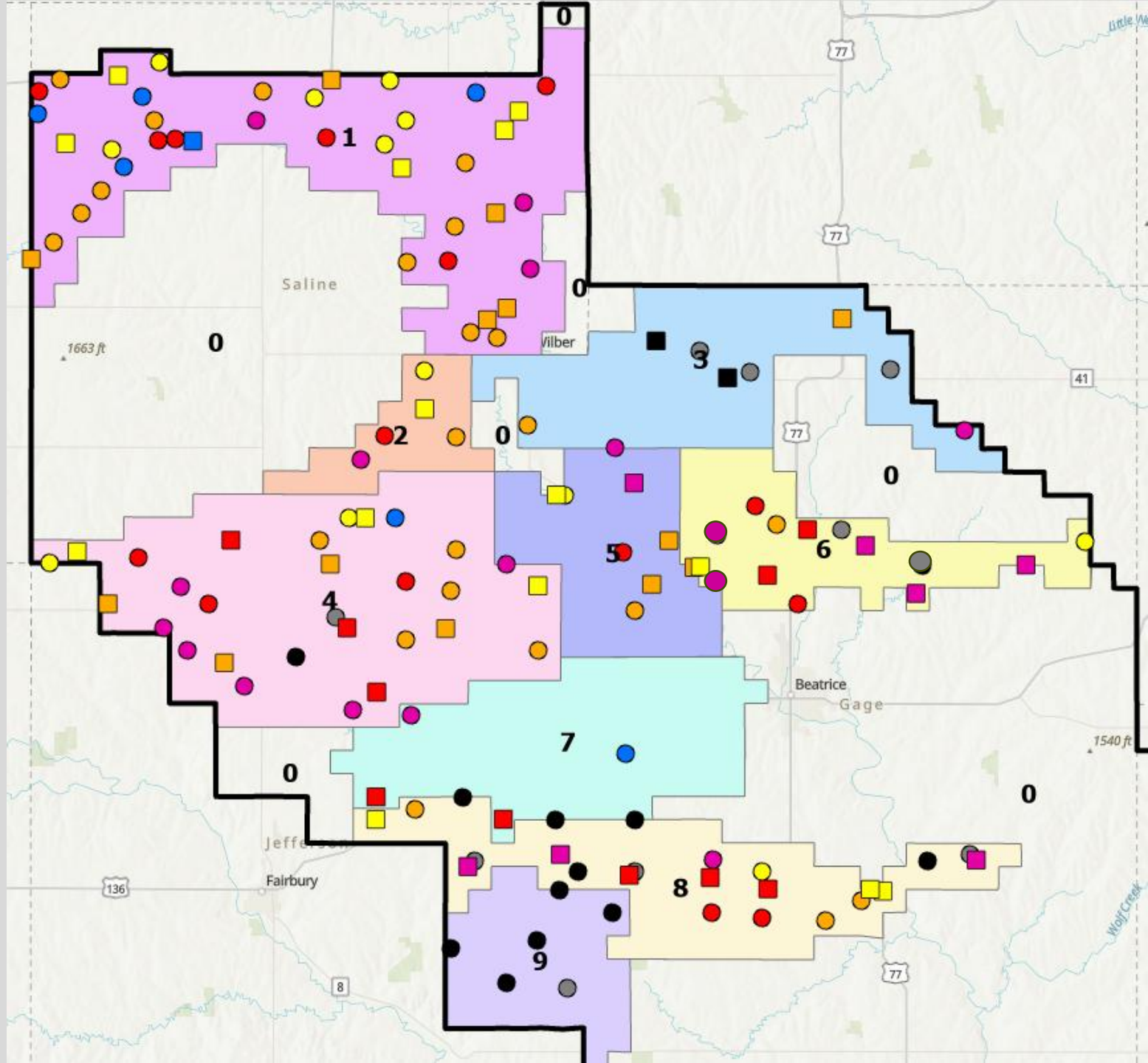
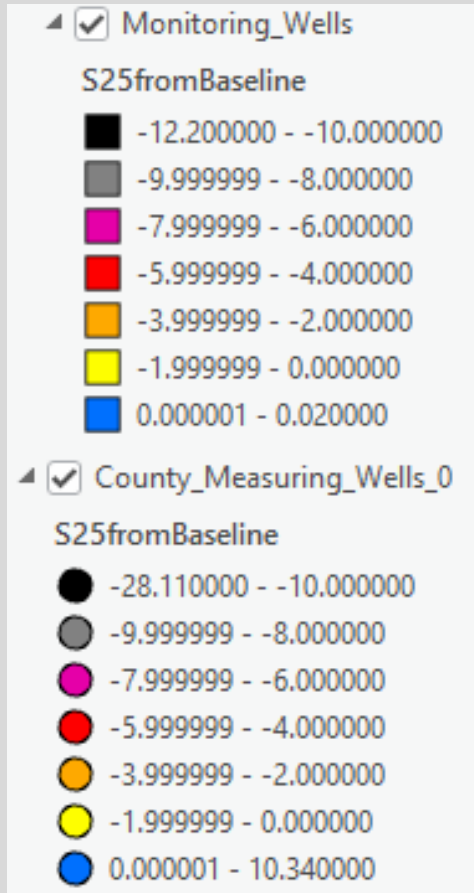


# Water Level Change from Spring 2024 to Spring 2025





## Spring 2025 Water Level From Baseline Reading



## Groundwater Levels

Wells	Number of Wells	Water Level Change From <b>Spring 2025</b> to <b>Fall 2025</b>	Water Level Change From <b>Fall 2024</b> to <b>Fall 2025</b>	<b>Spring 2025</b> Water Level From Baseline	<b>Fall 2025</b> Water Level From Baseline
Gage County	27	-2.52	2.04	-6.23	-8.76
Jefferson County	24	-1.20	2.45	-9.56	-10.77
Saline County	42	-0.67	1.15	-2.36	-3.03
Dedicated Monitoring Wells	48	-1.97	2.76	-3.77	-5.73
Blue River Compact Wells	32	-1.14	1.32	-4.2	-5.34
District-Wide	173	-1.50	1.94	-5.22	-6.73

## Groundwater Management Sub-Areas

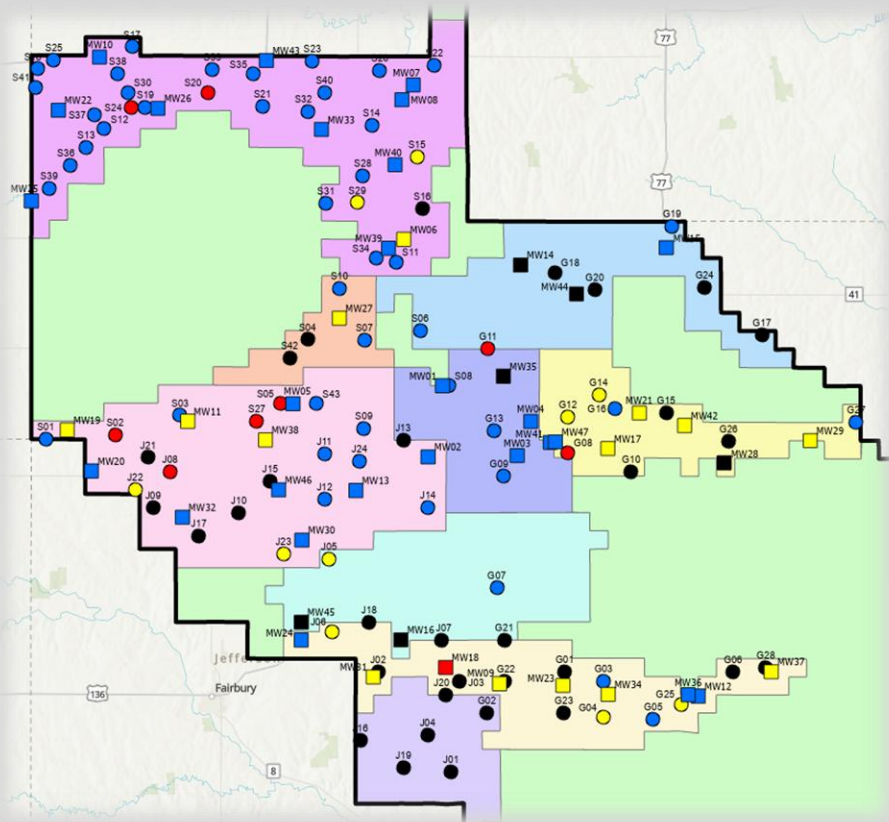
	Number of Wells	Water Level Change From <b>Spring 2025</b> to <b>Fall 2025</b>	Water Level Change From <b>Fall 2024</b> to <b>Fall 2025</b>	<b>Spring 2025</b> Water Level From Baseline	<b>Fall 2025</b> Water Level From Baseline
Sub-Area 1 Friend	41	-0.3	1.5	-2.3	-2.6
Sub-Area 2 Brush Creek	5	0.2	0.8	-3.7	-3.5
Sub-Area 3 Clatonia	8	-2.4	0.6	-8.2	-10.6
Sub-Area 4 Plymouth	29	-1.0	1.1	-4.0	-5.0
Sub-Area 5 DeWitt	9	-1.2	0.8	-3.2	-4.4
Sub-Area 6 Pickrell	14	-4.3	3.5	-5.8	-10.1
Sub-Area 7 Harbine	7	-1.3	6.5	-6.2	-7.5
Sub-Area 8 PWF	22	-0.4	1.4	-5.7	-6.1
Sub-Area 9 Diller	6	-1.2	1.5	-16.6	-17.8
District-Wide	141	-1.32	1.97	-6.19	-7.51

# LBBNRD MORATORIUM

- Entered temporary moratorium on Dec. 8, 2022
- Held public hearing on May 18, 2023
- Imposed permanent moratorium on June 5, 2023
- Contracted with Olsson to develop subareas based on aquifer characteristics
  - 9 areas and “remaining area”
  - Each sub area with have unique groundwater quantity rules
- Revised rules and regulations
- Public hearing held November 6, 2024
- Revised rules and regulations
- Public hearing held October 30, 2025
- *Groundwater Quantity Rules and Regulations* revisions approved November 13, 2025
- Revised rules and regulations take effect December 15, 2025



# Rules and Regs Summary



## Pumping Test

- If permit application fails to meet point score, a pumping test may be used to provide the district with more hydrogeologic information.
- 24-hour pump test between the August 1<sup>st</sup> and September 30<sup>th</sup>.
- The well must maintain 500gpm or more throughout the 24-hour period.

## Large Volume Water Wells (using more than 400 acre-feet per year)

- Reduced usage from 500 acre-feet per year to 400 acre-feet per year.
- Flowmeters required
- Updated permitting process...same as UBBNRD

## Phase 1

- Board designates sub-areas within the district (see map for sub-area boundaries).
  - a. May adjust boundaries
  - b. Well permit ranking system can be adjusted for each sub-area
  - c. Each sub-area can have different management options.
- Median groundwater level calculated from well network in each sub-area

## Phase 2

- A sub-area automatically goes into phase 2 when the median static water level of monitoring wells in that sub-area hit the median phase 2 trigger level for 3 consecutive years.
- An immediate moratorium on new irrigation wells and expansion of irrigated acres
- Flowmeters required
- Allocation amounts set (chapter 14, 15, 16) initially at 30/21 acre-inches over a 3-year period.
- Certified Expanded Acres – allows adding acres to be irrigated but the allocation amount does not change from the initial certification.
- Will return to phase 1 when water level is above trigger for 3 consecutive years.

## Phase 3

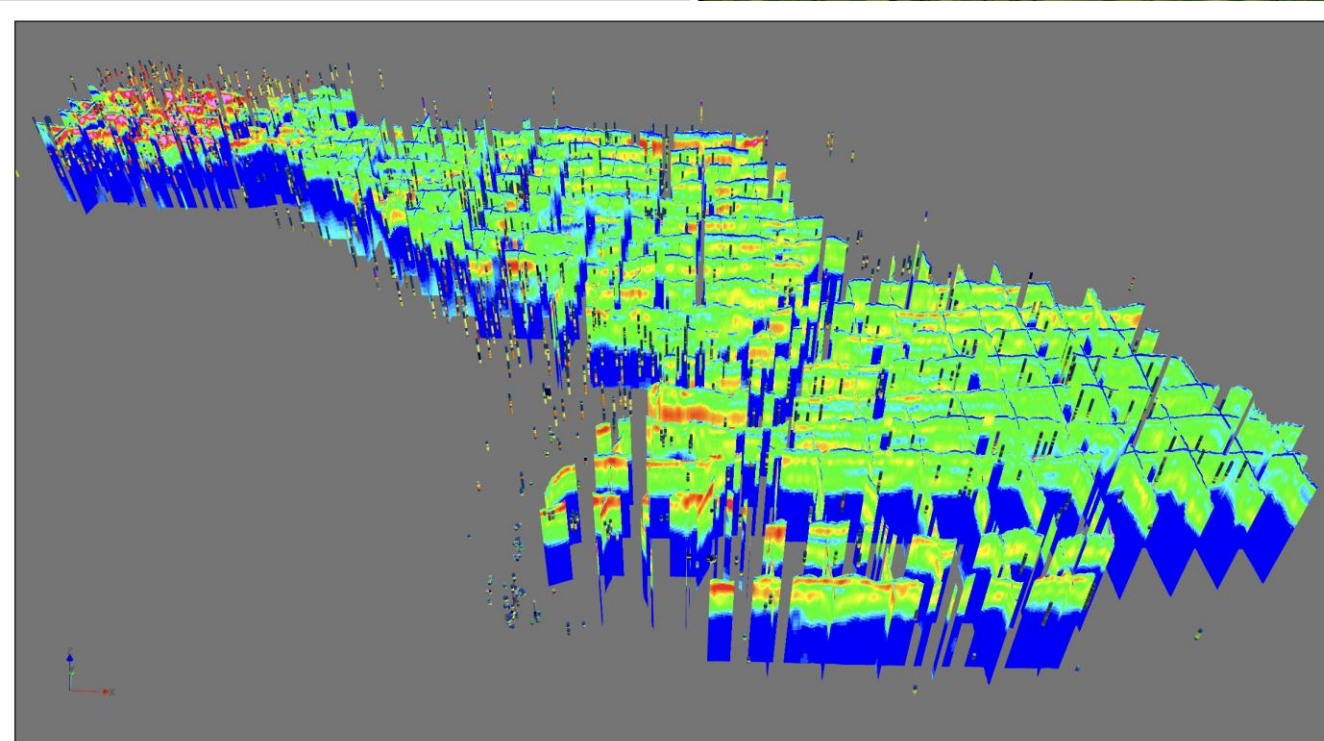
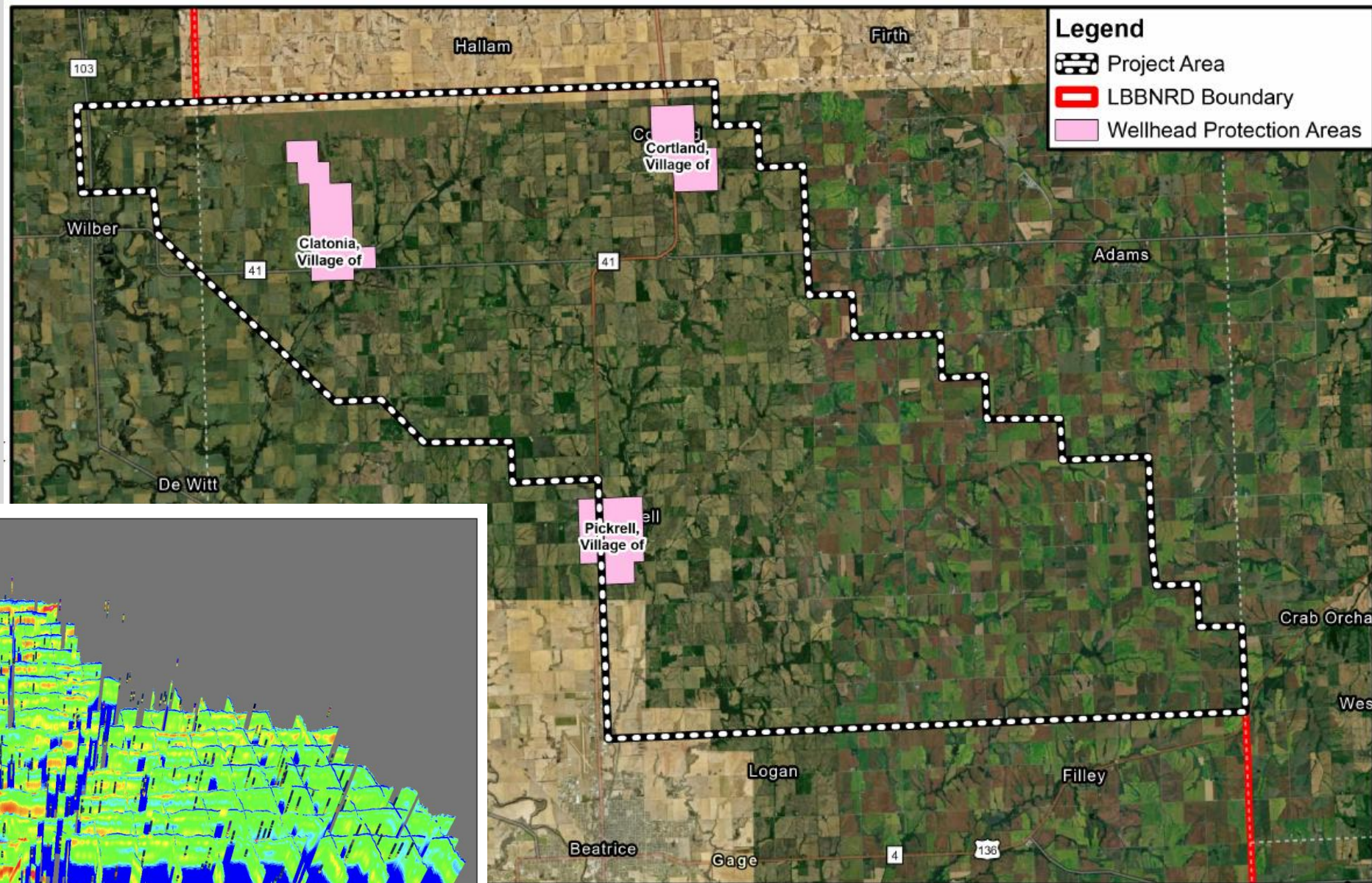
- A sub-area automatically goes to phase 3 when water level is 30% below phase 2 trigger level for 3 consecutive years.
- Allocation amounts are reduced.
- Certified Expanded Acres – allows adding acres to be irrigated but the allocation amount does not change from the initial certification.

# WSF Grant Application – AEM (Airborne Electromagnetic Hydrogeologic Mapping) Project





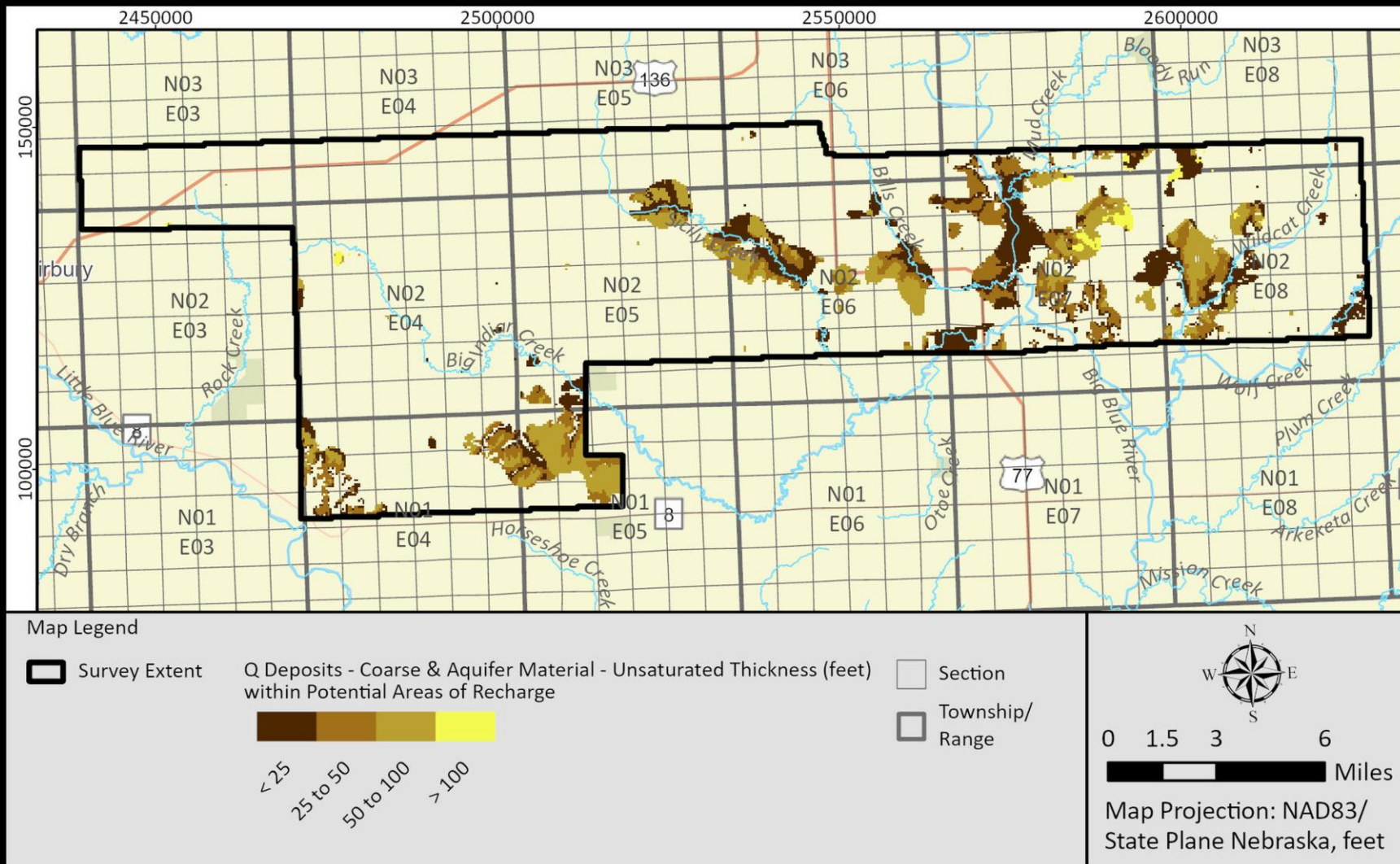
# Survey Area 3



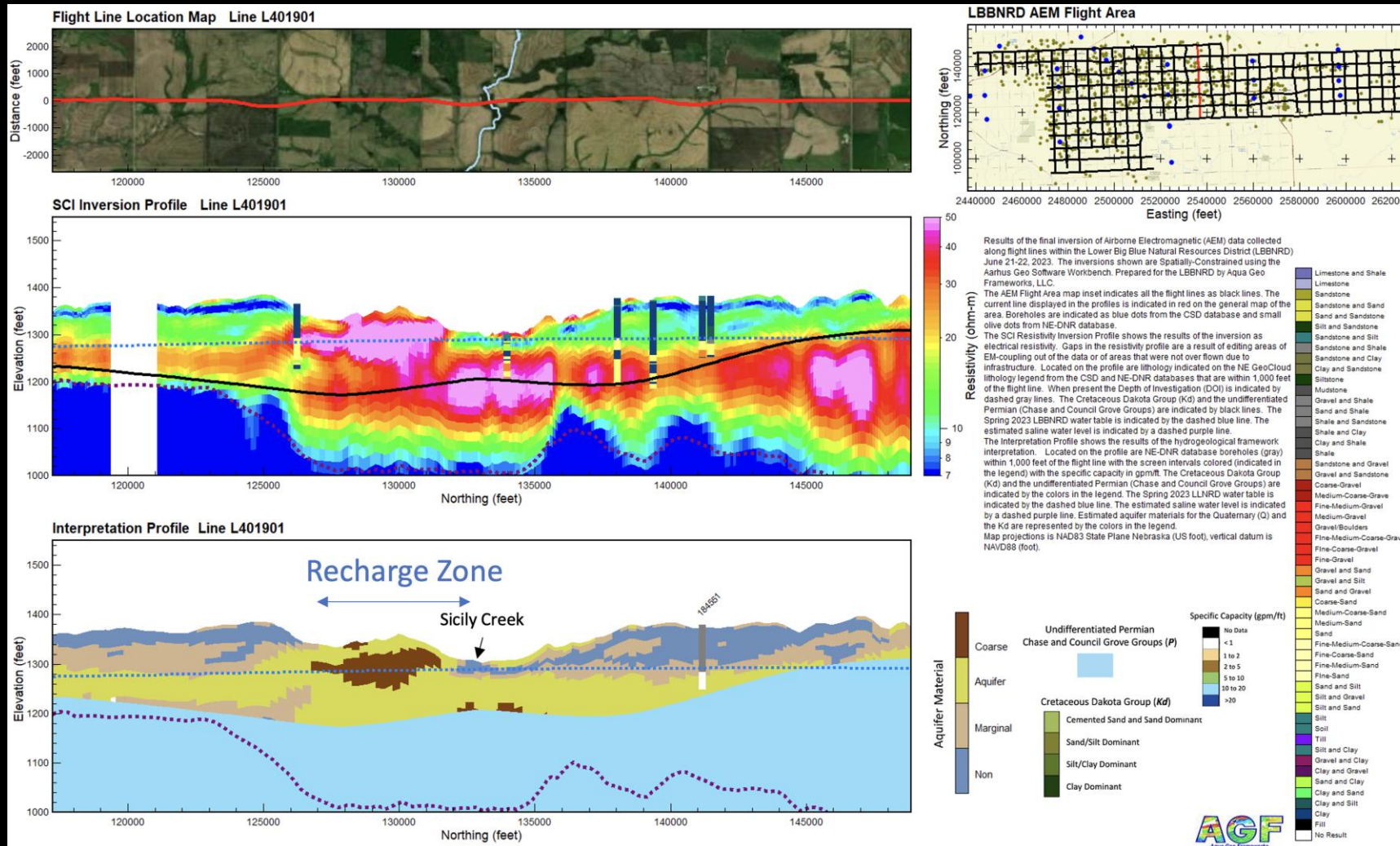
	<p><b>WELLHEAD PROTECTION AREAS</b></p> <p>AEM HYDROGEOLOGIC MAPPING - PHASE 3 LBBNRD</p>	<p><b>FIGURE</b></p>
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# Near-surface Sand Zones

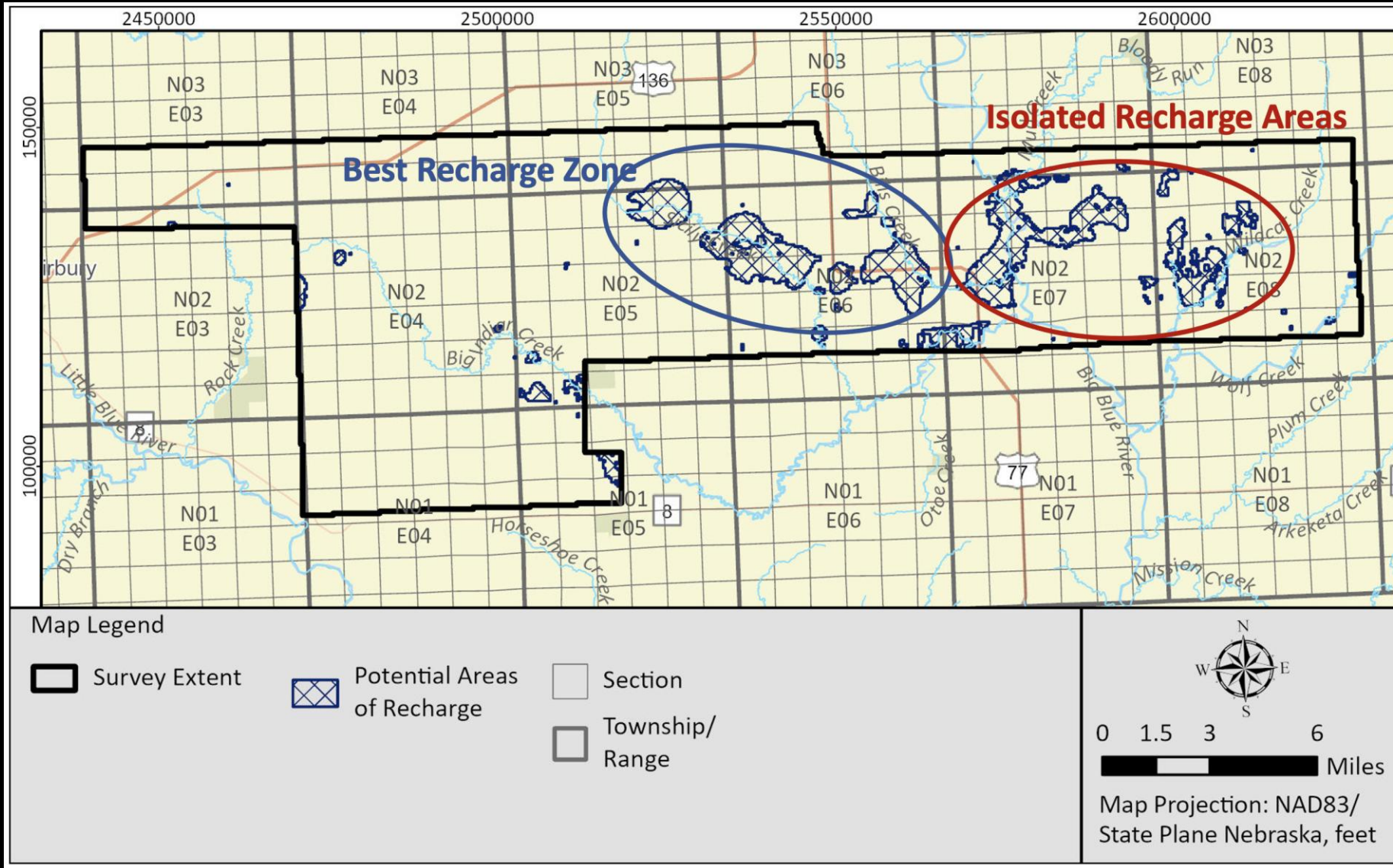


# Profile near Sicily Creek



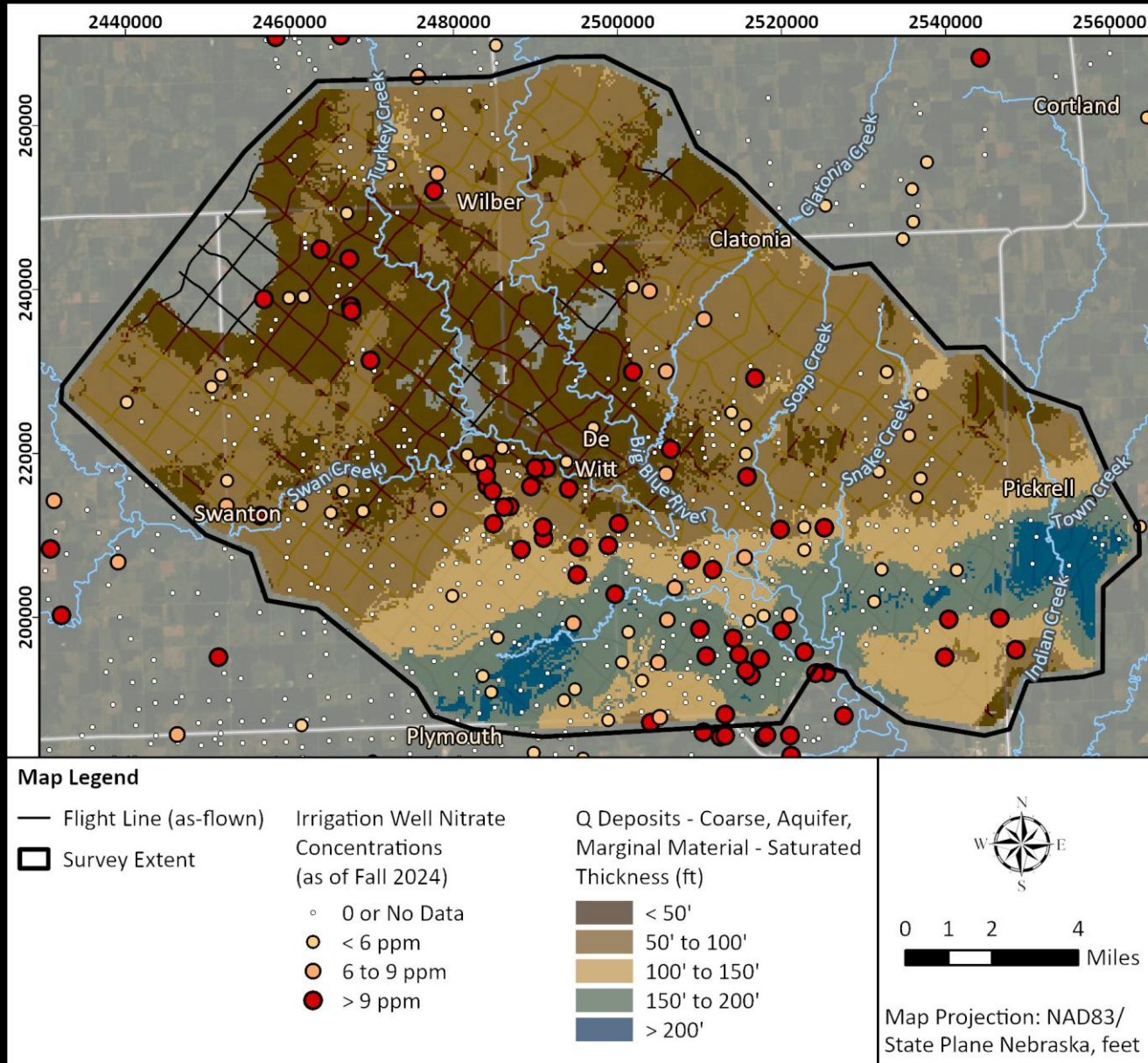


# Recharge Targets

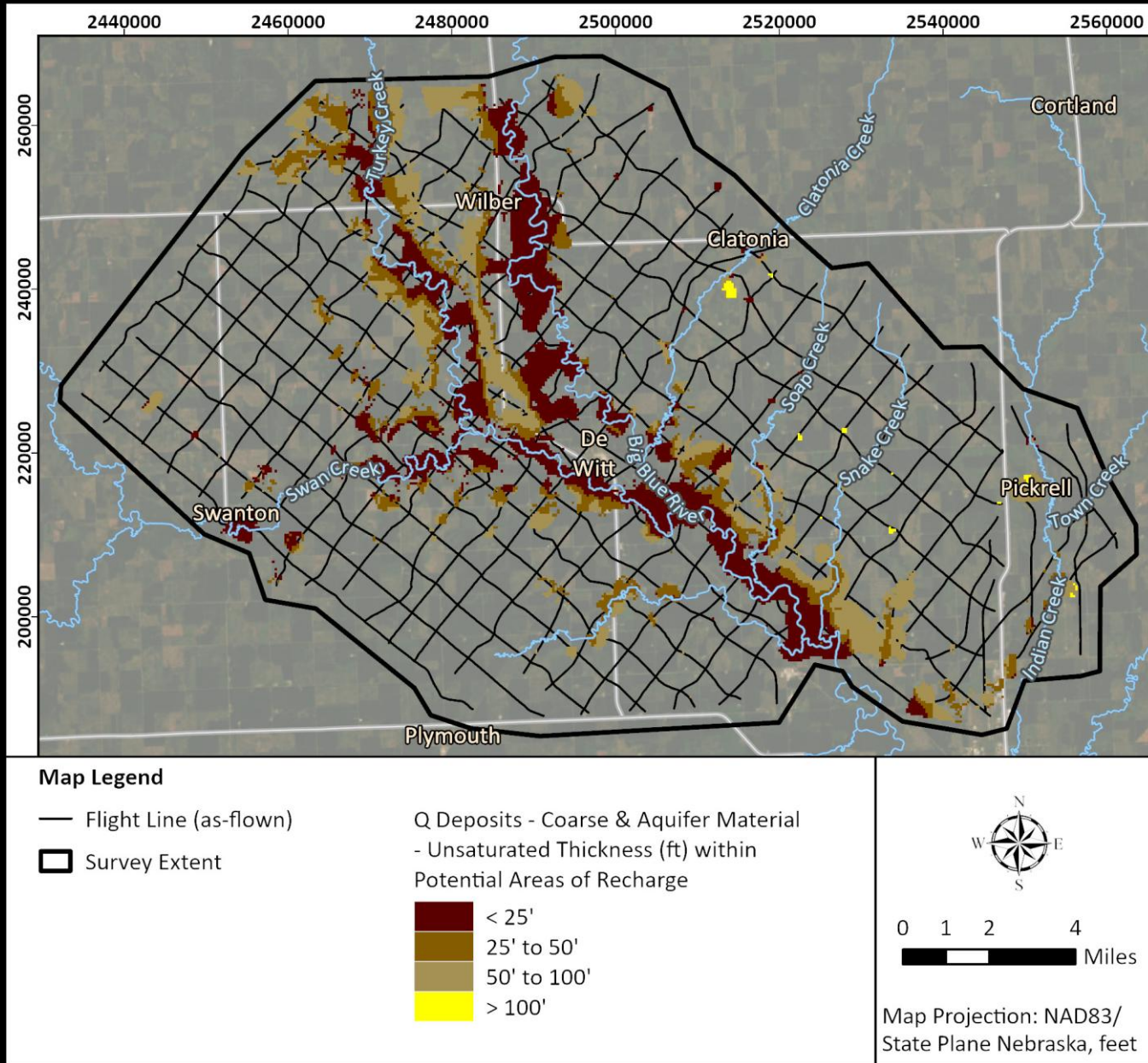




# Nitrate Samples and Aquifer Materials

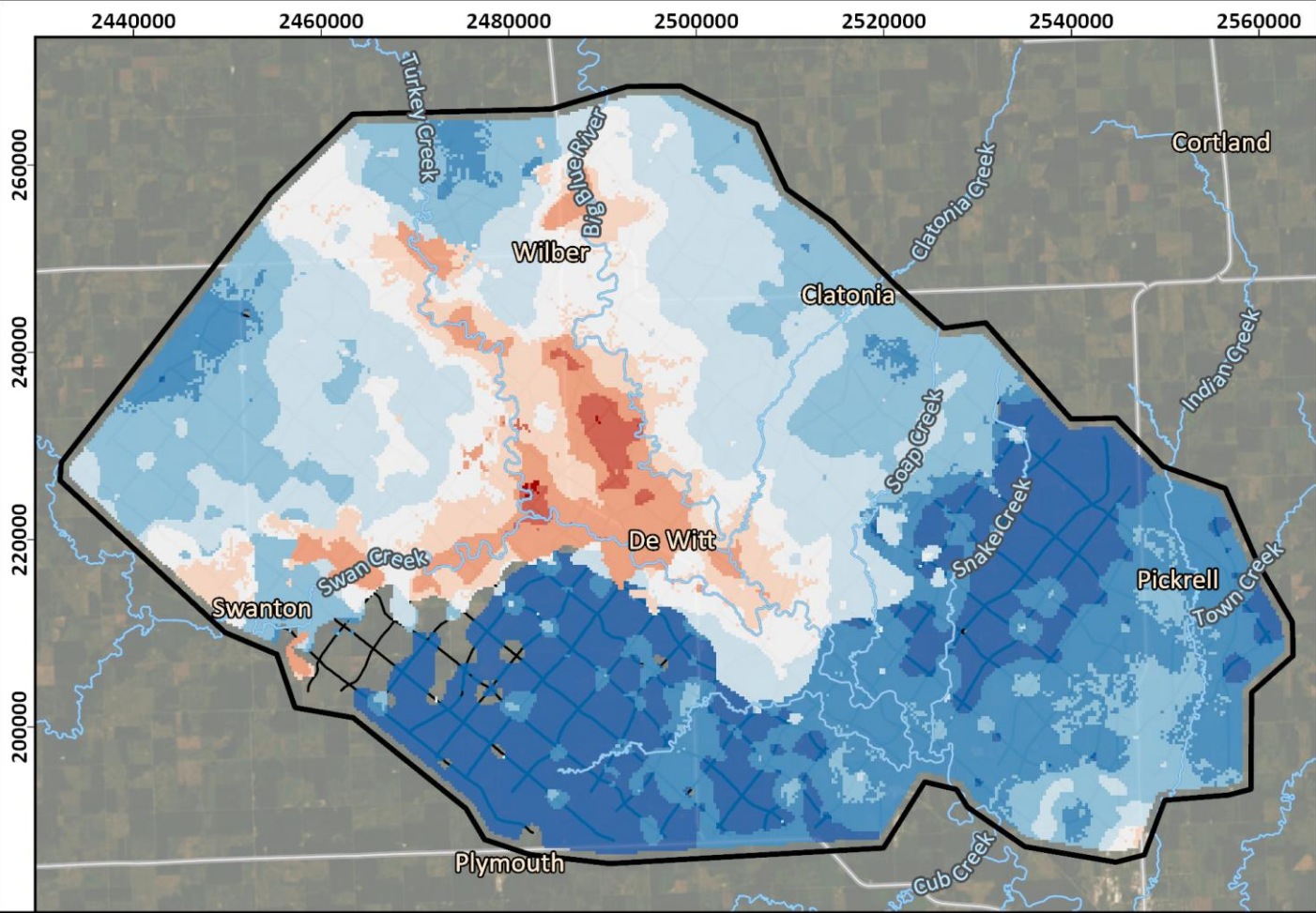


# Near-surface Sand Zones



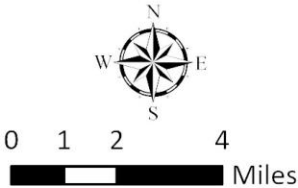
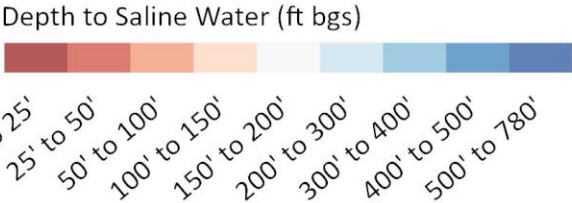


# Estimated Depth to Saline Water



Map Legend

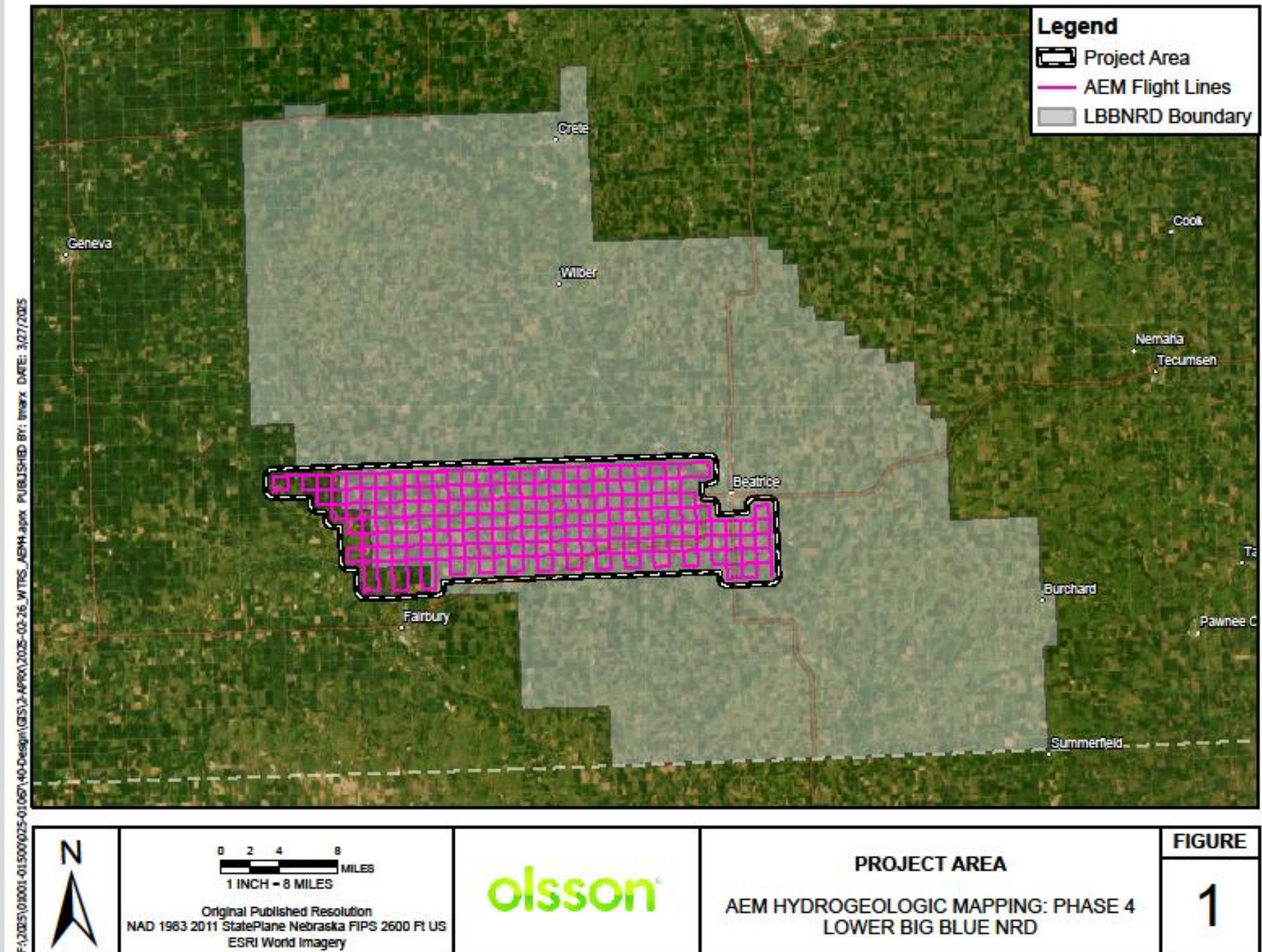
- Survey Extent
- Flight Line (as-flown)



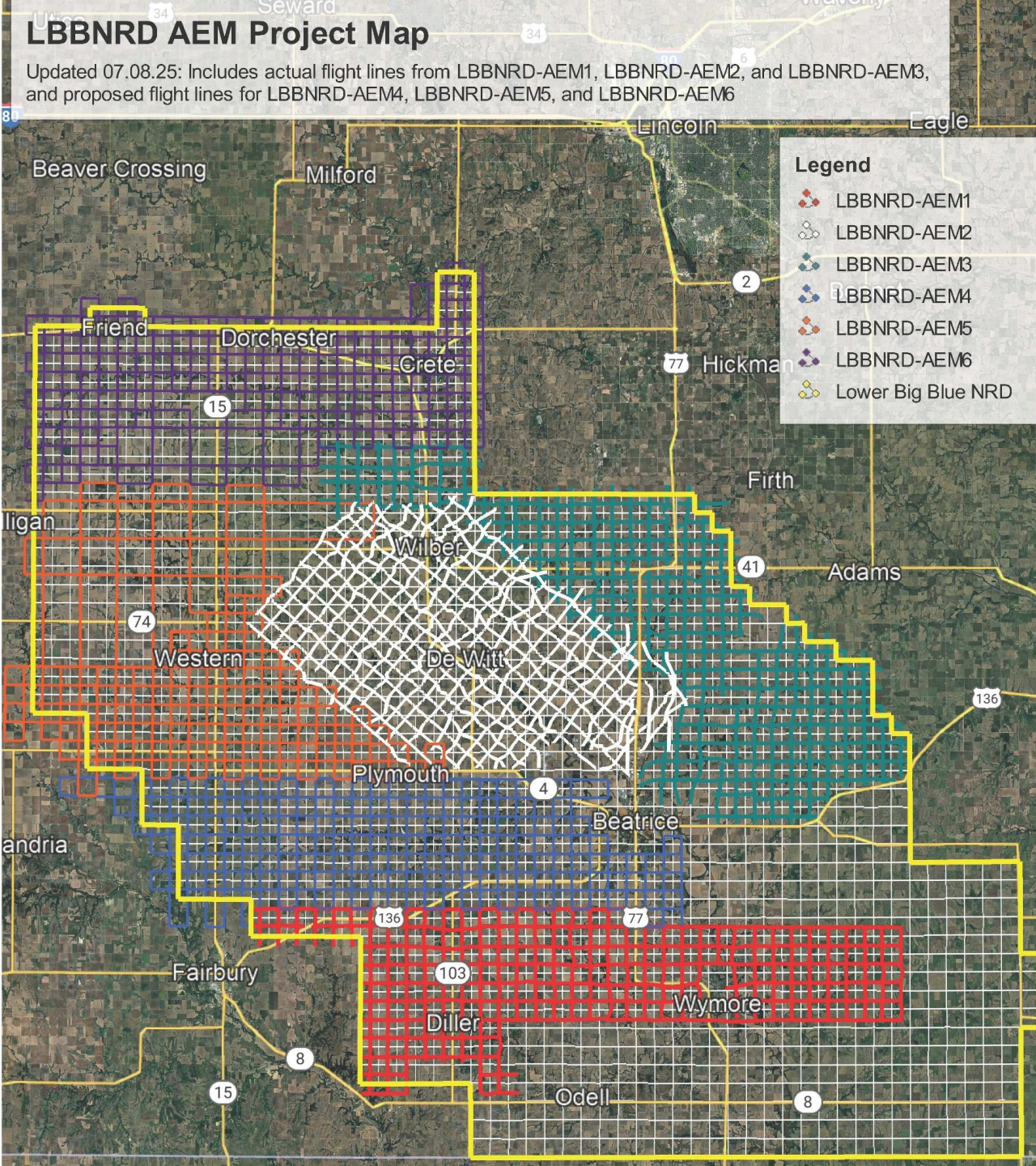
Map Projection: NAD83/  
State Plane Nebraska, feet



## Survey Area 4







## Lower Big Blue NRD AEM Project Timeline

2023: 429.0 line miles in southern Jefferson & Gage Counties (WSF funded 60%)

2024: 535.4 line miles in the middle of the District (WSF funded 60%)

2025: 485.0 line miles in northeastern Gage County & east central Saline County (WSF funded 60%)

2026: Planning to fly northern Jefferson County & west central Gage County (**not funded**)

2027: Planning to fly central and southern Saline County

2028: Planning to fly northern Saline County

# *Rules and Regs*

Phase I 0.0 – 5.99 ppm

- Entire NRD except for the 60 square mile Phase II area
- Permits from NRD for all wells greater than 50gpm
- Operators use voluntary measures to reduce contamination
- NRD increases public education activities relating to groundwater



# *Rules and Regs*

Phase II 6.0 – 9.0 ppm

– Operator Certification

Classes every 4 years on current and new BMPs

Any owner/operator who applies or oversees application of nitrogen fertilizer to fields greater than 20 acres

## ▪ Fall Application

Commercial nitrogen fertilizer delayed until after November 1<sup>st</sup>

- Exception - Fall seeded crops (wheat) and when applications are 30 pounds or less

# *Rules and Regs*

- Demonstration Field

Operator will use his/hers largest irrigated corn or grain sorghum field larger than 20 acres to adopt the following BMPs.

- If no irrigated field, then largest dry land field
  - This field will be used indefinitely during Phase II
- Operator required to have one demonstration field per landlord

# *Rules and Regs*

- Annual Reporting

- Irrigation water analysis for nitrates - NRD

- Basic surface soil test every 4 years - organic matter

- Deep nitrate soil analysis 0-8" and 8-36"

- Commercial nitrogen fertilizer recommendation per UNL guidelines

- Actual rate of fertilizer applied

- Estimated amount of water applied

- Actual Yield

- Other BMPs proven effective



# *Rules and Regs*

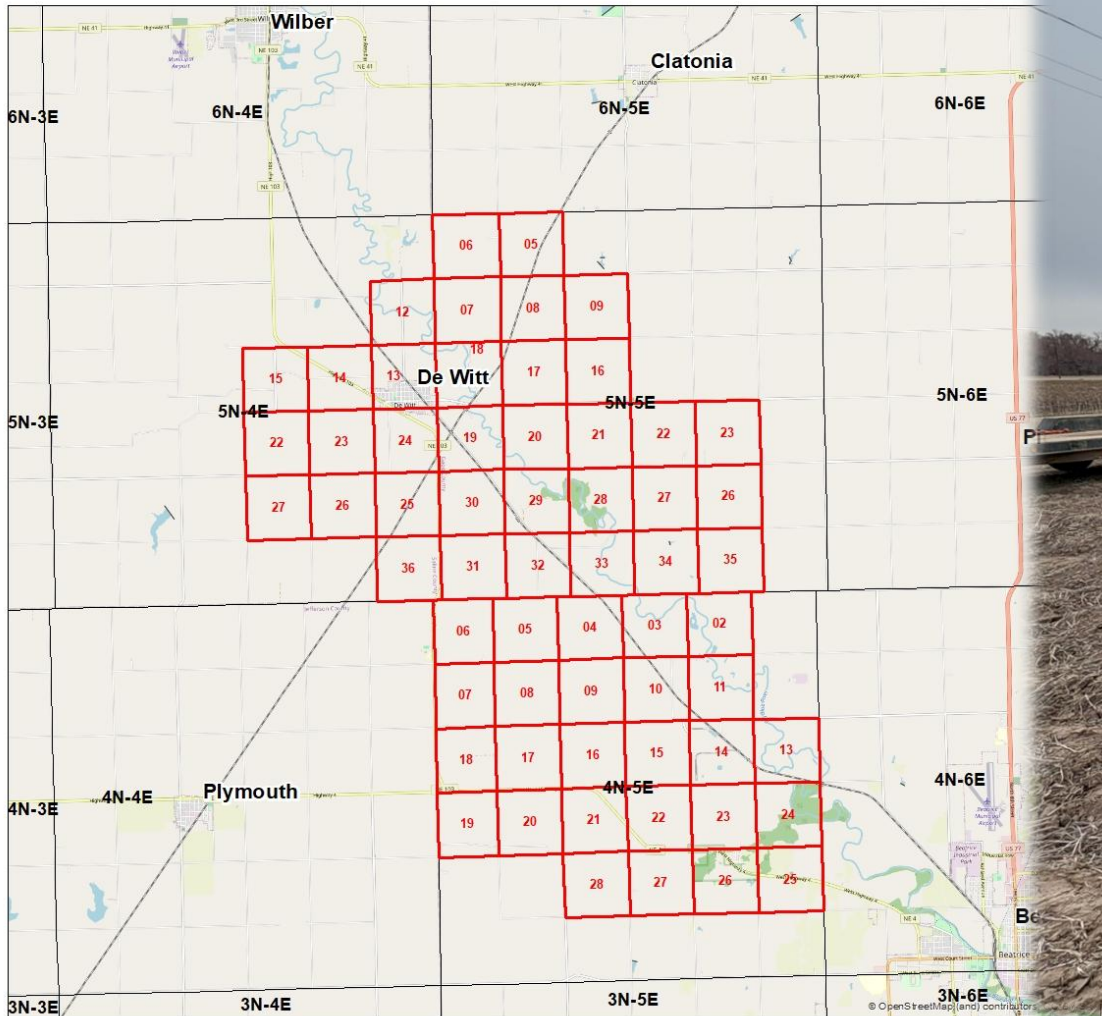
Phase III Greater than 9.0 ppm

- All of Phase II requirements with addition of
  - Application of commercial nitrogen fertilizer prohibited until after March 1<sup>st</sup>
- Annual reporting required on ALL corn and grain sorghum fields larger than 20 acres
- Spring nitrogen application requirements
  - Split application (pre-plant or pre-emergent/post emergent) with with no more than 50% applied as pre-plant or post emergent when 100 pounds per acre or more is required
  - OR use of approved inhibitor if more than 50% is applied pre-plant or pre-emergent and provide proof that inhibitor was used
  - OR all nitrogen fertilizer applied as side dress post-emergent

# Water Quality Cost-Share Programs

Nitrate Phase 2 Water Quality Area

Lower Big  
Natural Resources





# WATERSHED CAPITAL OF NEBRASKA<sup>SM</sup>

## STATE OF NEBRASKA

United States of America, } ss.  
State of Nebraska }

Secretary of State  
State Capitol  
Lincoln, Nebraska

I, Robert B. Evnen, Secretary of State of the  
State of Nebraska, do hereby certify that

a Service Mark indexed as WATERSHED CAPITAL OF NEBRASKA was registered in this office  
on February 13, 2025 for a term of ten years. The name of the registrant is LOWER BIG BLUE  
NATURAL RESOURCES DISTRICT a Nebraska Local Government. Whose address is 805  
DORSEY STREET, BEATRICE, NE 68310.

The date claimed for the first use of the mark anywhere is 01/31/1995. The date claimed for the first  
use of the mark in Nebraska is 01/31/1995.

The class of goods or services is Advertising; business management; business administration; office  
functions. The mark is used on or in connection with NATURAL RESOURCES MANAGEMENT  
FLOOD AND EROSION CONTROL, GROUNDWATER MANAGEMENT, TREE PLANTING,  
EDUCATION, RECREATION.

*This certificate is not to be construed as an endorsement,  
recommendation, or notice of approval of the entity's financial  
condition or business activities and practices.*

In Testimony Whereof,



I have hereunto set my hand and  
affixed the Great Seal of the  
State of Nebraska on this date of

February 13, 2025

A handwritten signature in blue ink, reading "Robert B. Evnen".

Secretary of State



# Snap-Tite Project







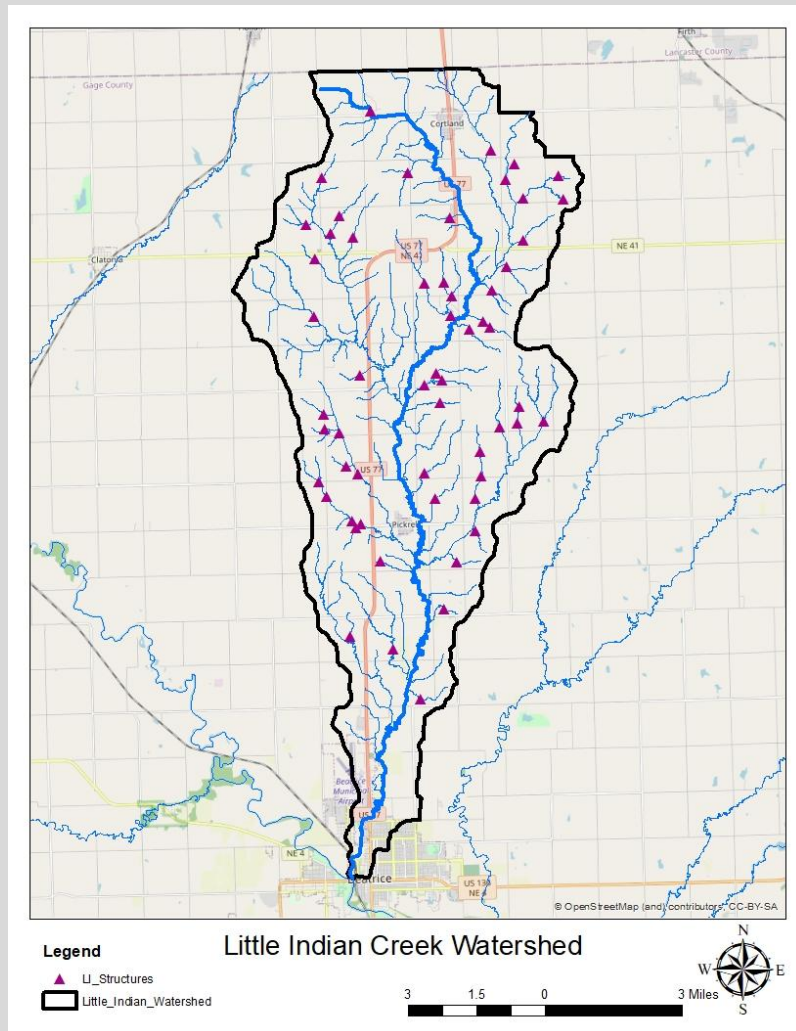
Clatonia 3-A



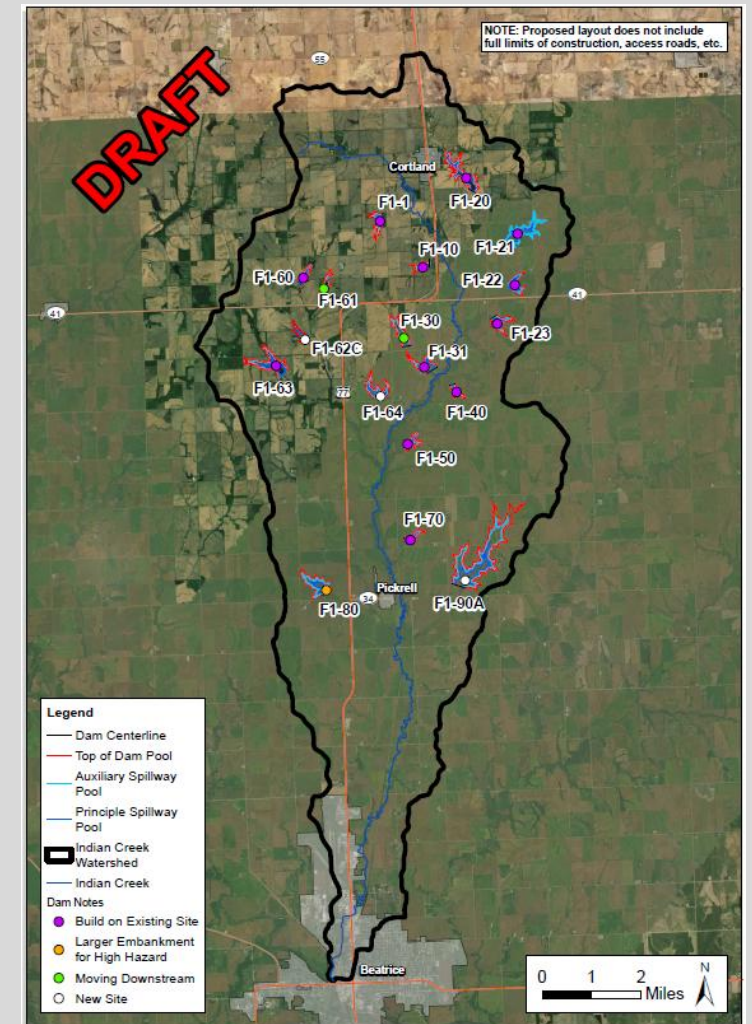


# Little Indian Watershed Flood Preventions and Operations (WFPO)

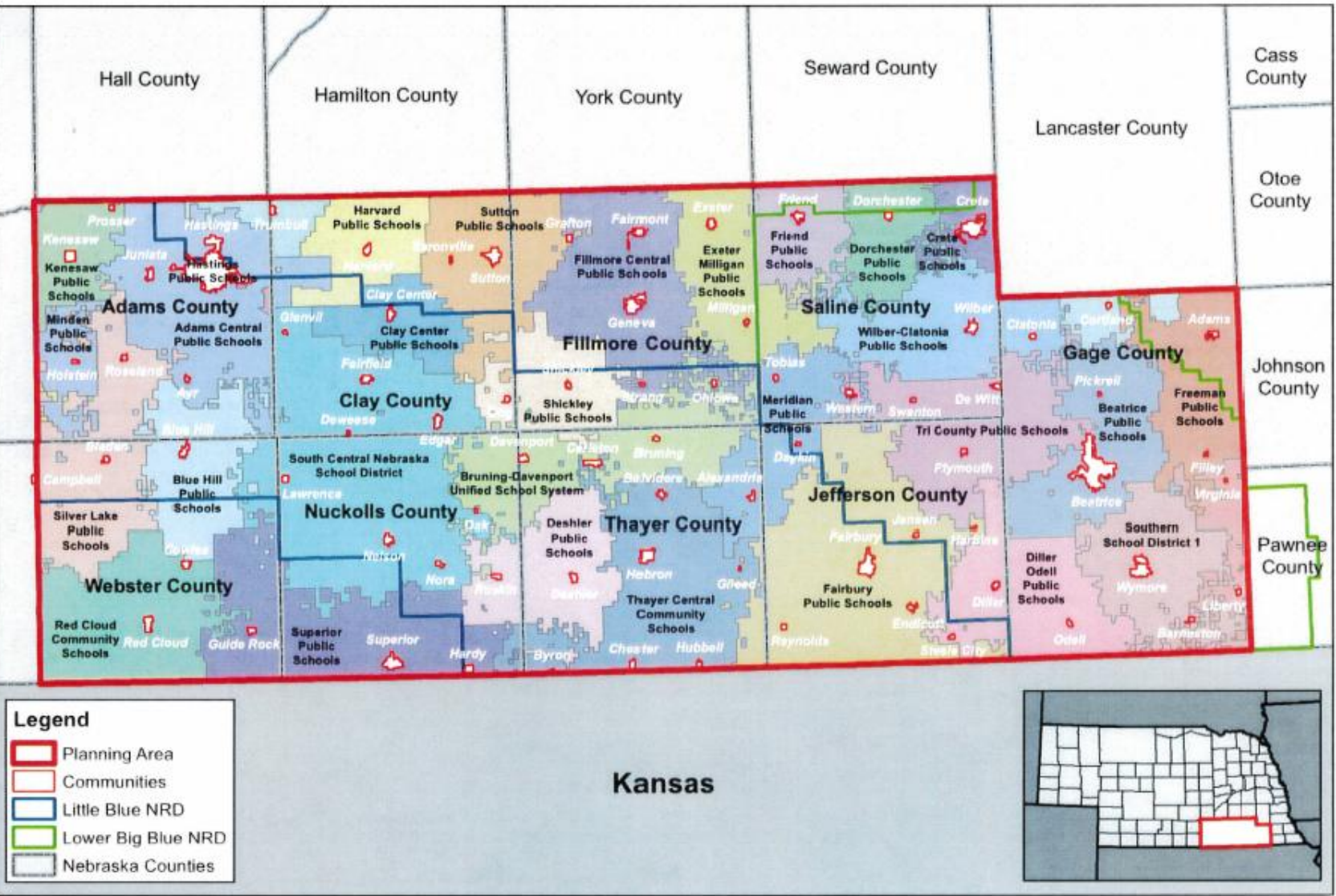
## Current Little Indian Creek Watershed



## Dam Alternatives







- Hazard Mitigation Plan



# Rural Water Upgrades





# New Website Design



Programs ↓

Resources ↓

About ↓

Ask a Question 

# Watershed Capital of Nebraska

Ask a Question 

Programs ↗

Groundwater ↗

Recreation ↗

Forms ↗

News & Info ↗

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Rural Water ↗

Education Resources ↗





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New Office/Shop





New Office/Shop





New Office/Shop





New Office/Shop





New Office/Shop





New Office/Shop





New Office/Shop



