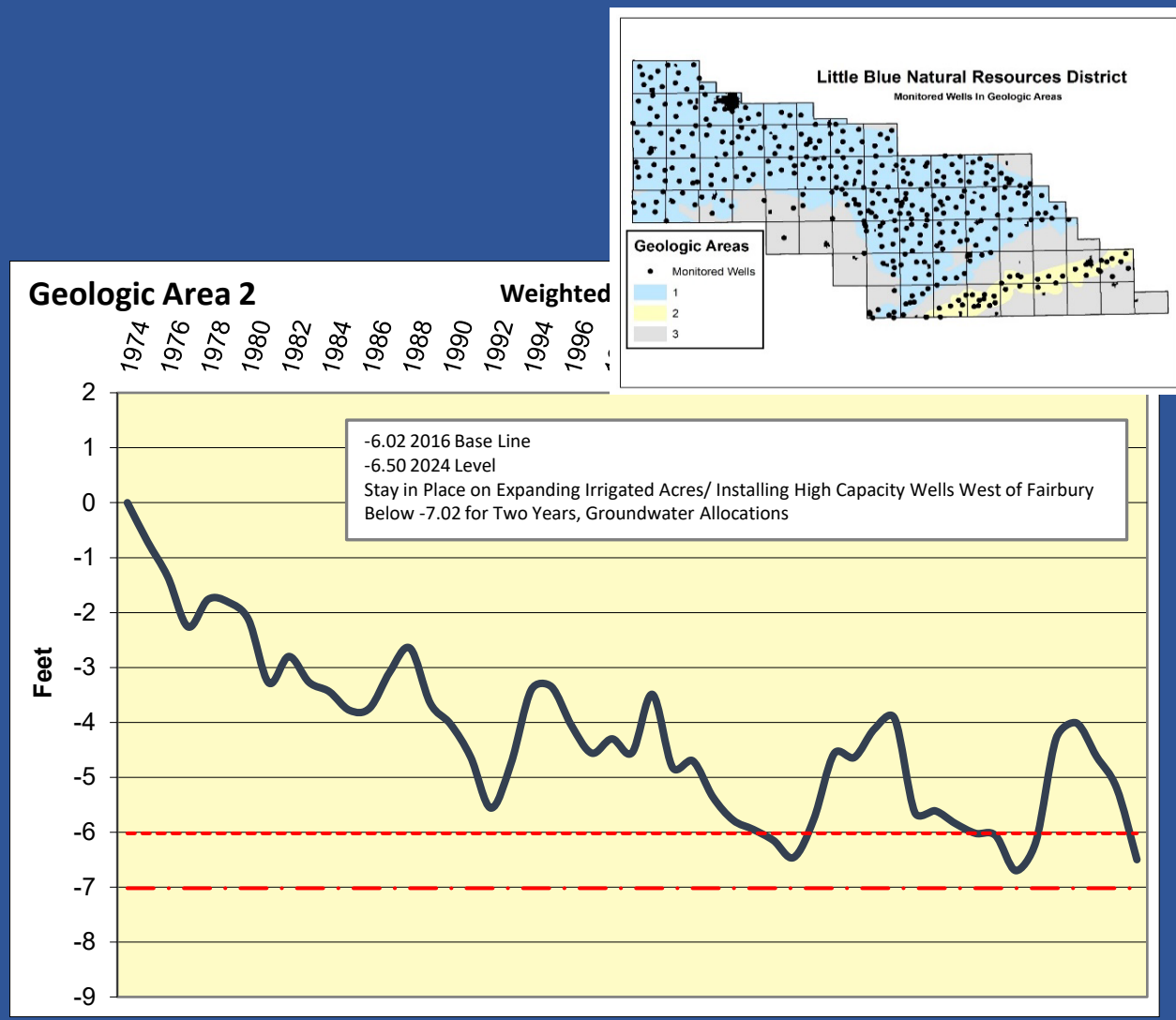
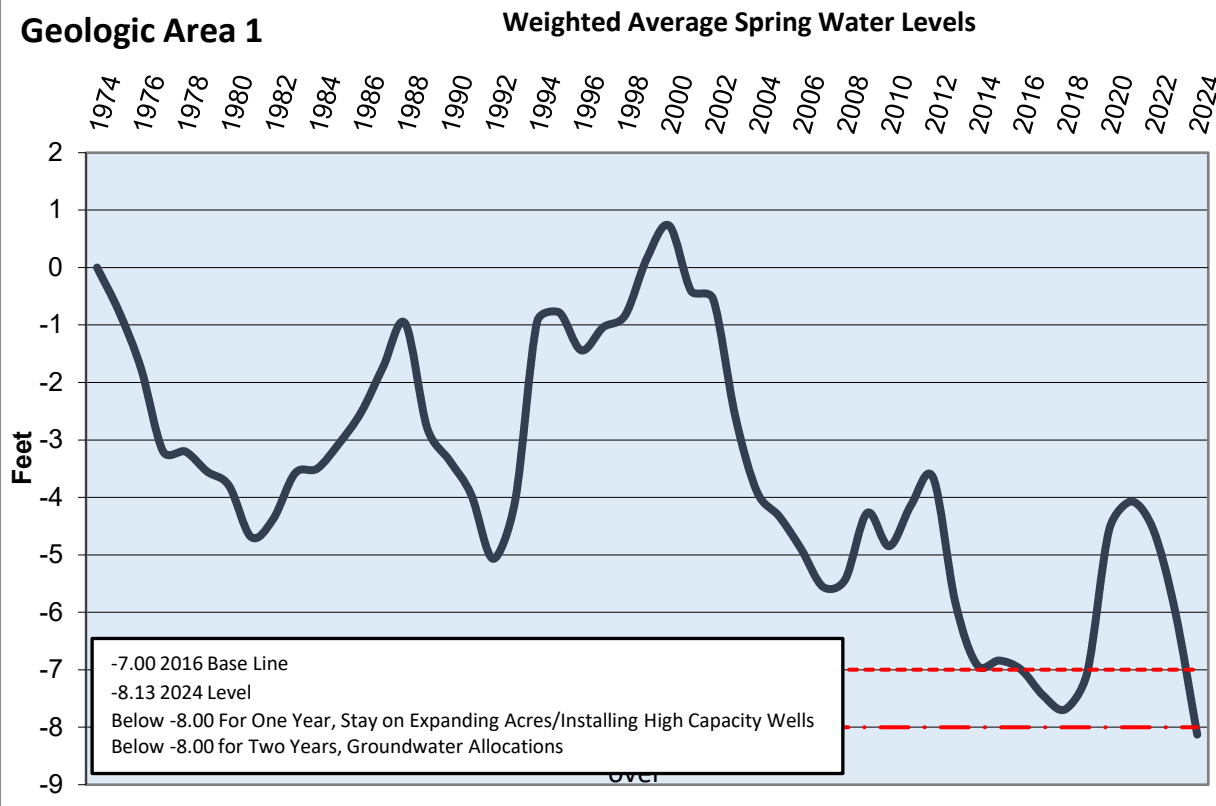


Little Blue Natural Resources District 2024 Integrated Management Plan Report

Updates for September 25, 2024



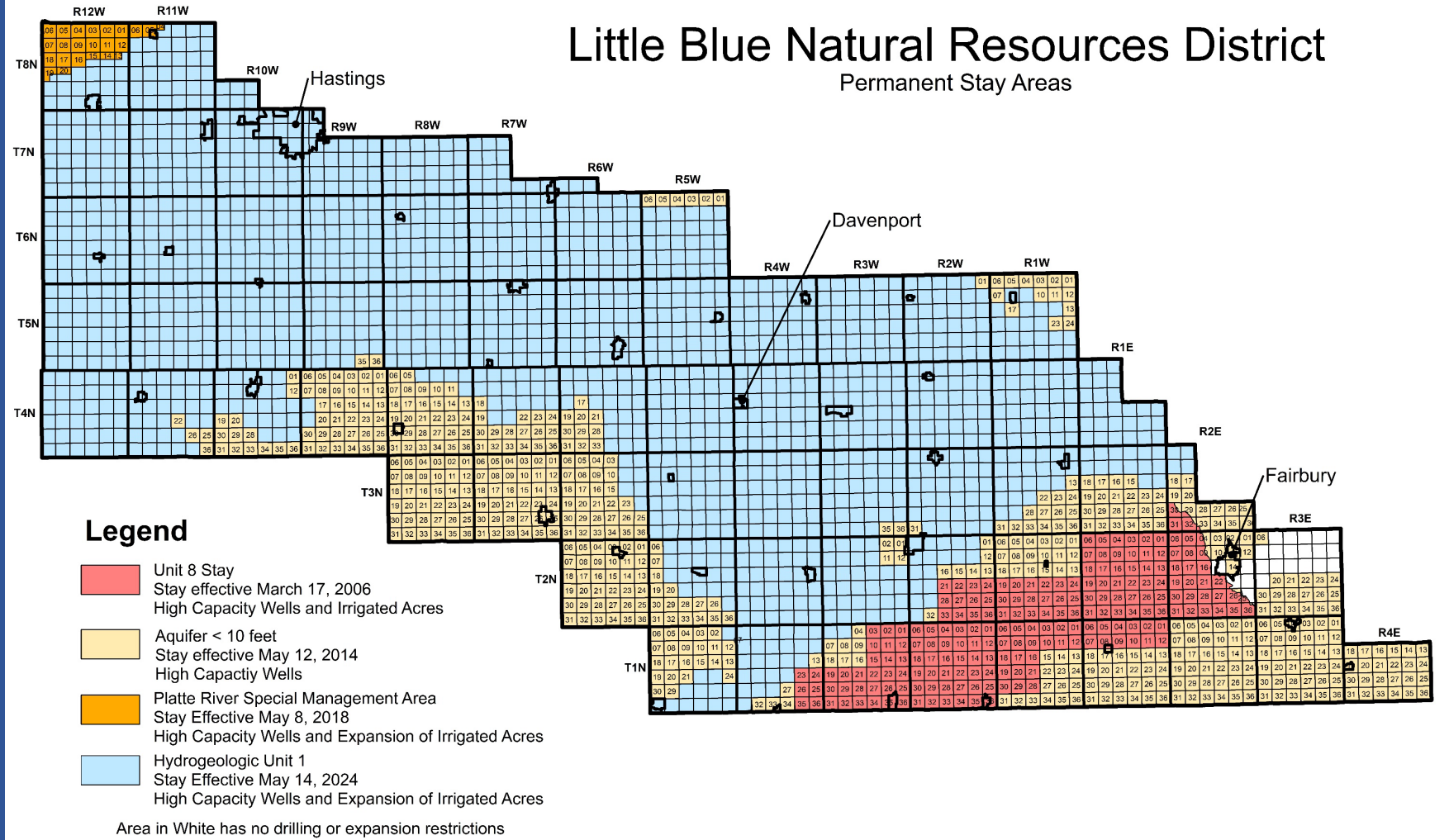


Geologic Area 1 was 0.13 feet below trigger for stay with spring 2024 measurements
 Geologic Area 2 was 0.52 feet above trigger for stay with spring 2024 measurements

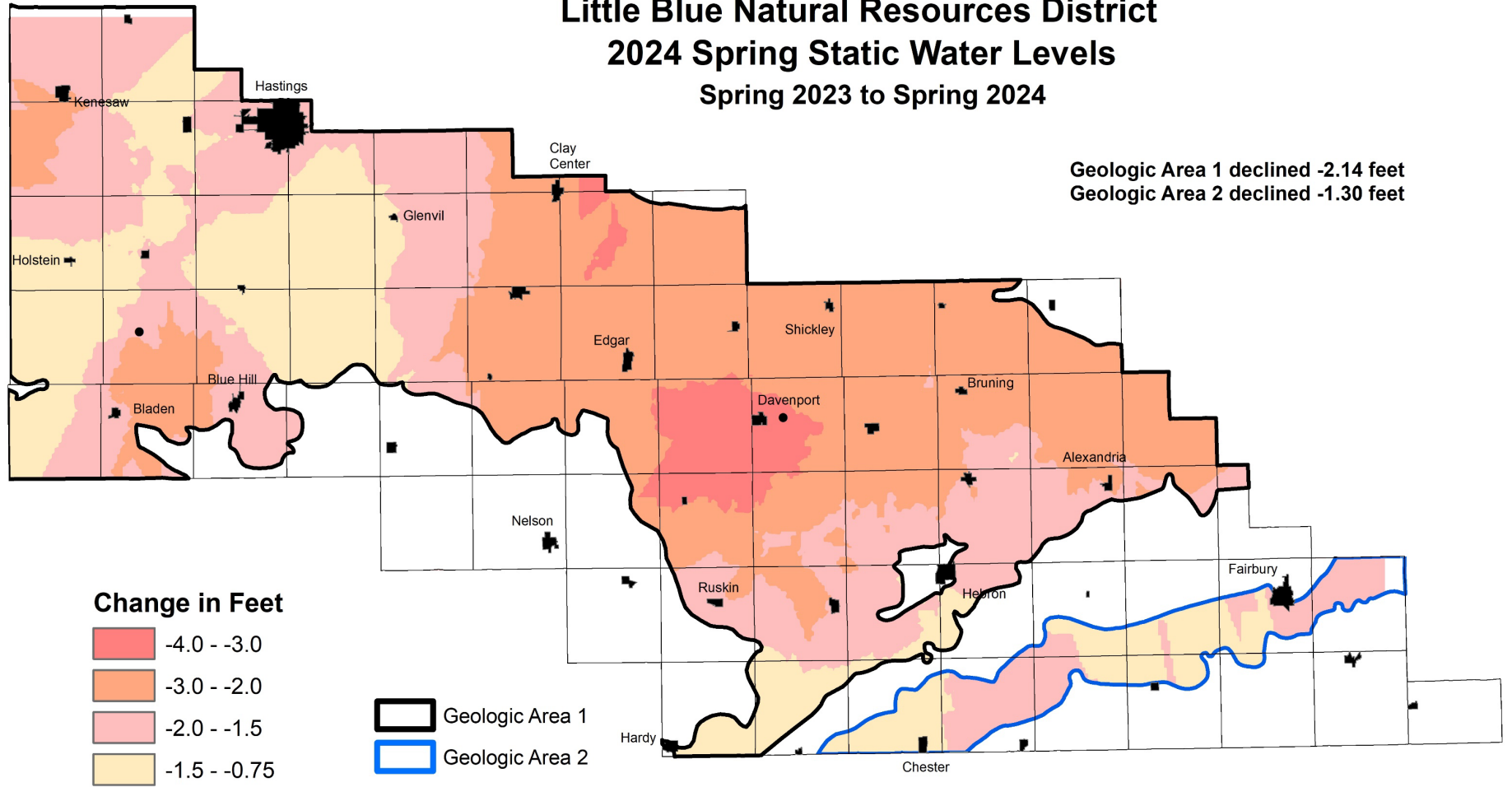


Little Blue Natural Resources District

Permanent Stay Areas

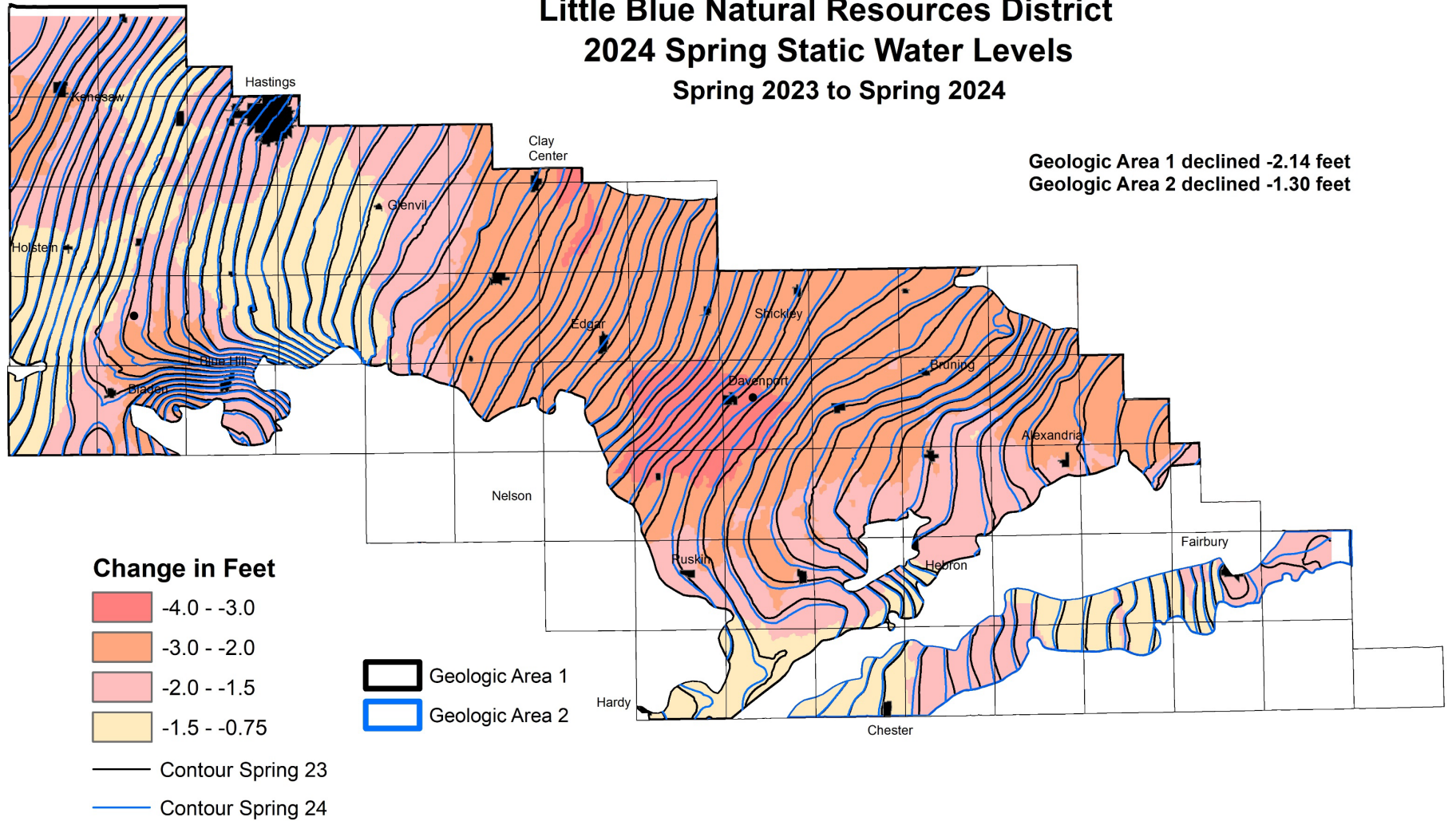


Little Blue Natural Resources District 2024 Spring Static Water Levels Spring 2023 to Spring 2024



Little Blue Natural Resources District 2024 Spring Static Water Levels Spring 2023 to Spring 2024

Geologic Area 1 declined -2.14 feet
Geologic Area 2 declined -1.30 feet



District's database has 6,529 active wells and 6,153 active flow meters

2019 - average irrigation use was 2.4 inches per acre – 36.22” rainfall

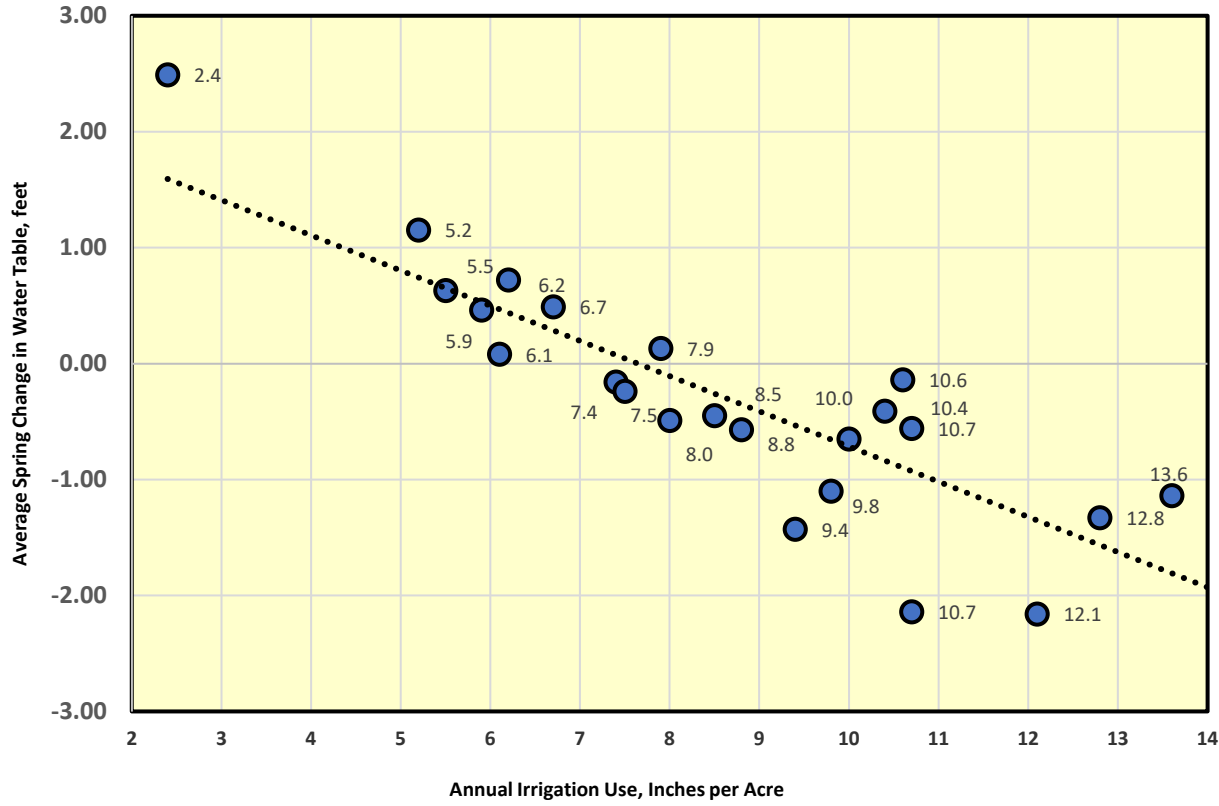
2020 - average irrigation use was 6.7 inches per acre – 21.28” rainfall

2021 - average irrigation use was 8.0 inches per acre – 26.39 “ rainfall

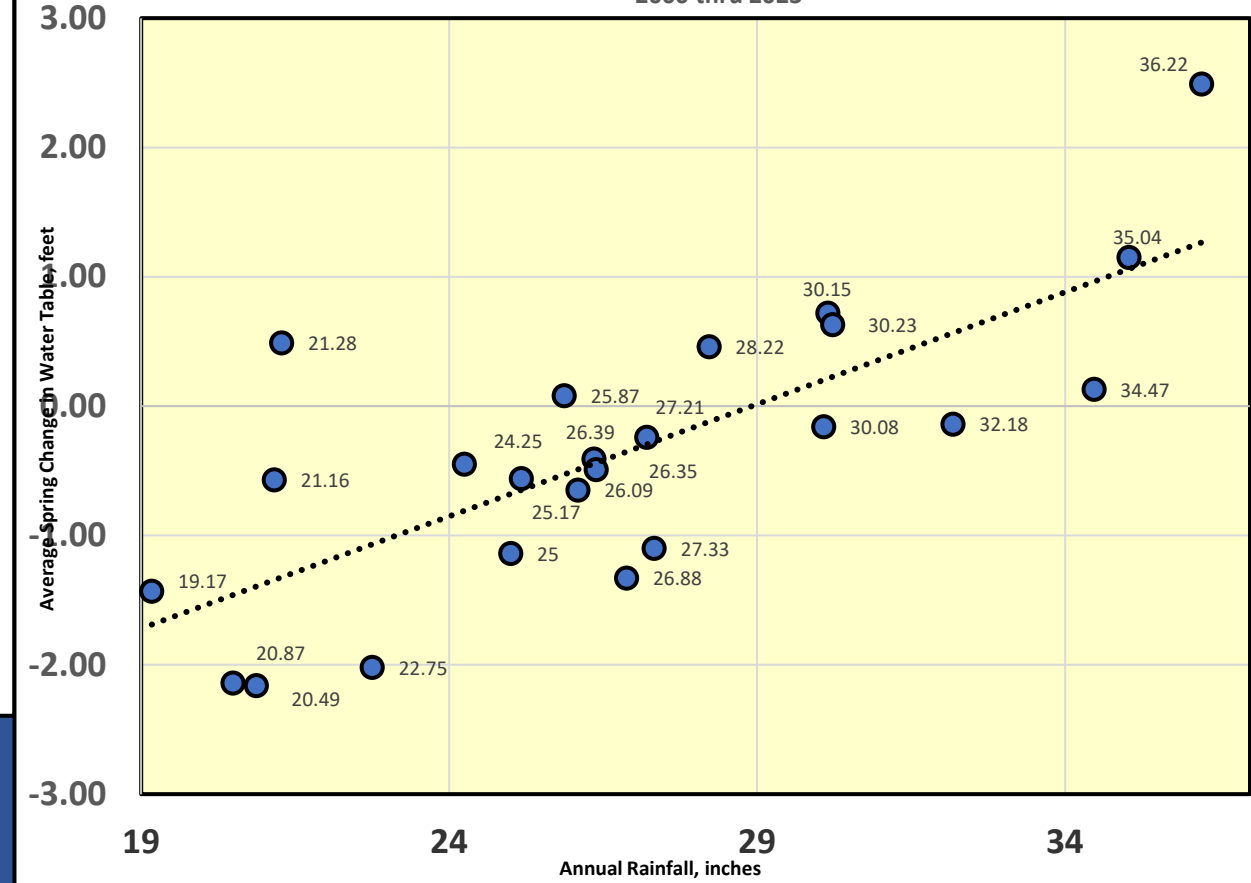
2022 - average irrigation use was 9.4 inches per acre – 19.17” rainfall

2023 - average irrigation use was 10.7 inches per acre – 20.49” rainfall

Annual Irrigation Withdrawal to Water Level Change.
2000 thru 2023



Annual Rainfall to Water Level Change
2000 thru 2023



Certified Irrigated Acres

initial certification completed December 31, 2018

- 2019 – 636,180 acres
 - 2020 – 653,780 acres 2.7% increase
 - 2021 – 662,742 acres 1.3% increase
 - 2022 – 668,248 acres 0.8% increase to September 2022
 - 2023 – 671,404 acres 0.4% increase from September 2022
 - 2024 – 672,940 acres 0.2% increase from September 2023
-
- Certified 26,545.24 acres in Unit 8
 - 9,510.40 acres PRRIP area
 - 1,527.14 acres Unit 3
 - no additions since creation



Average wildlife use was 9.7 inches per acre on 4,309 acres
Average golf course use was 23.1 inches per acre on 452 acres

Filling ponds and sprayers used 322,751,268 gallons

NAD Groundwater Extraction/Treatment used 1.766 billion gallons

Water use for the municipalities and villages for:

2019 3,077,984,693

2020 3,646,231,938

2021 3,365,870,947

2022 3,665,361,948

2023 3,744,333,409

Acres of Gravity Irrigation

2019 – 36,900

2020 – 34,534

2021 – 31,965

2022 – 28,701

2023 – 25,200

Rule Changes

Relocation of Certified Acres

- Same ownership
- Mortgage holder notified
- Irrigation system considered equal or more efficient

Pooling of acres for allocations was removed
Allocations 65” for 5 years, nothing up front

Well Permits August 2023 to August 2024

42 Irrigation Wells, 9 were replacements

1 Other (fire suppression)

3 Livestock

4 Replacements after stay

1 other (fire suppression)

Irrigation Well Permitting Process

9 required a soil conservation plan

0 required pumping test



Variations

1. variations to District rules are considered by the Water Resources Committee on a case-by-case basis with recommendations made to full board
2. variations are only considered if sent to the Committee by a board member or manager

- 2 variations were approved
- Adding a second well for 2 pivots being irrigated by a 10 inch well
- Converting gravity irrigation to pivot

1. Groundwater Transfers Off Overlying Land

1. definition of overlying land for transfers is limited to a contiguous tract no larger than 160 acres
2. receiving tract can be no larger than where the transfer originates from
3. transfer can only be to adjacent tract of land

1 transfer was approved in Jefferson county
1 transfer denied in Thayer county



WaterSMART Small-Scale Water Efficiency Project Grant Application

NOFO: R24AS00059

Fiscal Year 2024

Bureau of Reclamation

Well Meter Upgrade and Water Efficiency Project

January 16, 2024

PROJECT SUMMARY

- Upgrade 81 aging flow meters on high-capacity wells in areas showing groundwater declines
- New meters will be the latest models featuring digital readouts, telemetry capabilities, and more durable components
- Real-time flow data can have a significant impact on water use and conservation.
- Meters will be purchased/installed beginning in Spring 2025



BUDGET SUMMARY

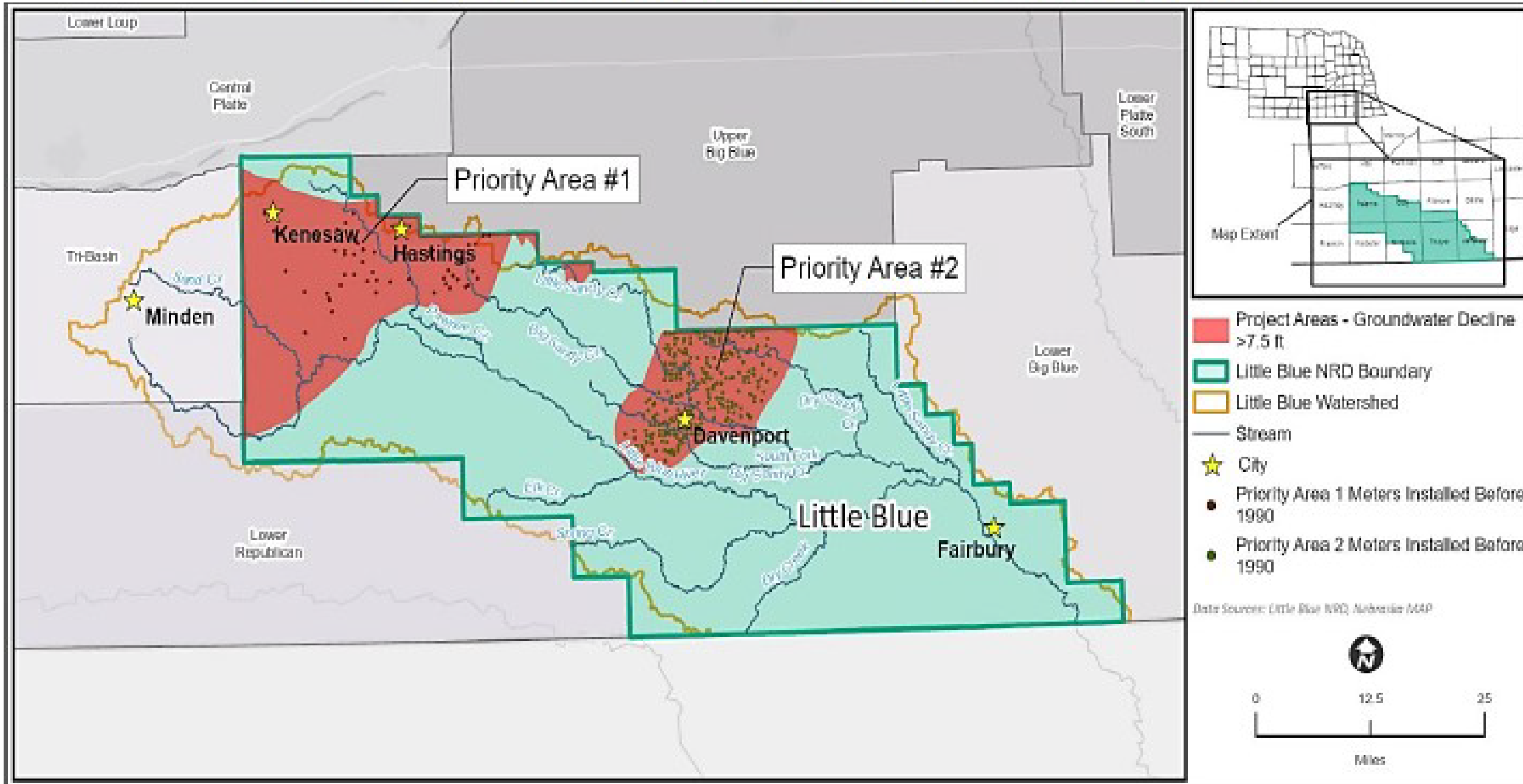
Table 1. Summary of Non-Federal and Federal Funding Sources

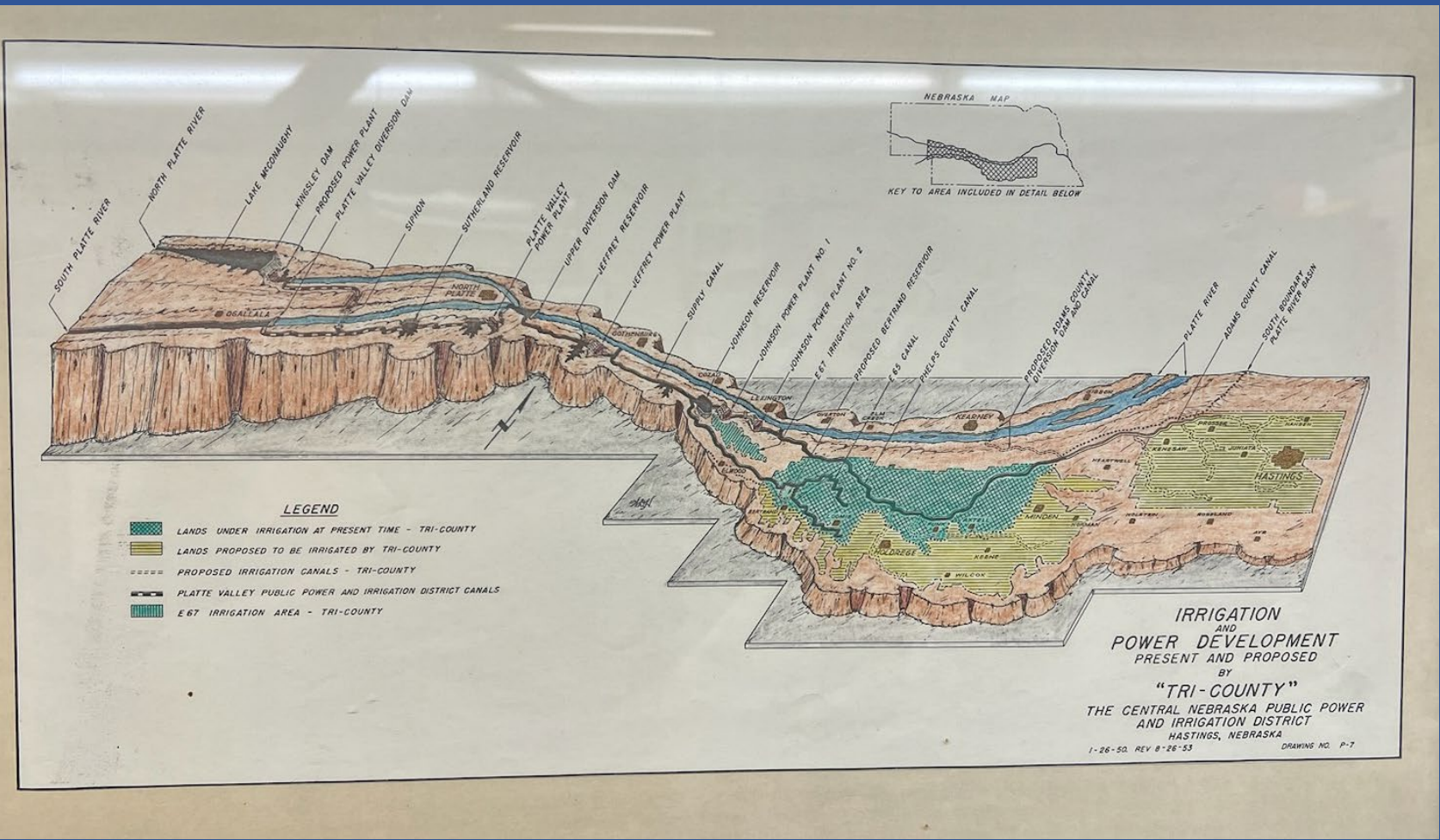
FUNDING SOURCES	AMOUNT	PERCENT
Non-Federal Entities		
Little Blue Natural Resources District	\$ 105,200	51%
Non-Federal Subtotal	\$ 105,200	51%
Requested BOR Funding	\$ 100,000	49%
TOTAL PROJECT FUNDING	\$ 205,200	100%

* This will fund approximately 81 new meters



Figure 2 - Project Priority Areas and Pre-1990 Meter Locations





Investigating potential for groundwater recharge project with diversion of Platte River water into inactive surface water canal in Adams county



Questions or Comments?

