

North Dakota Bi-Weekly Drought Update

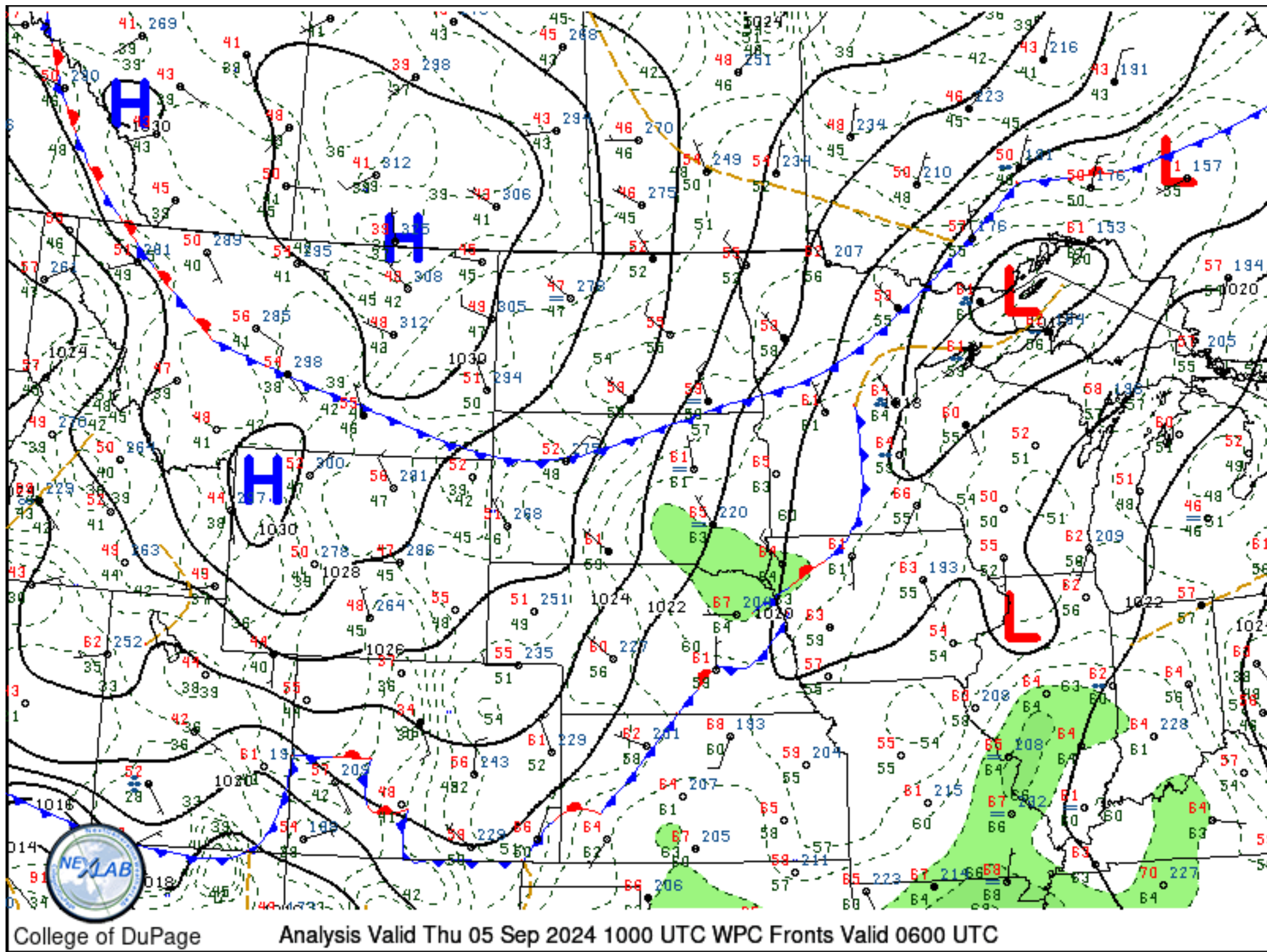
Daryl Ritchison, September 5, 2024

West

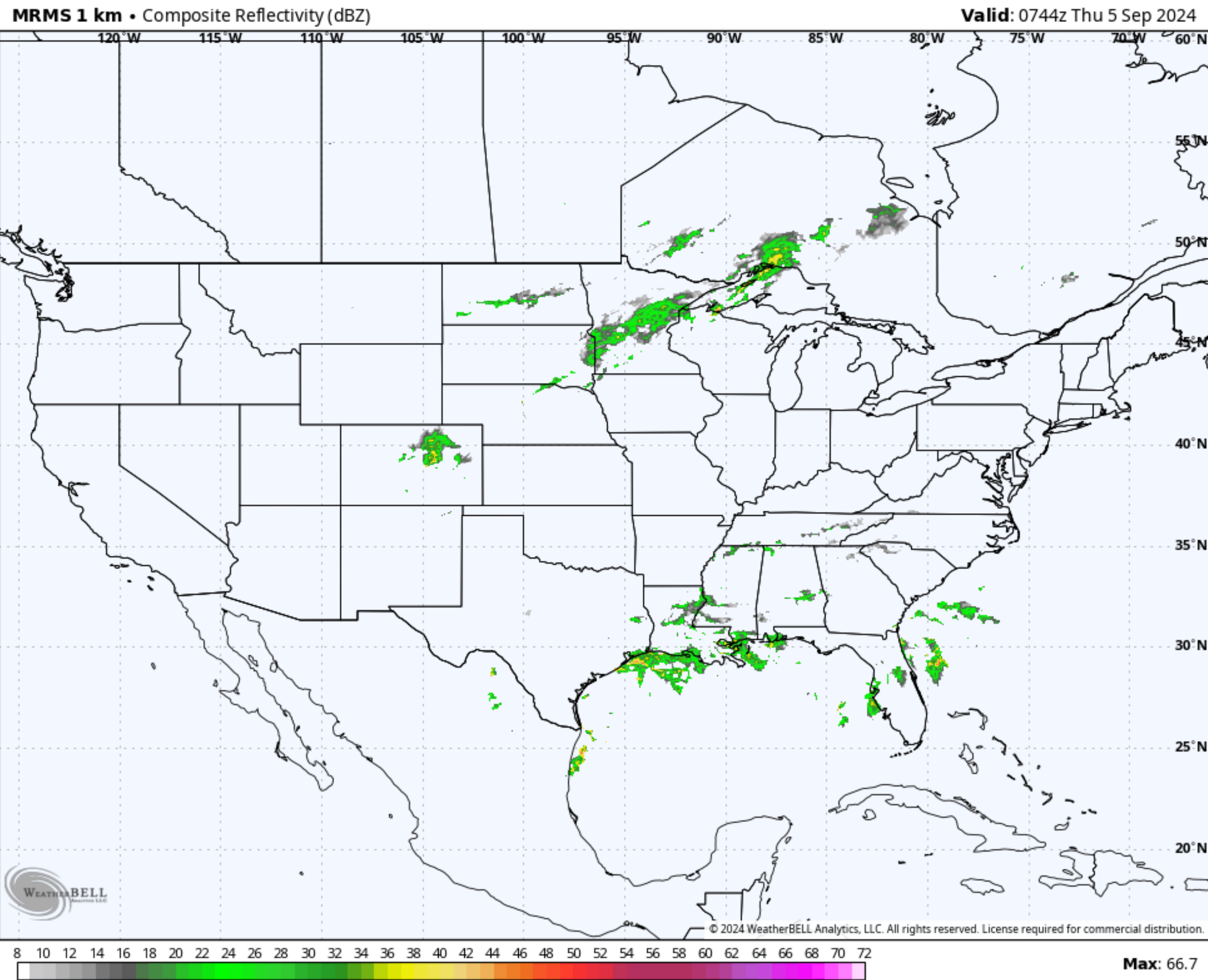


NDAWN Wirch

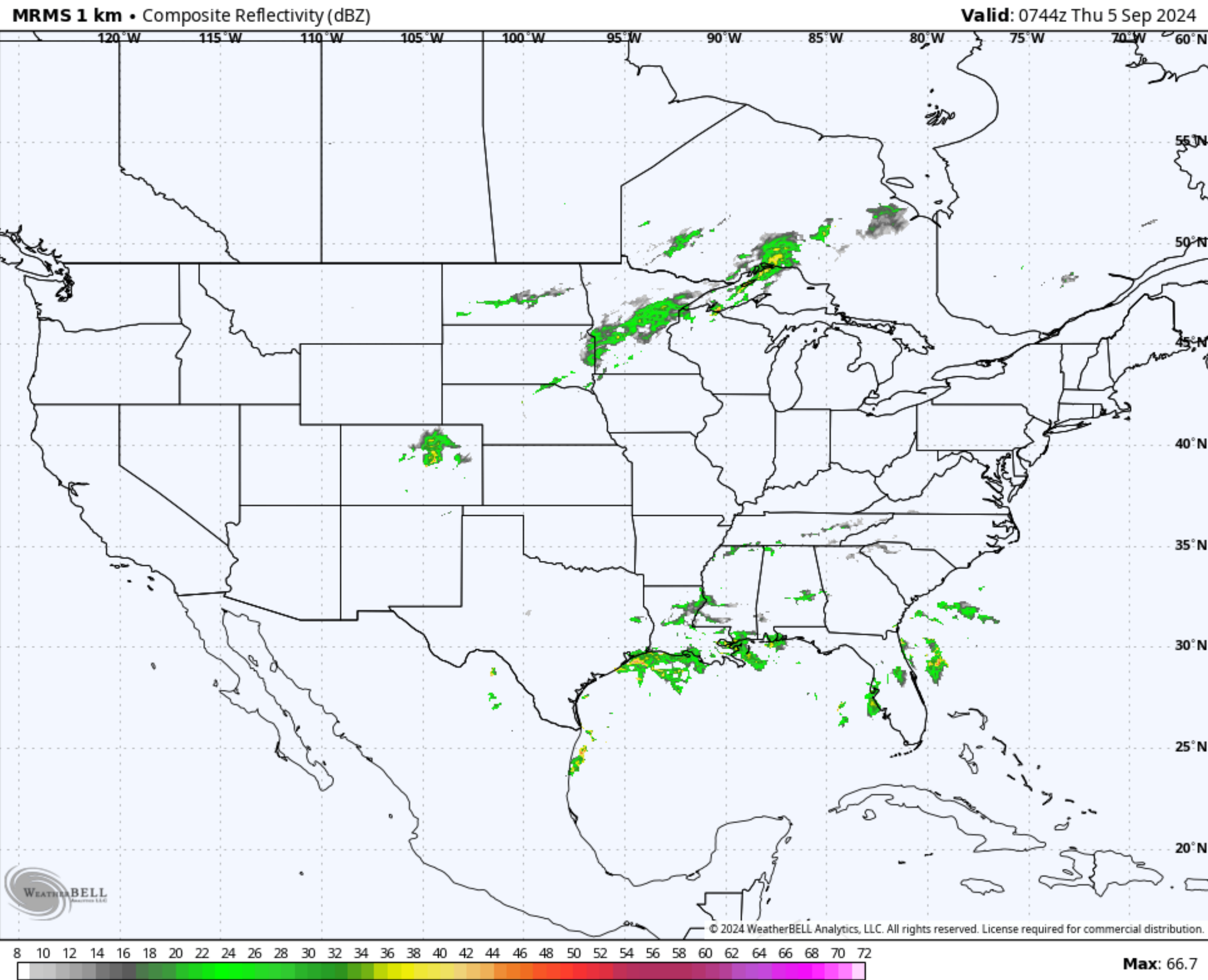
09/04/2024 08:15:41 PM



National Surface Map



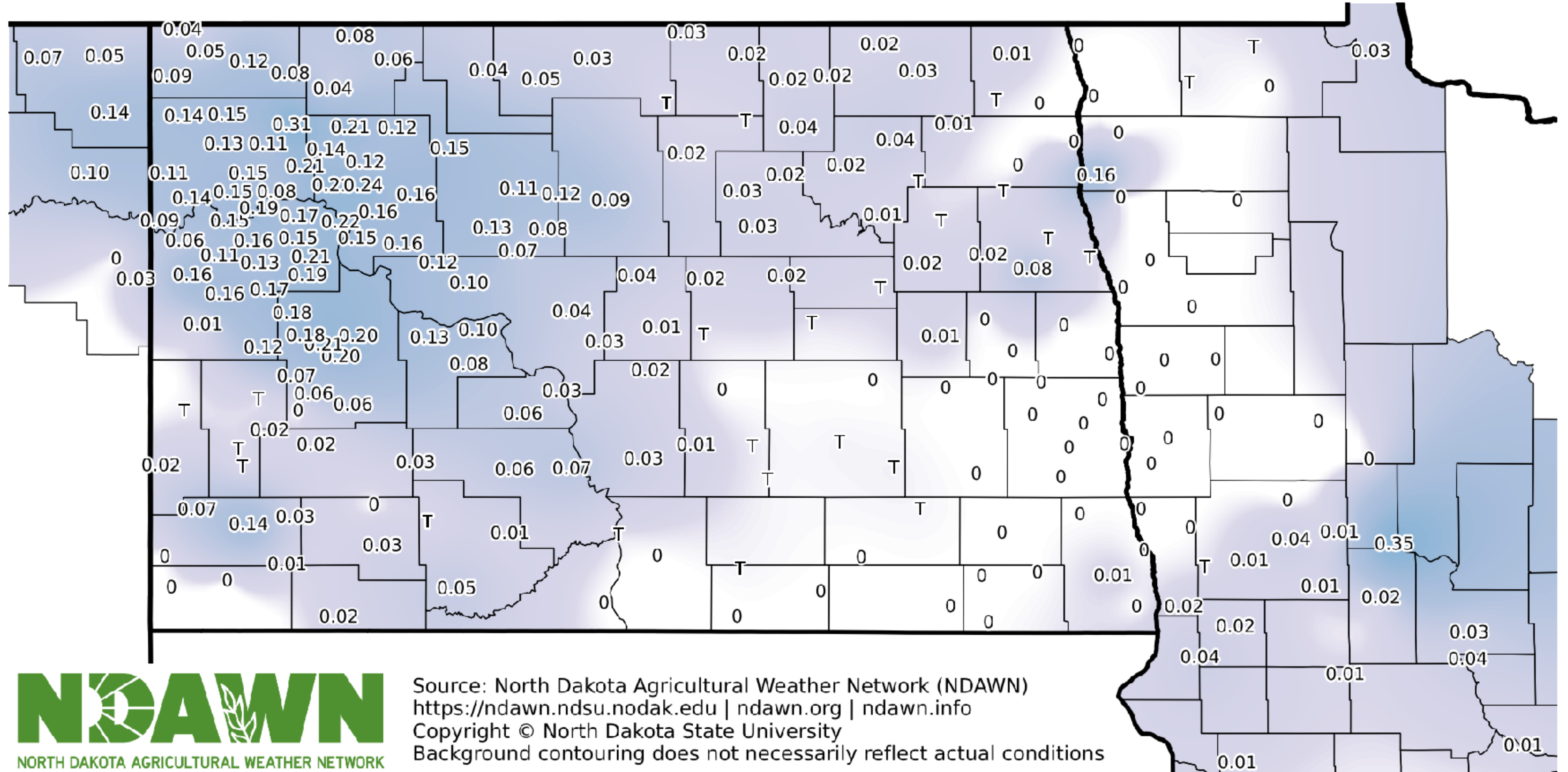
Radar This Morning



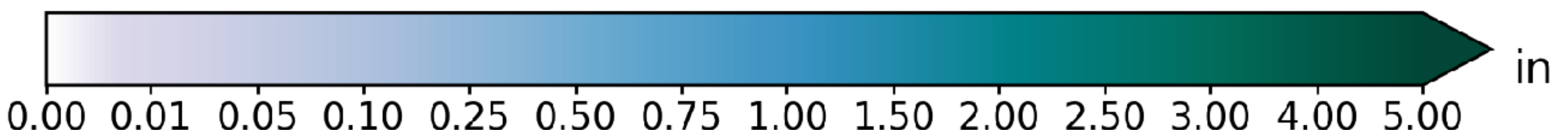
Radar This Morning

Total Rain Since Yesterday (in)

Sep 05 2024 06:11 AM

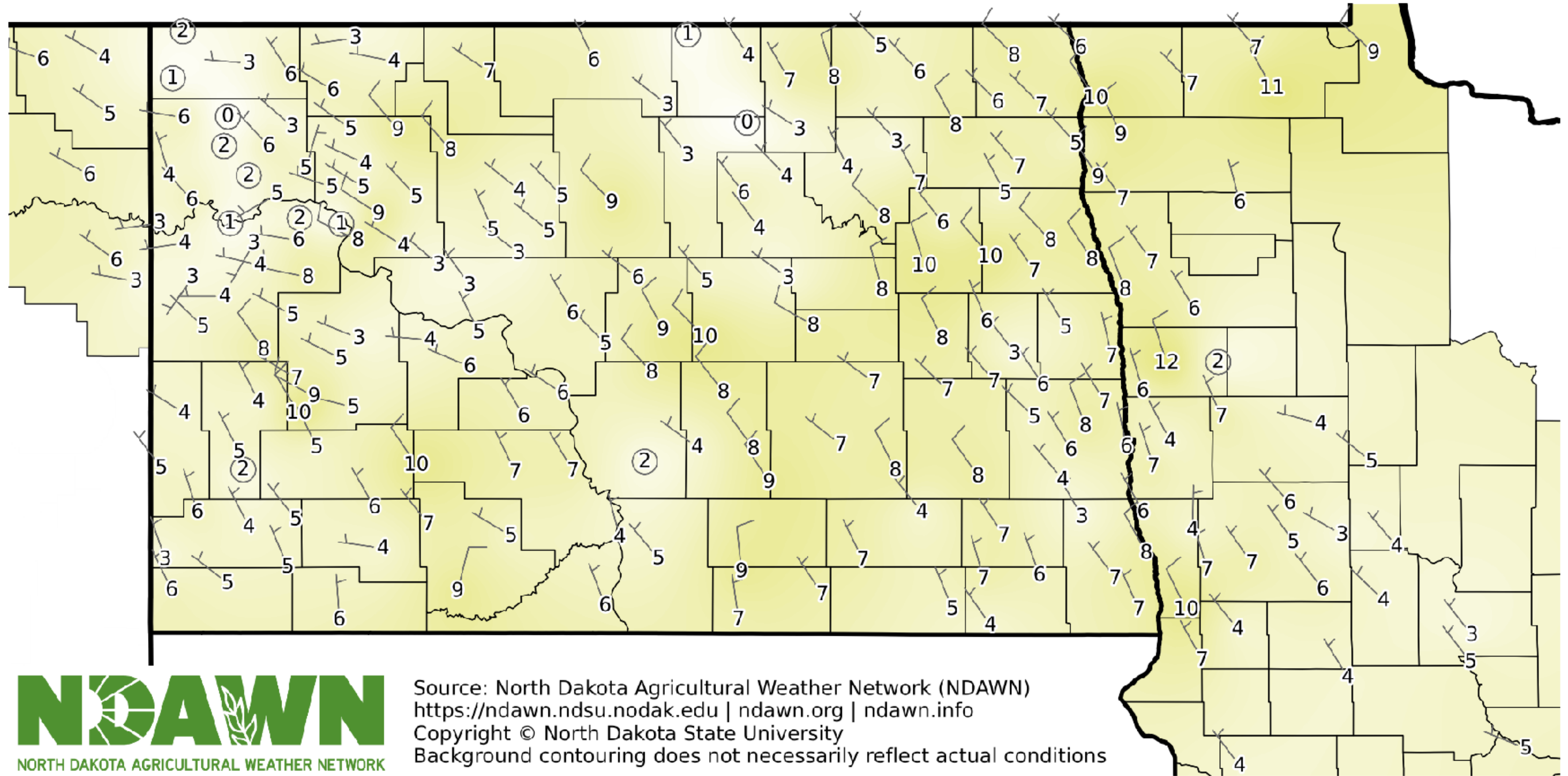


Source: North Dakota Agricultural Weather Network (NDAWN)
<https://ndawn.ndsu.nodak.edu> | ndawn.org | ndawn.info
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Background contouring does not necessarily reflect actual conditions



Wind Speed & Direction @ 10ft (mph)

Sep 05 2024 06:06 AM



Source: North Dakota Agricultural Weather Network (NDAWN)

<https://ndawn.ndsu.nodak.edu> | ndawn.org | ndawn.info

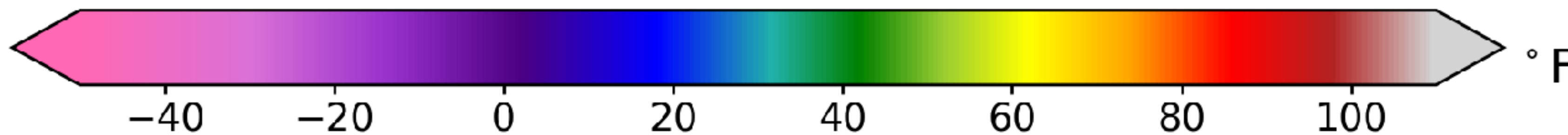
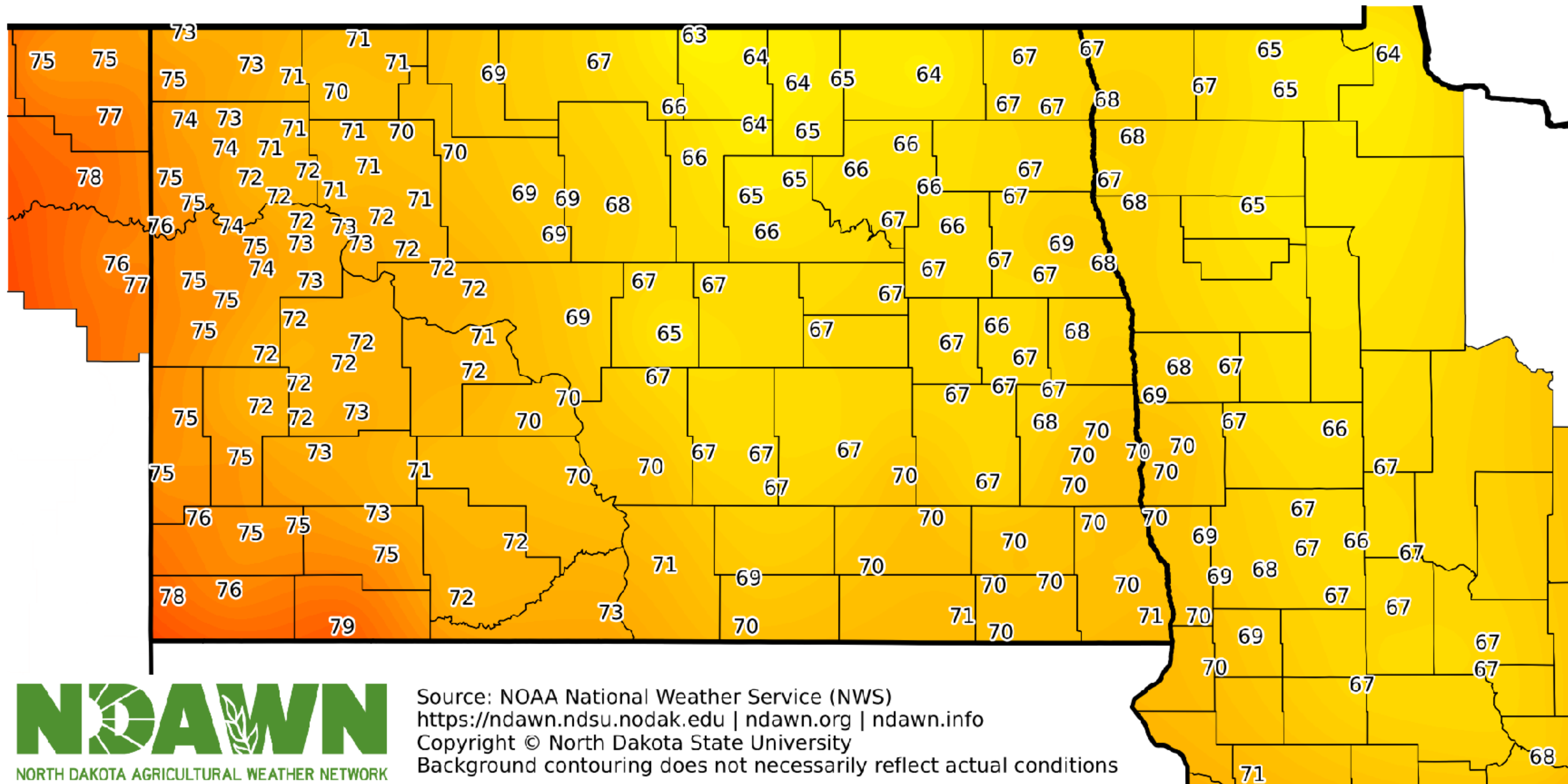
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Background contouring does not necessarily reflect actual conditions



NWS Forecast Maximum Temperature for Tomorrow (° F)

Created: Sep 05 2024

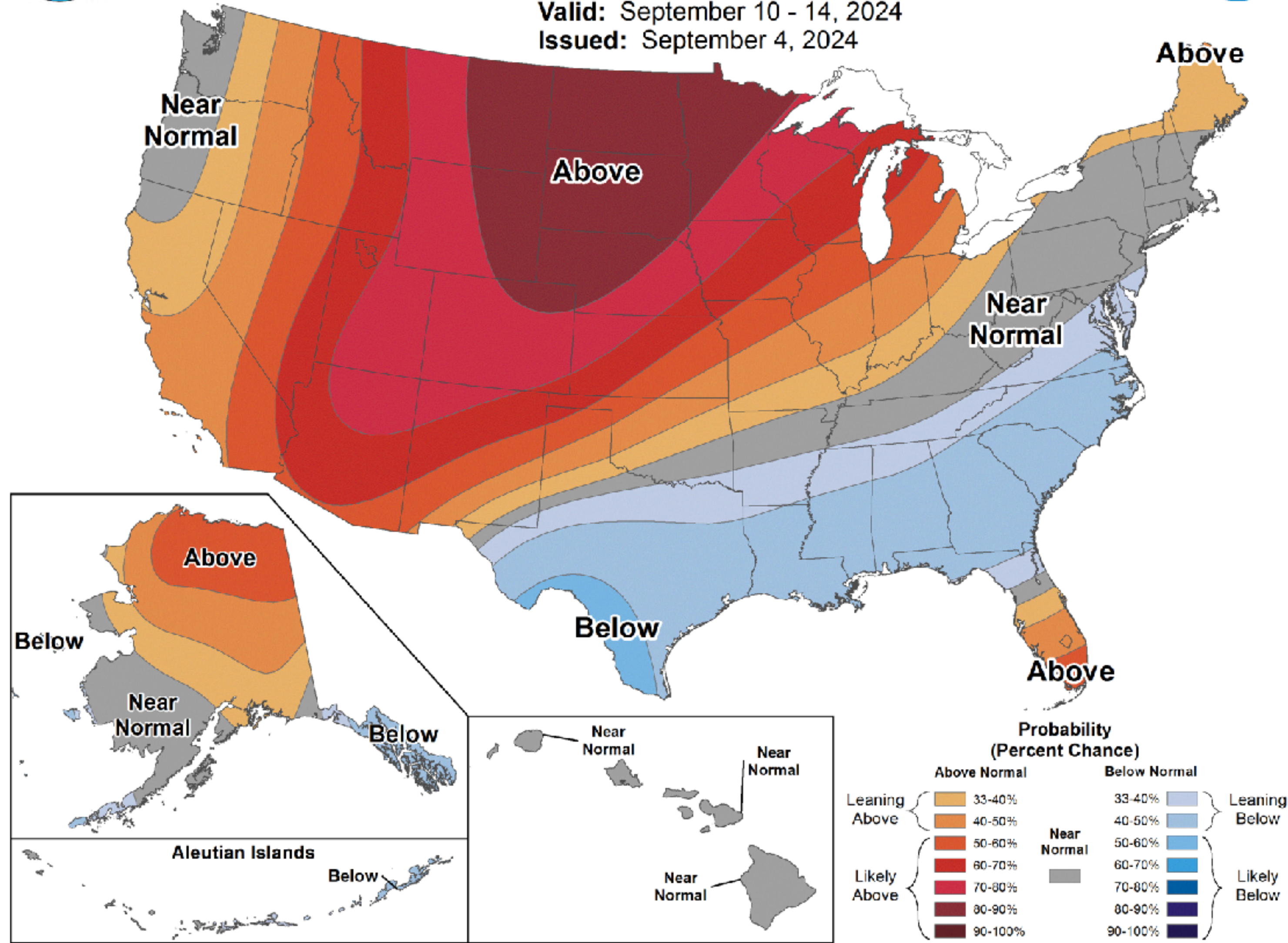




6-10 Day Temperature Outlook



Valid: September 10 - 14, 2024
Issued: September 4, 2024



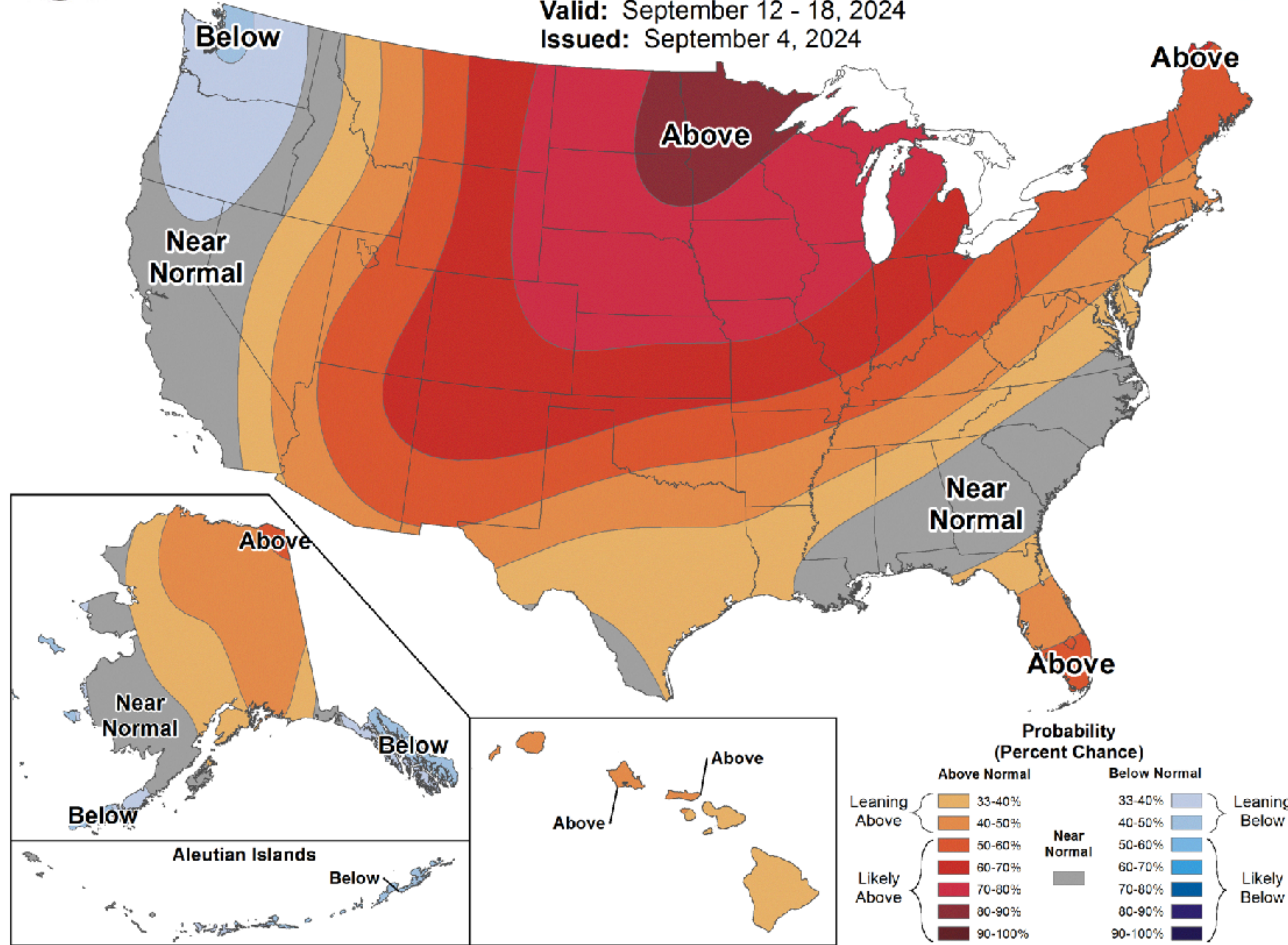
6-10 Day Outlook



8-14 Day Temperature Outlook



Valid: September 12 - 18, 2024
Issued: September 4, 2024



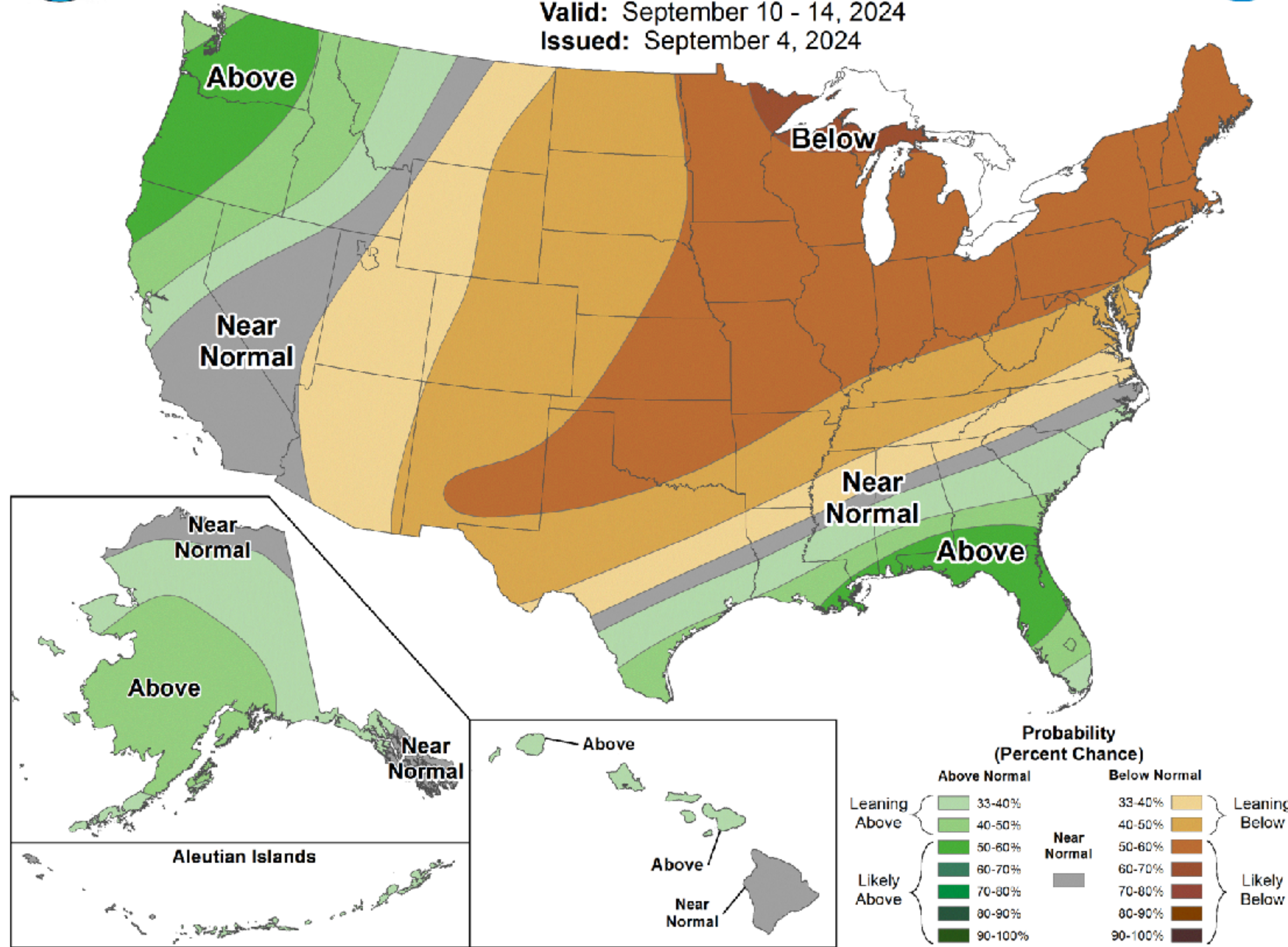
8-14 Day Outlook



6-10 Day Precipitation Outlook



Valid: September 10 - 14, 2024
Issued: September 4, 2024



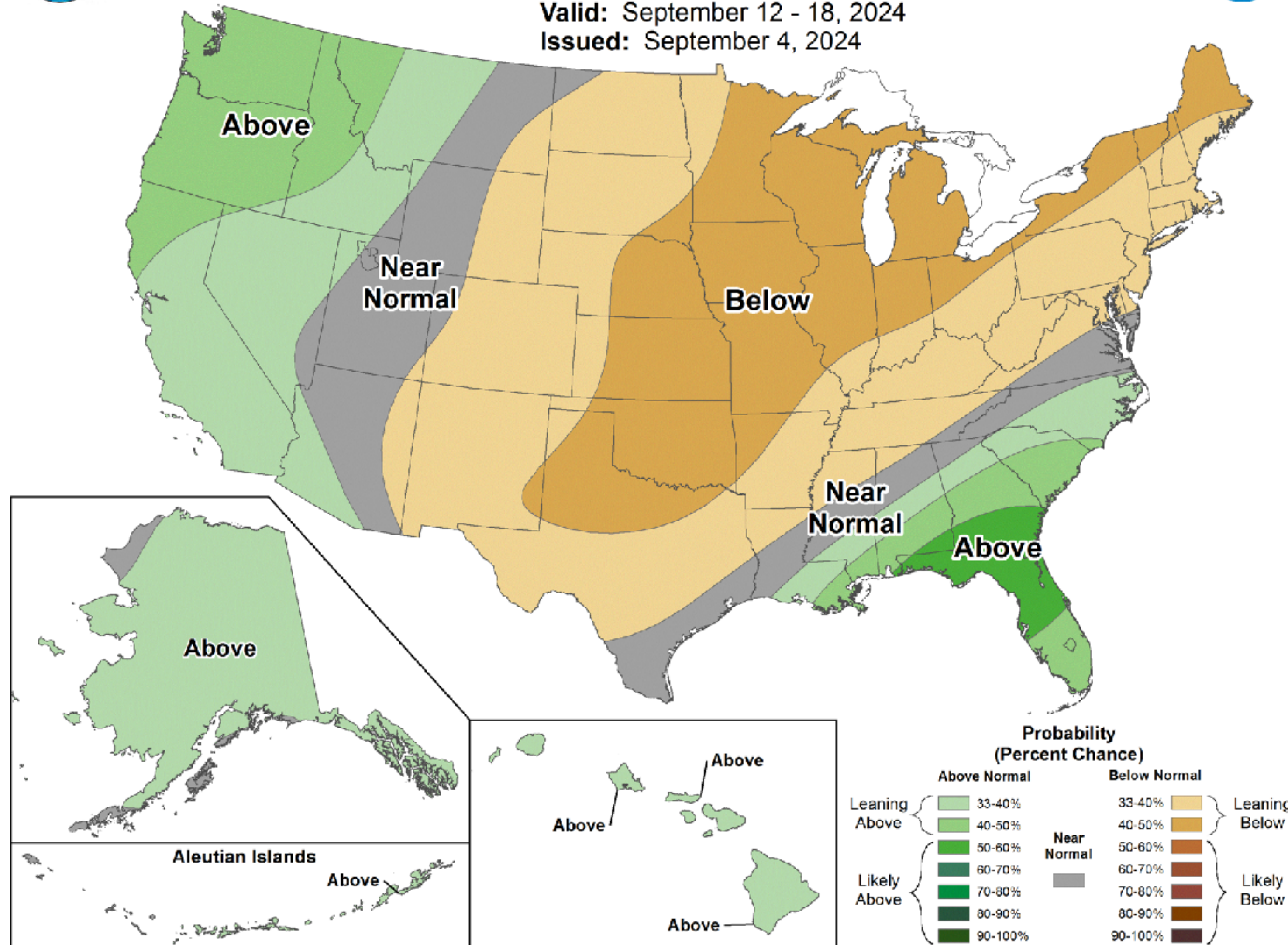
6-10 Day Outlook



8-14 Day Precipitation Outlook



Valid: September 12 - 18, 2024
Issued: September 4, 2024



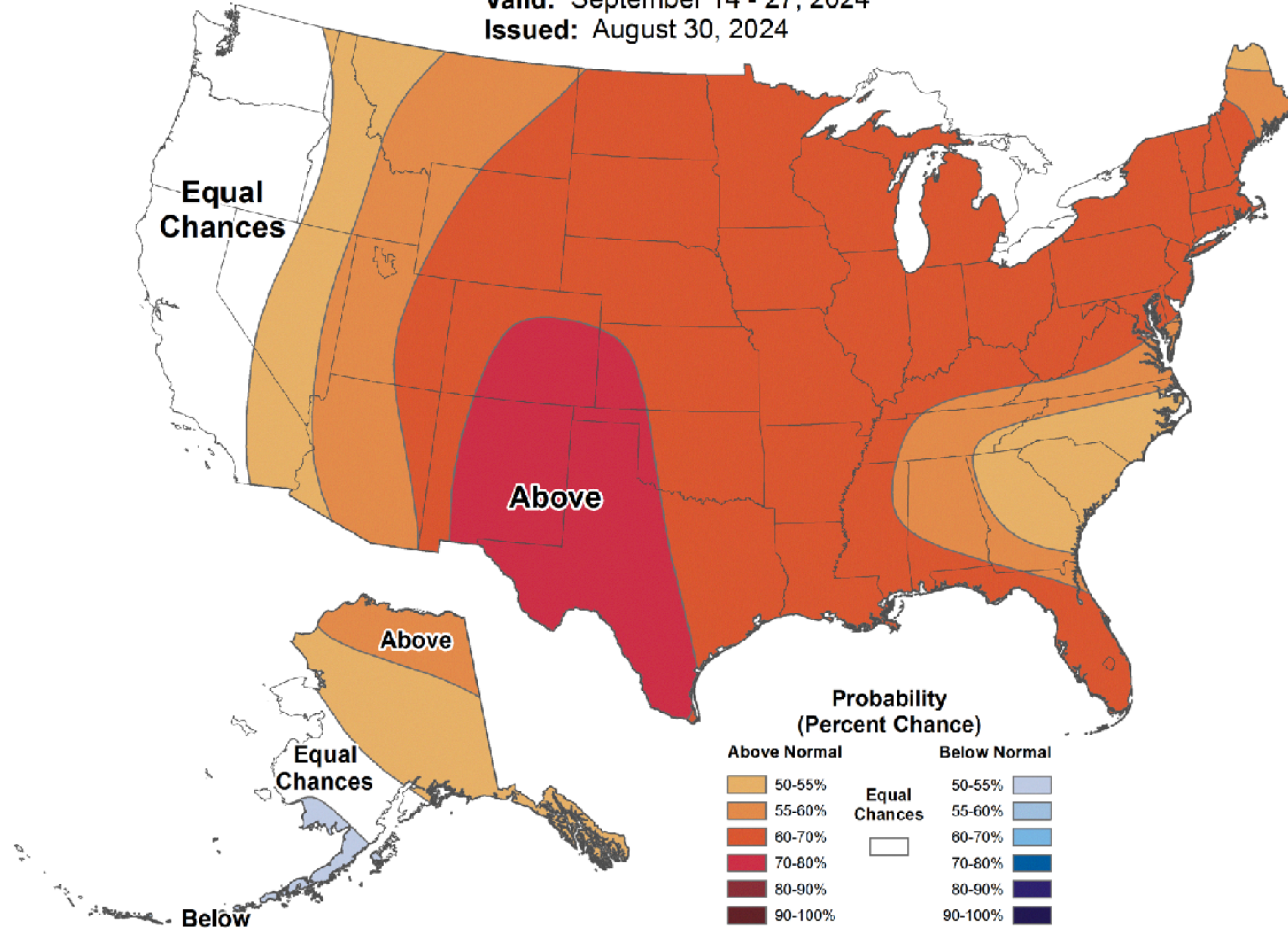
8-14 Day Outlook



Weeks 3-4 Temperature Outlook



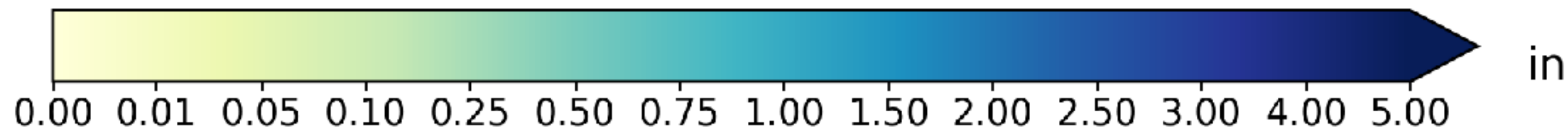
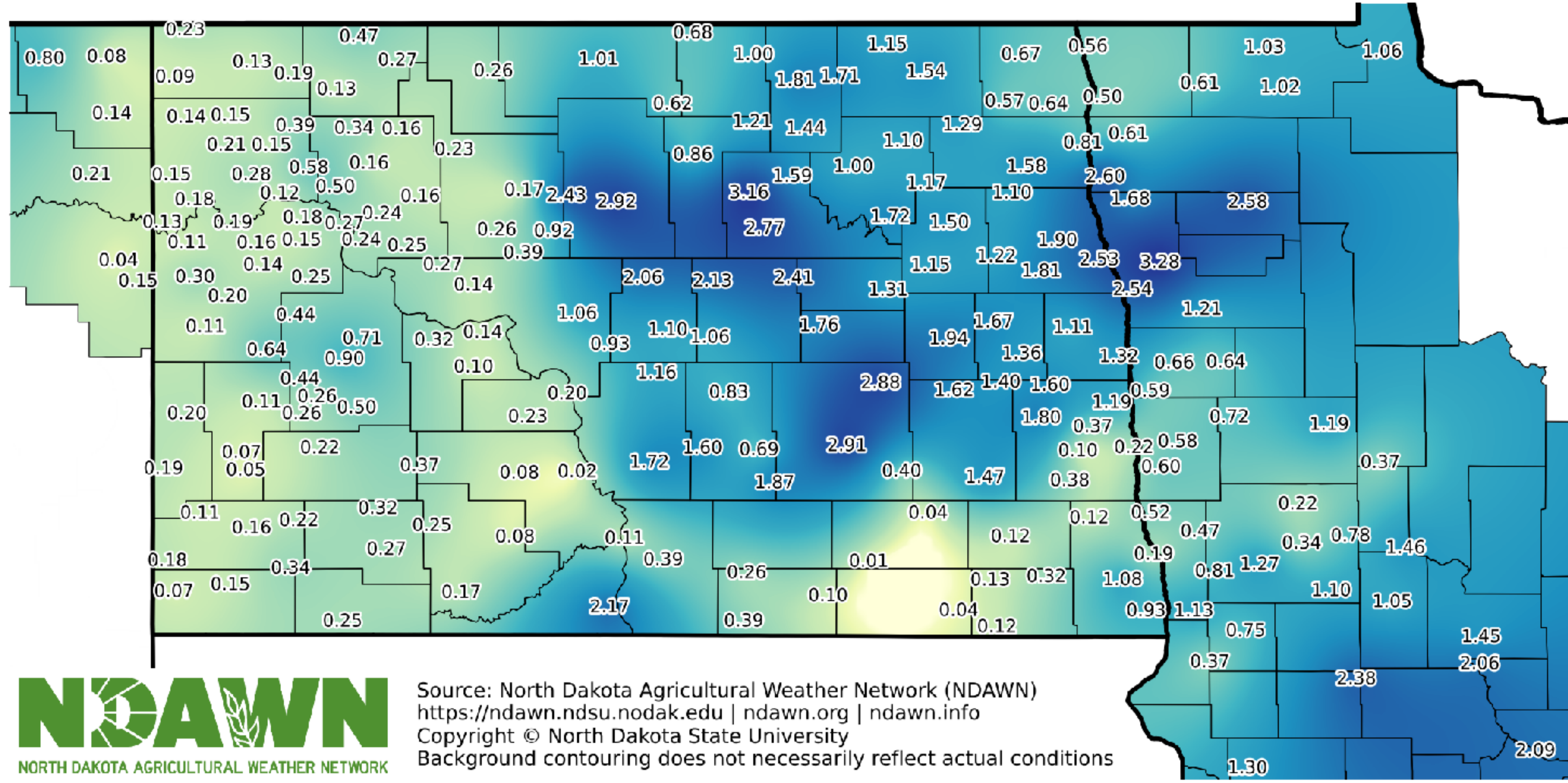
Valid: September 14 - 27, 2024
Issued: August 30, 2024



3-4 Week Outlook

Total Precipitation - Past 14 Days

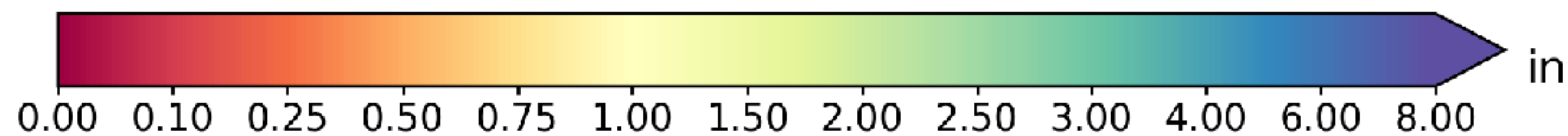
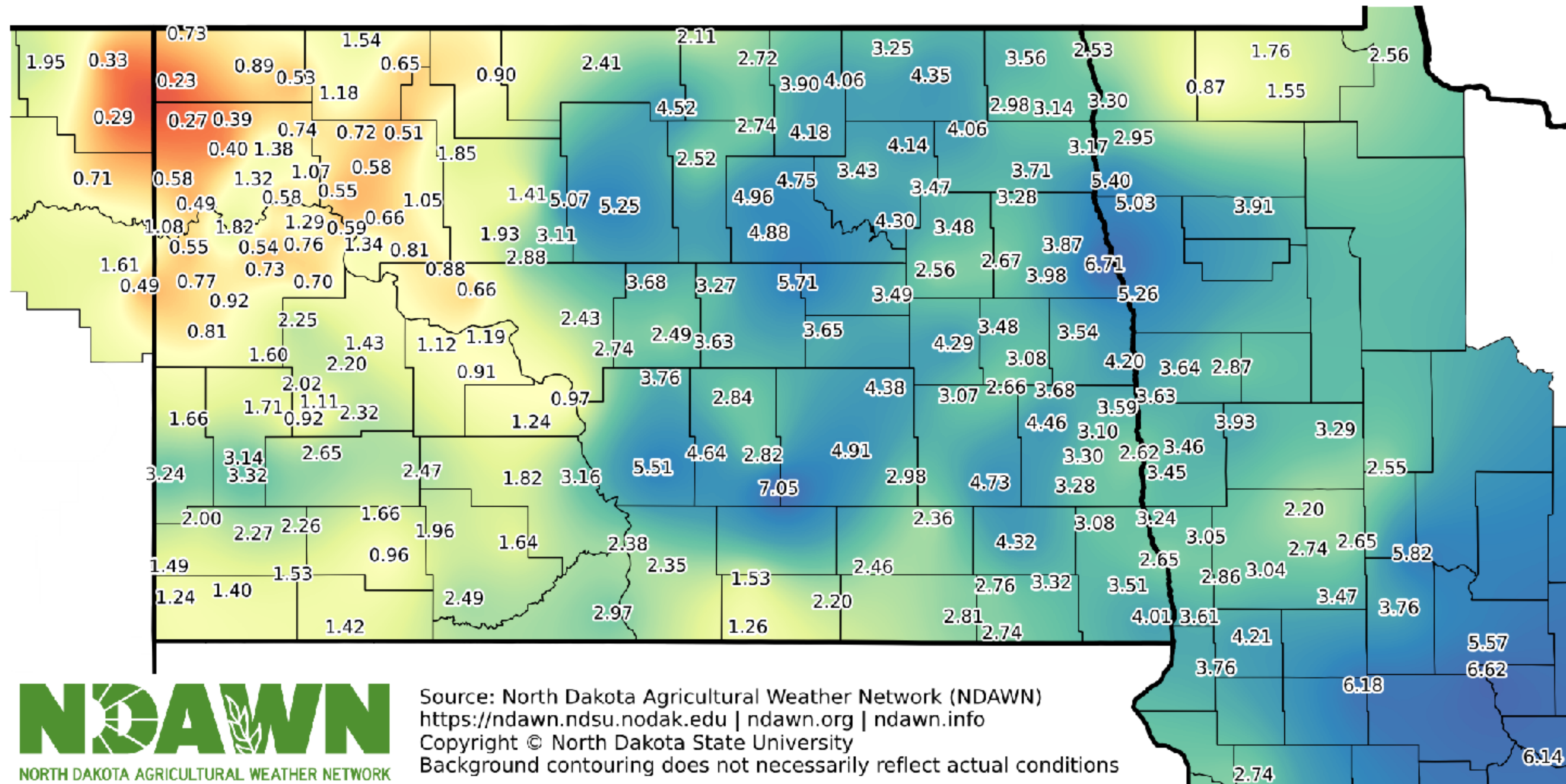
Sep 04 2024



Two-Week Rain Totals

Total Precipitation (in)

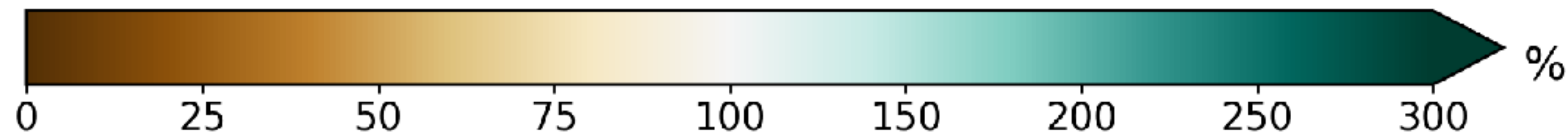
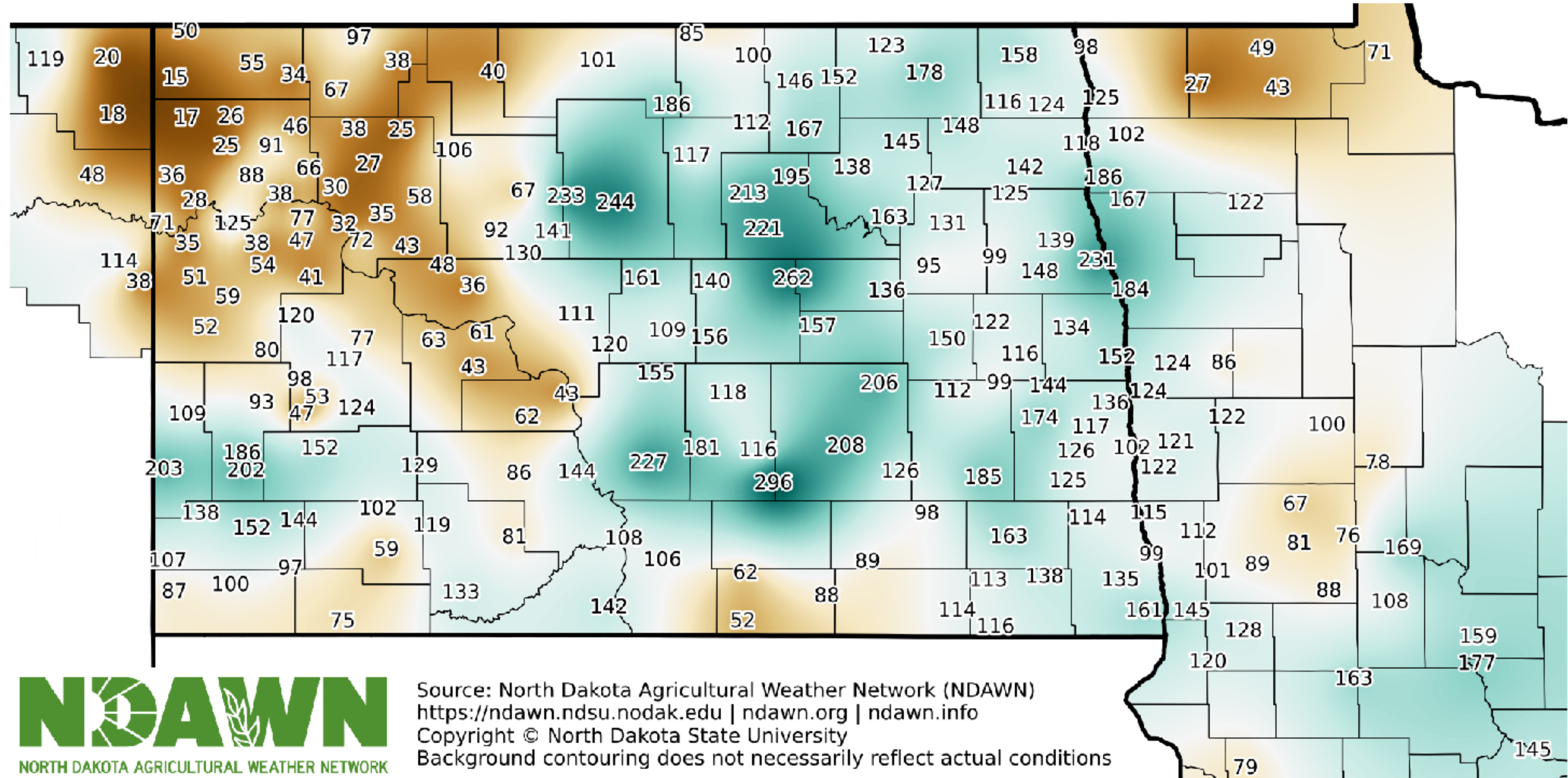
08-01-2024 - 08-31-2024



August Rain

Percent of Normal Precipitation (%)

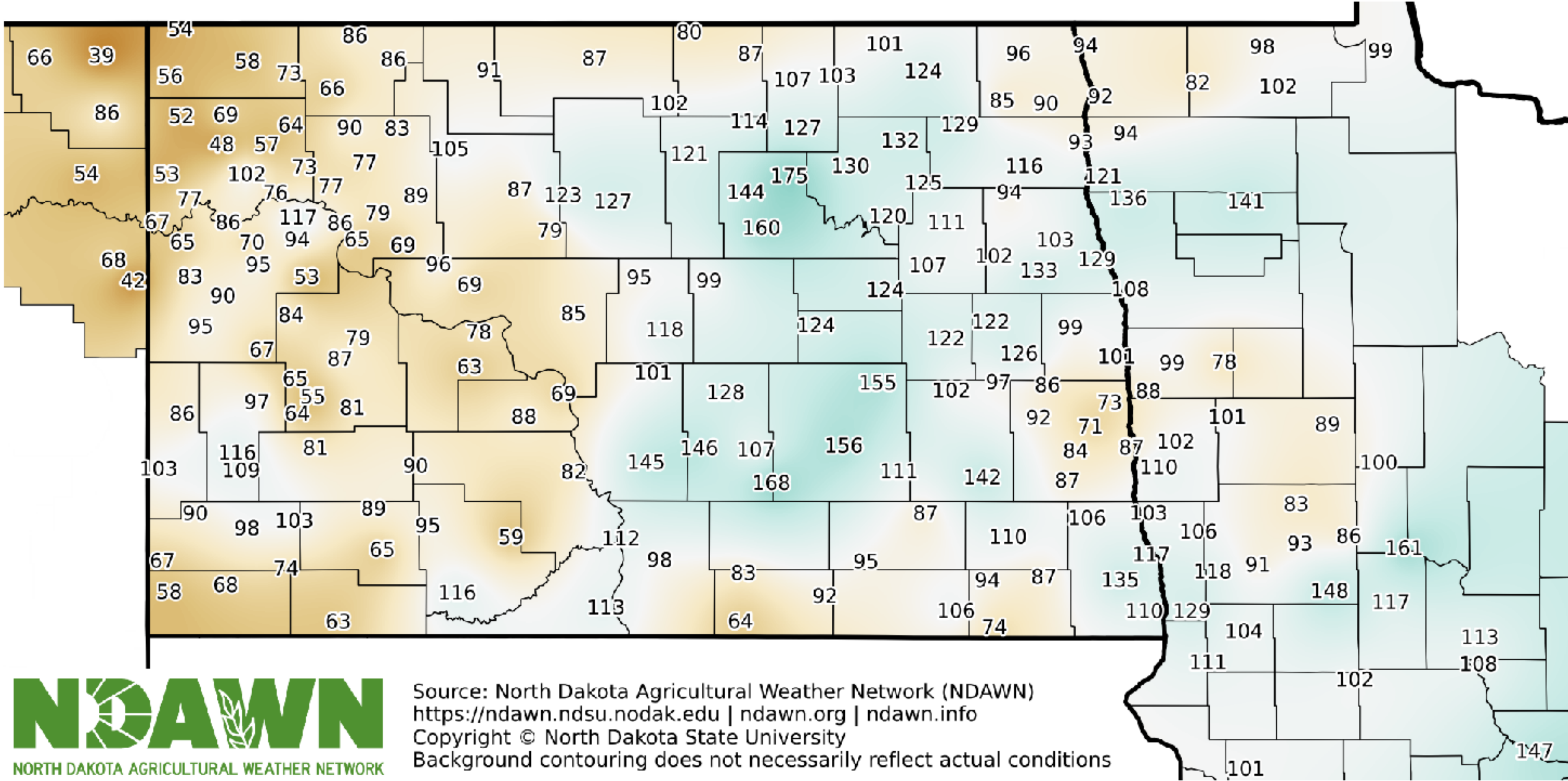
08-01-2024 - 08-31-2024



August Rain

Percent of Normal Precipitation (%)

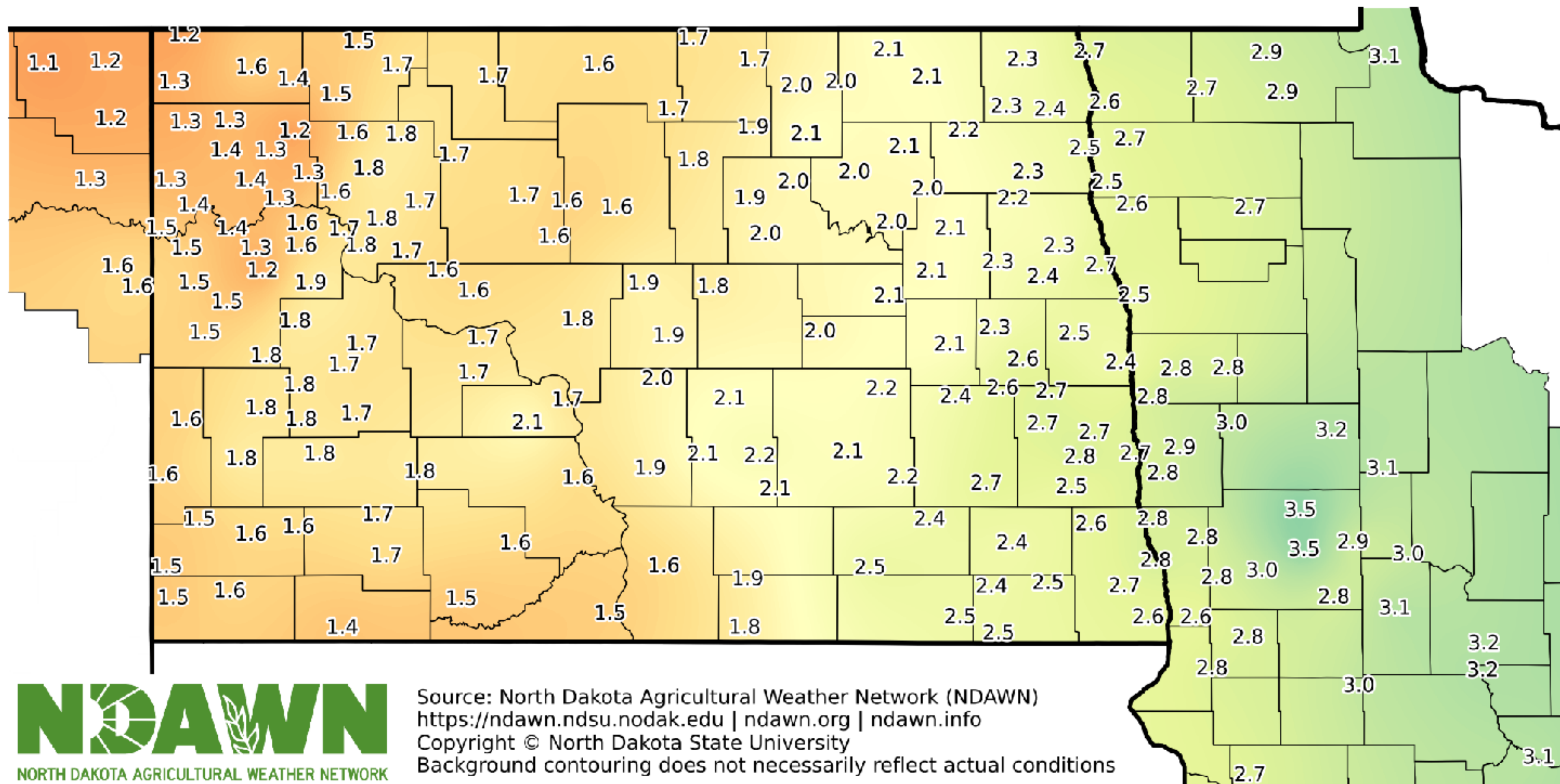
06-01-2024 - 08-31-2024



Percent of Average Rain Summer 2024

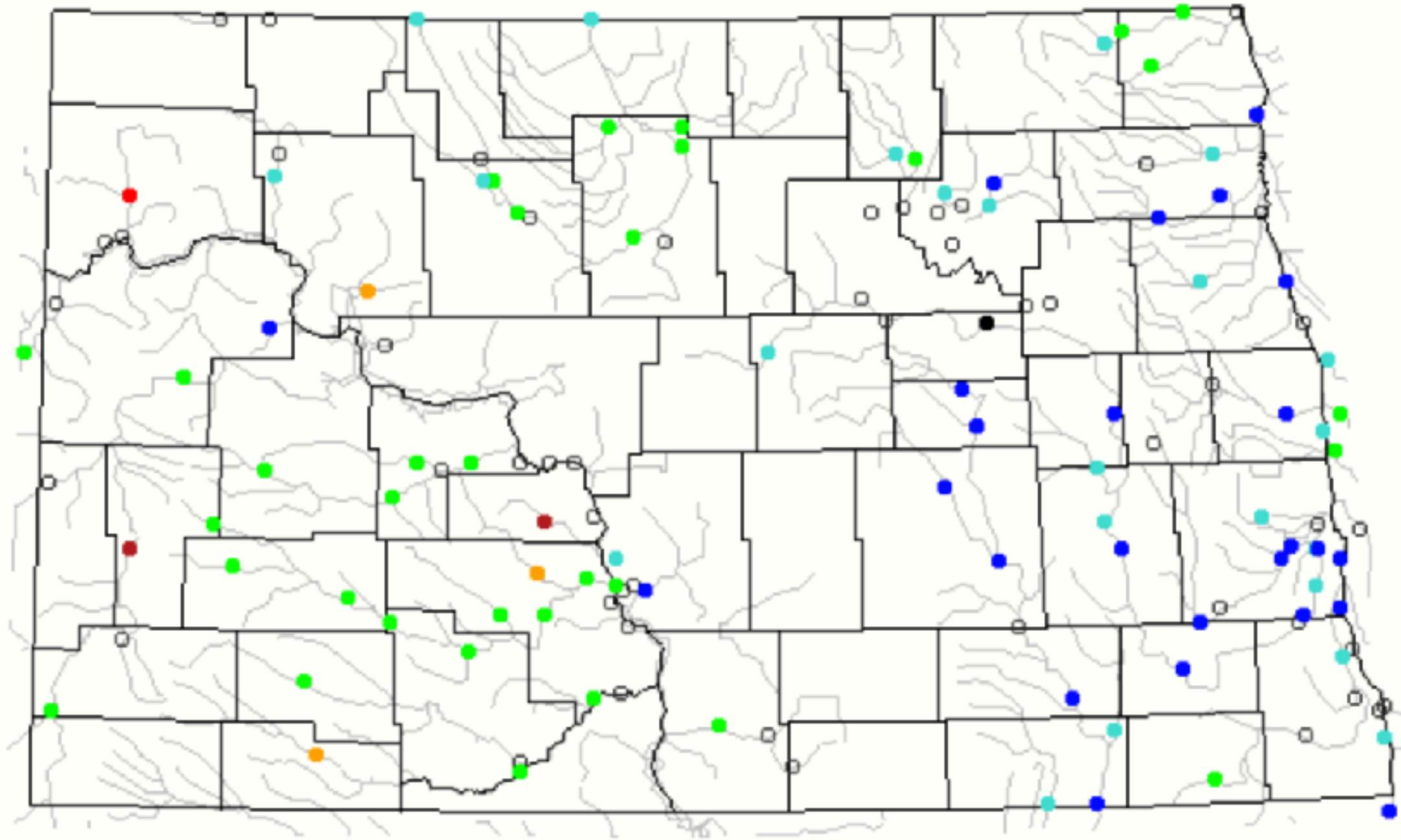
September Total Precipitation (in)

1991-2020 Climate Normals



September Average Rainfall

Thursday, September 05, 2024 07:30ET



Search USGS streamgage



Choose a data retrieval option and select a location on the map

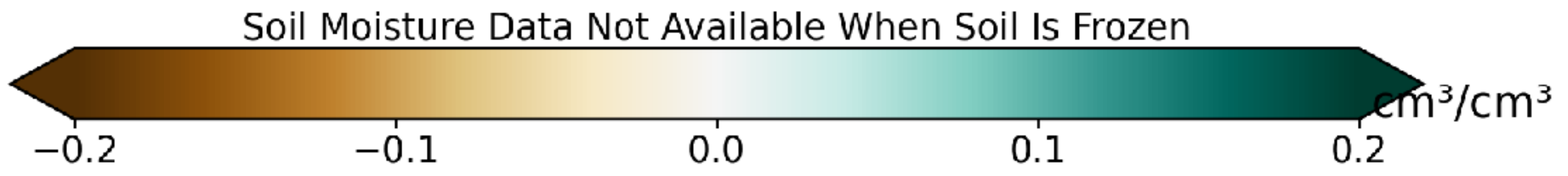
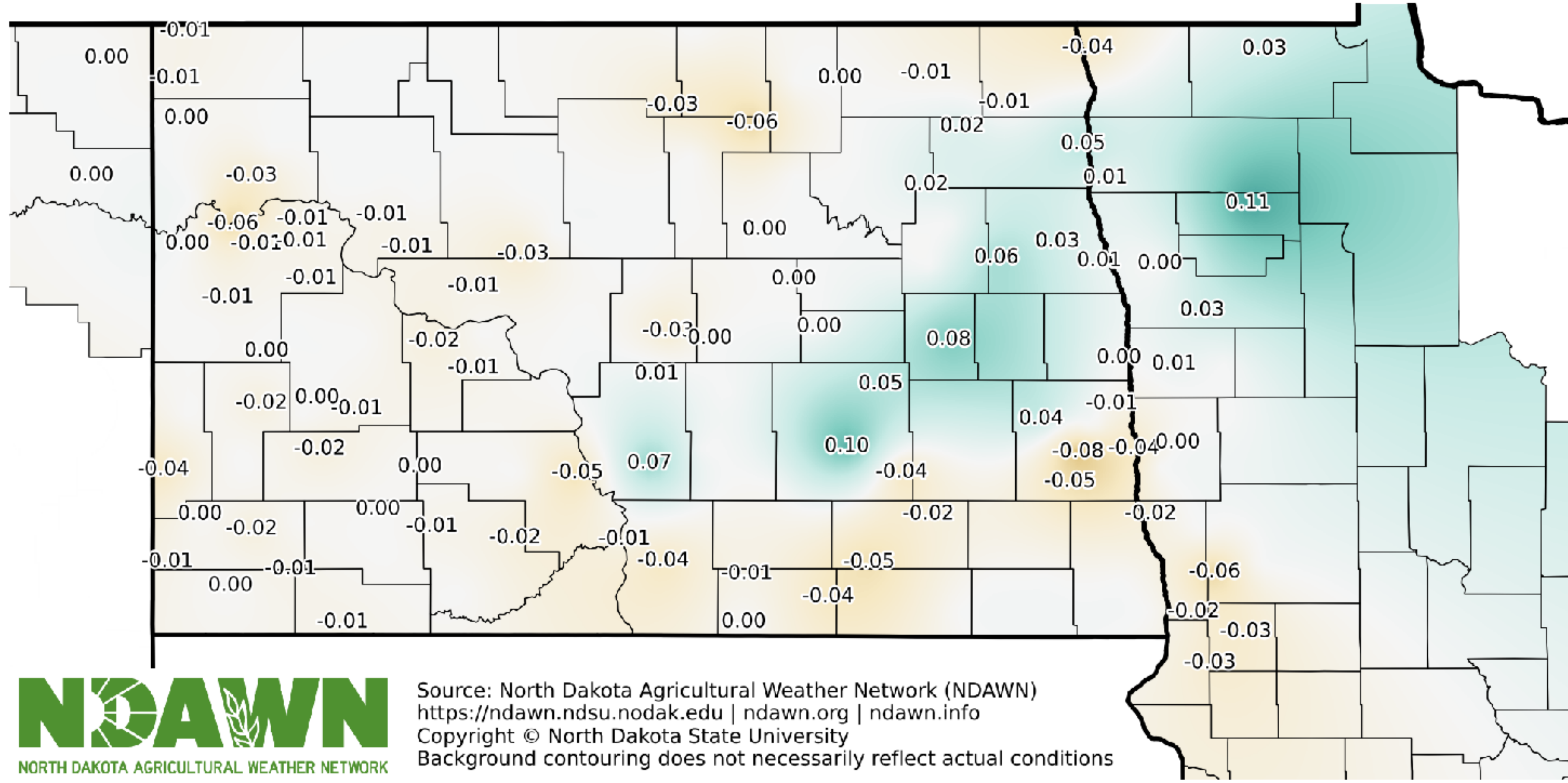
List of all stations Single station Nearest stations Peak flow

Explanation - Percentile classes							
Low	<10	10-24	25-75	76-90	>90	High	Not-ranked
	Much below normal	Below normal	Normal	Above normal	Much above normal		

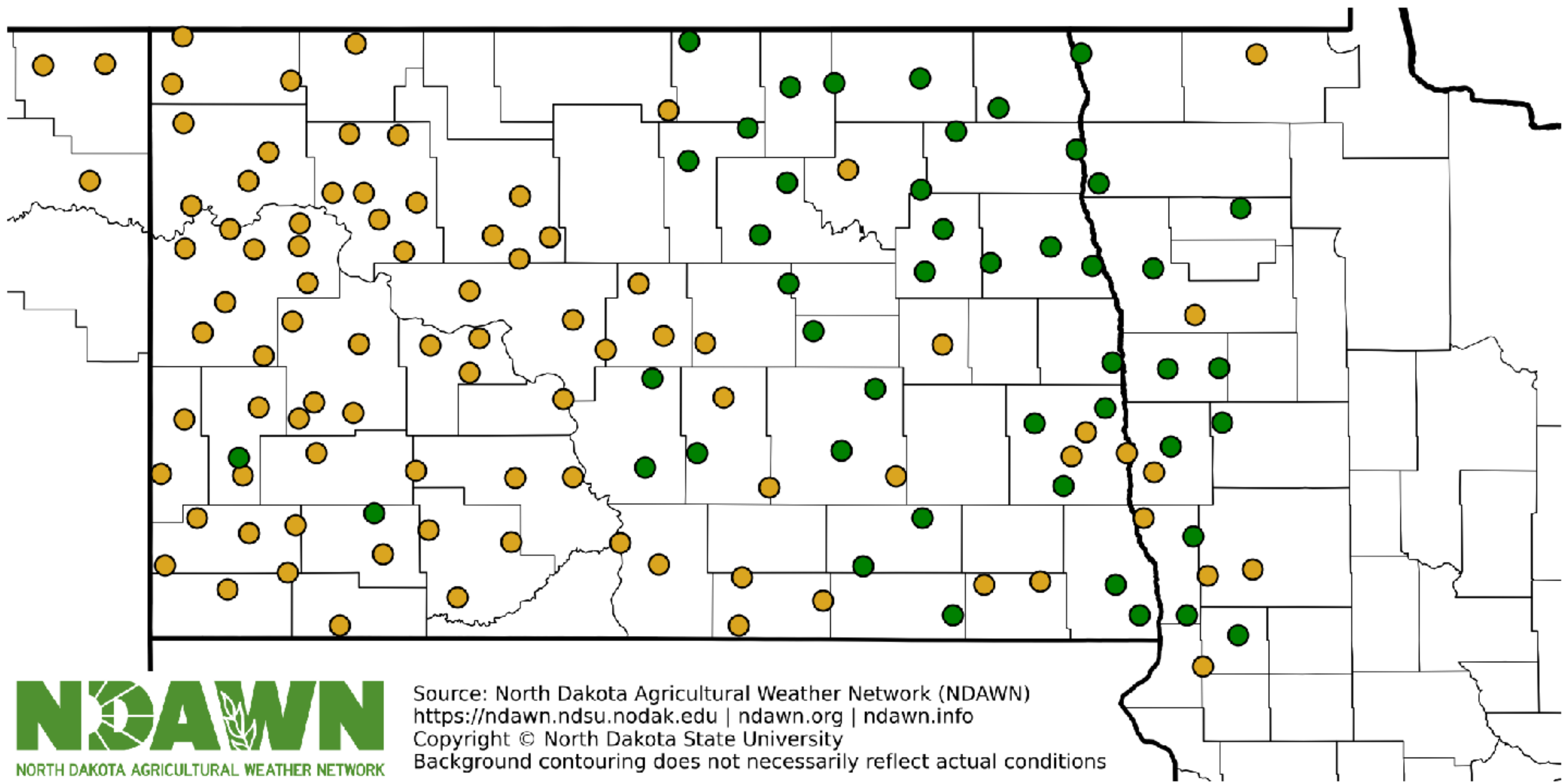
Stream Flows

7 Day Change in VWC 4 Inch Depth (cm³/cm³)

Sep 02 2024 01:00 PM

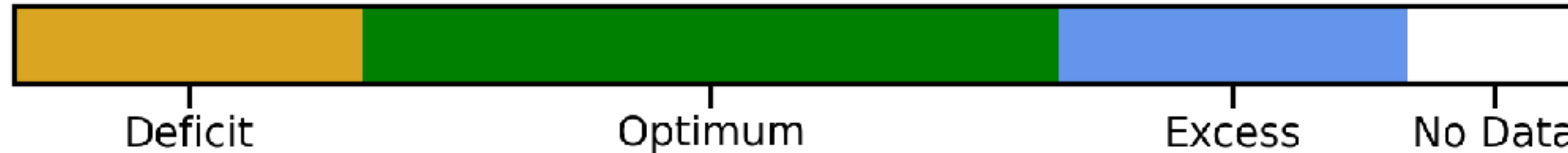


Weekly Soil Water Change at 4 in

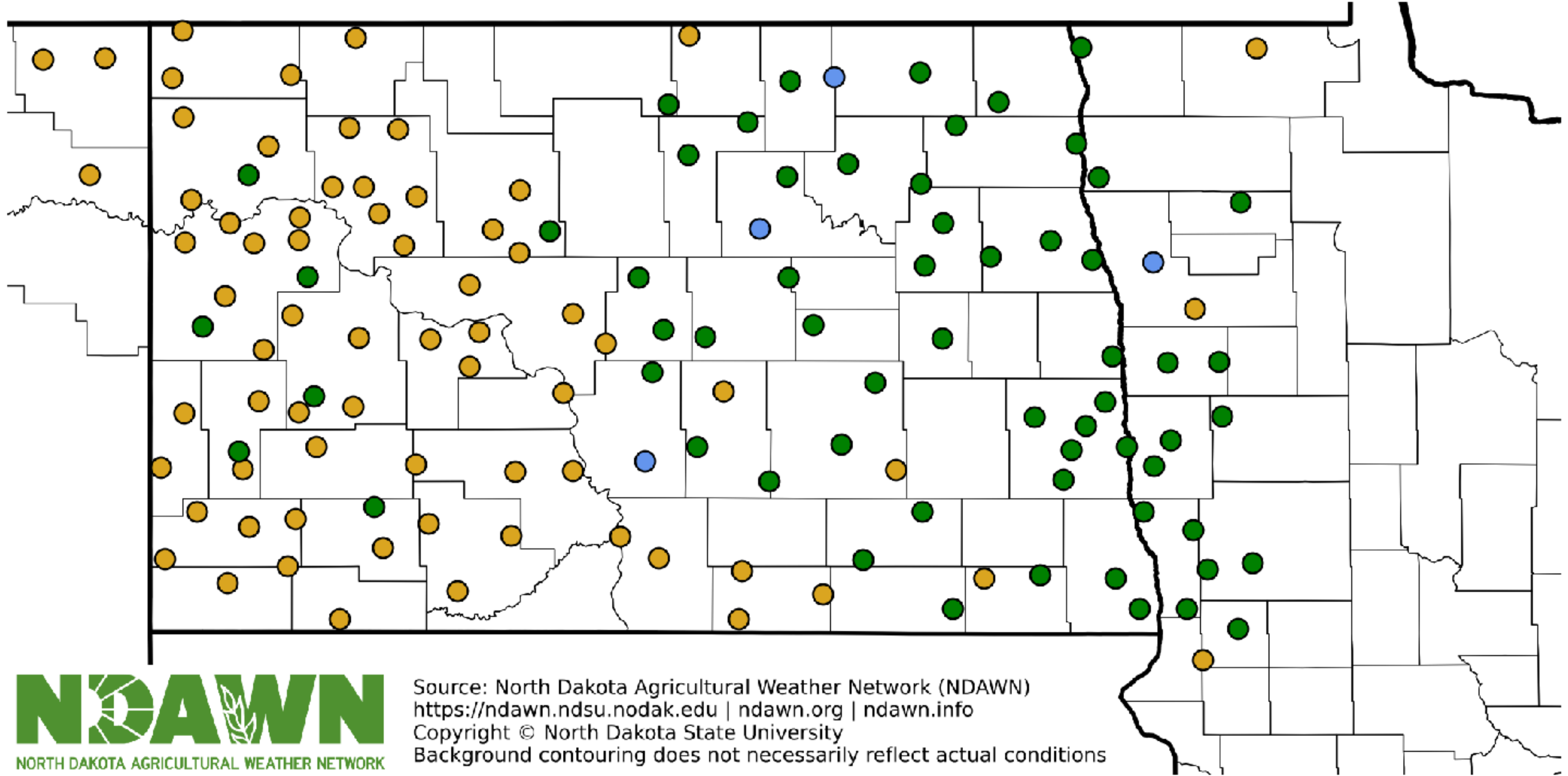


Source: North Dakota Agricultural Weather Network (NDAWN)
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Soil Moisture Data Not Available When Soil Is Frozen

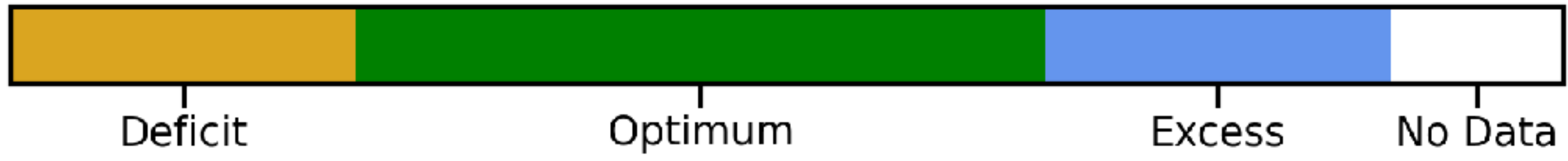


Soil Water 2 inches

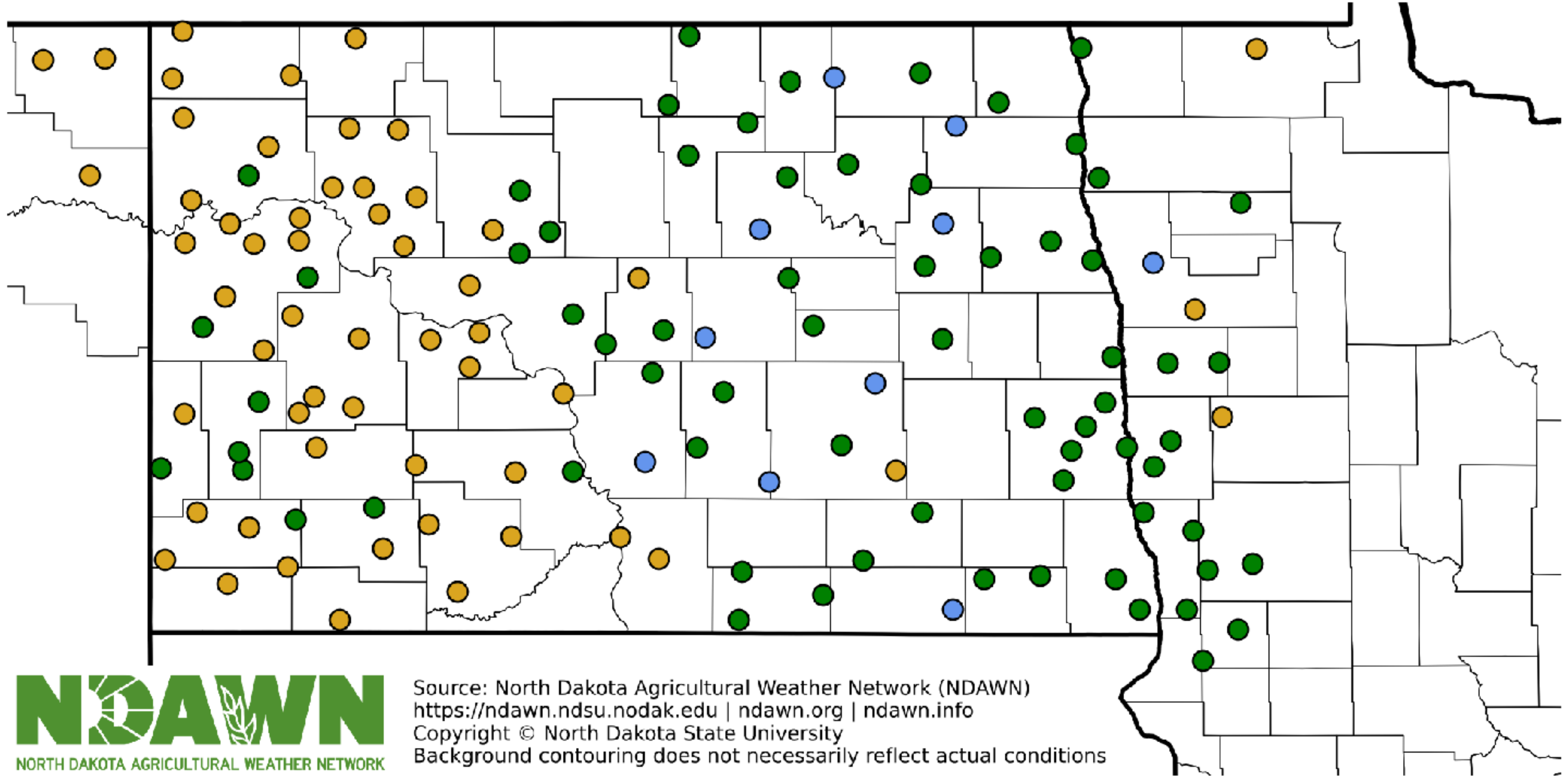


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Soil Moisture Data Not Available When Soil Is Frozen

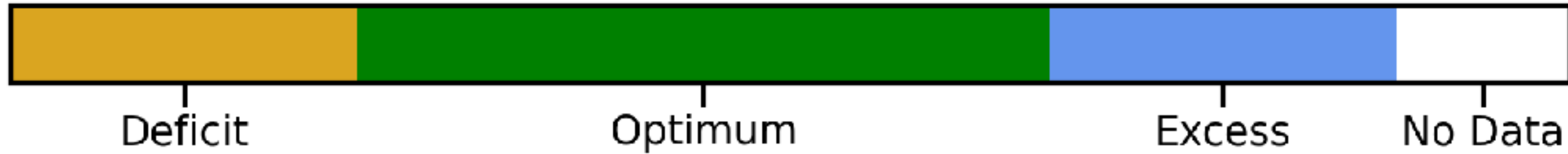


Soil Water 4 inches

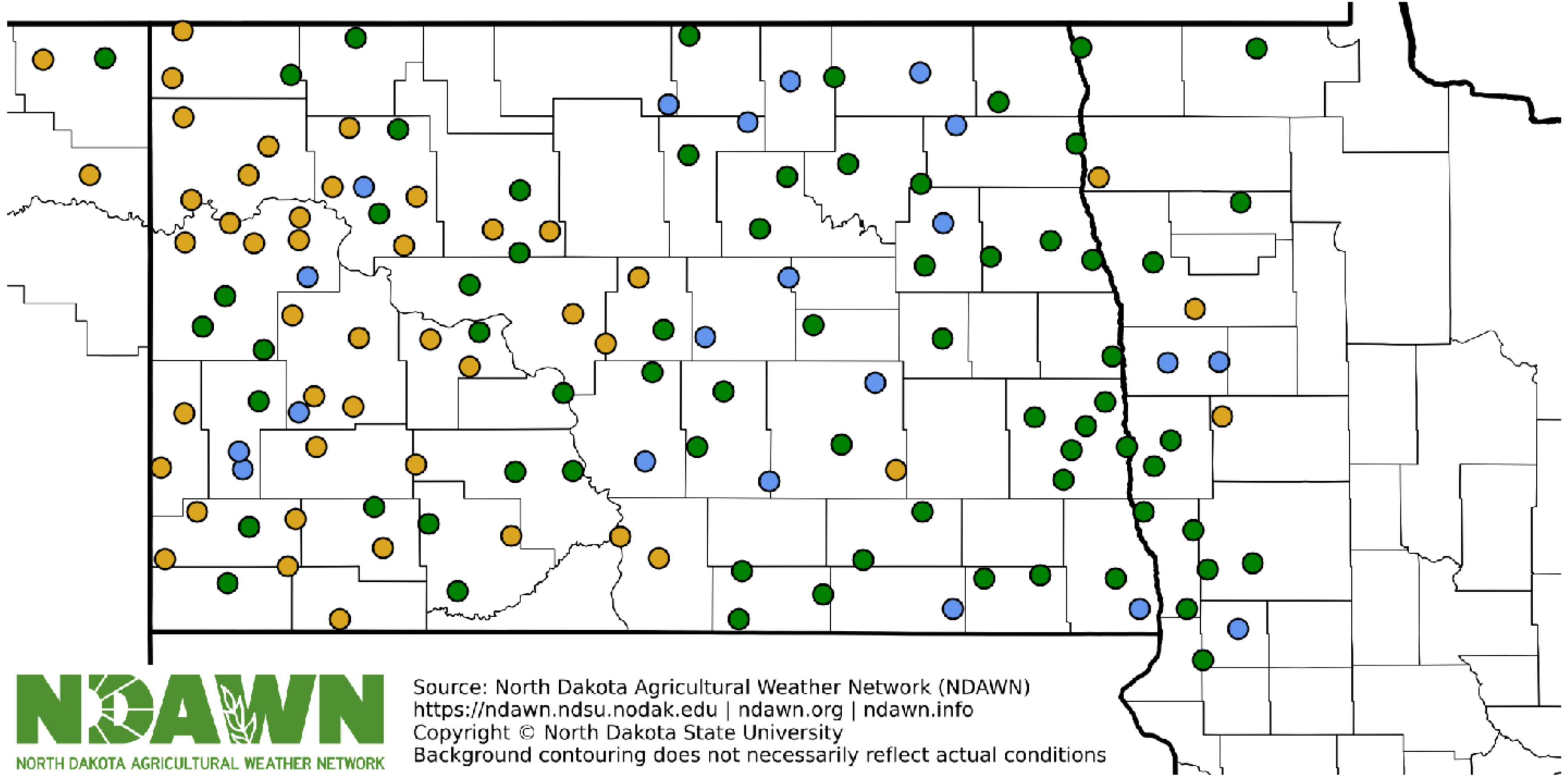


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Soil Moisture Data Not Available When Soil Is Frozen



Soil Water 8 inches

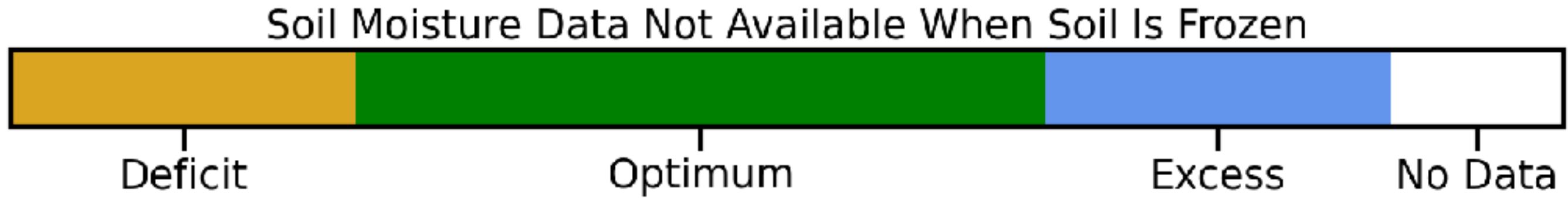
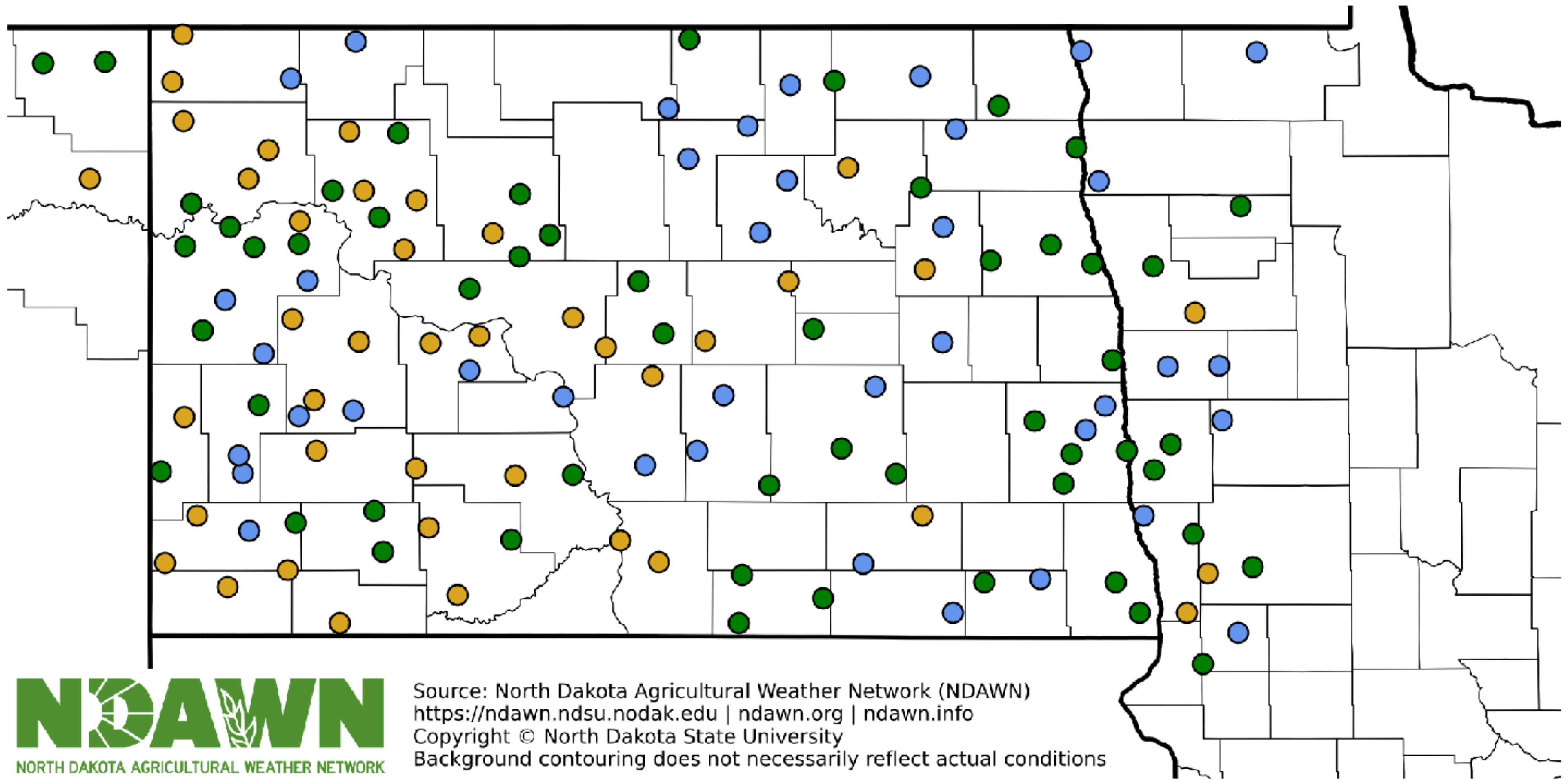


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Soil Moisture Data Not Available When Soil Is Frozen



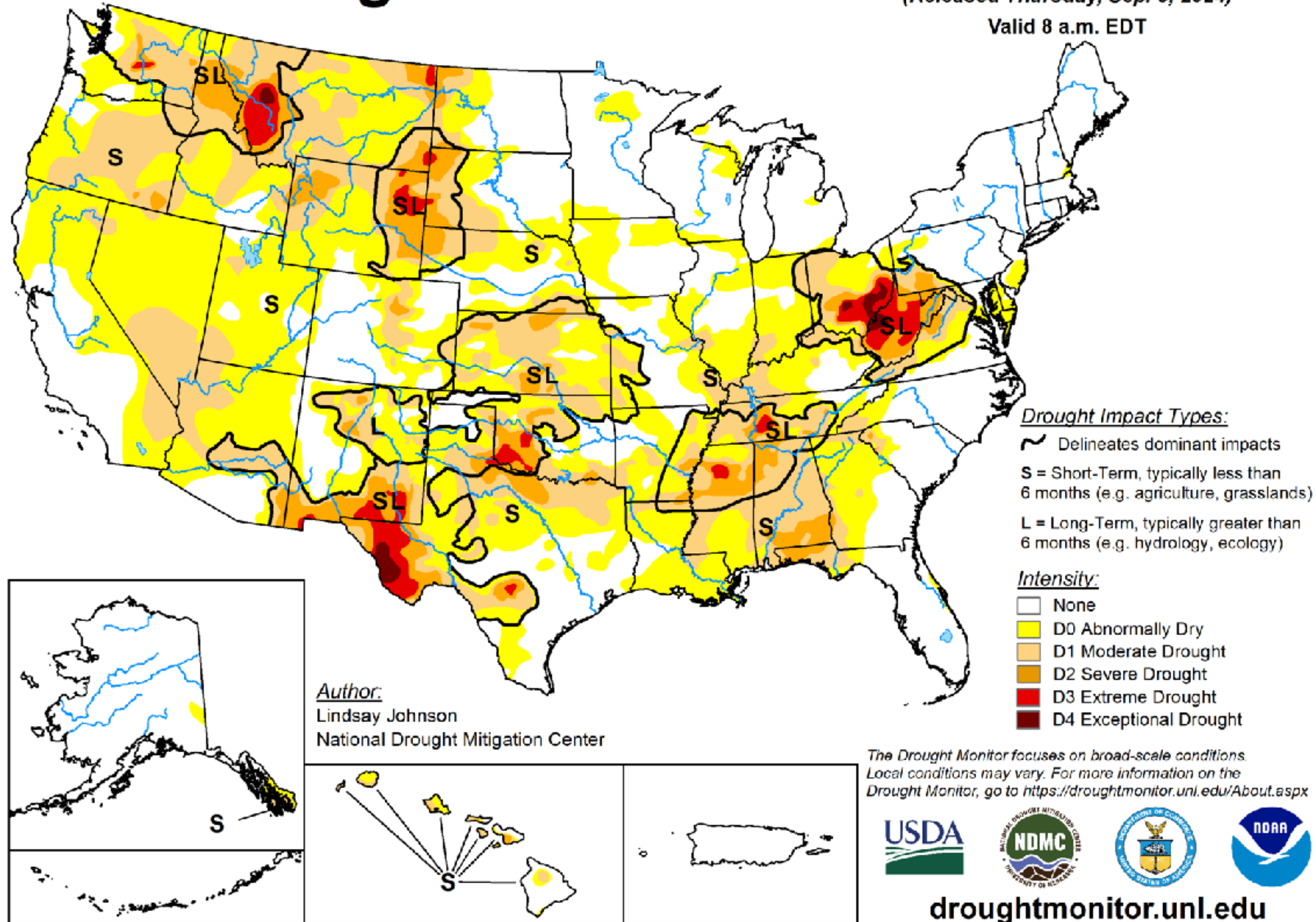
Soil Water 20 inches



Soil Water 40 inches

U.S. Drought Monitor

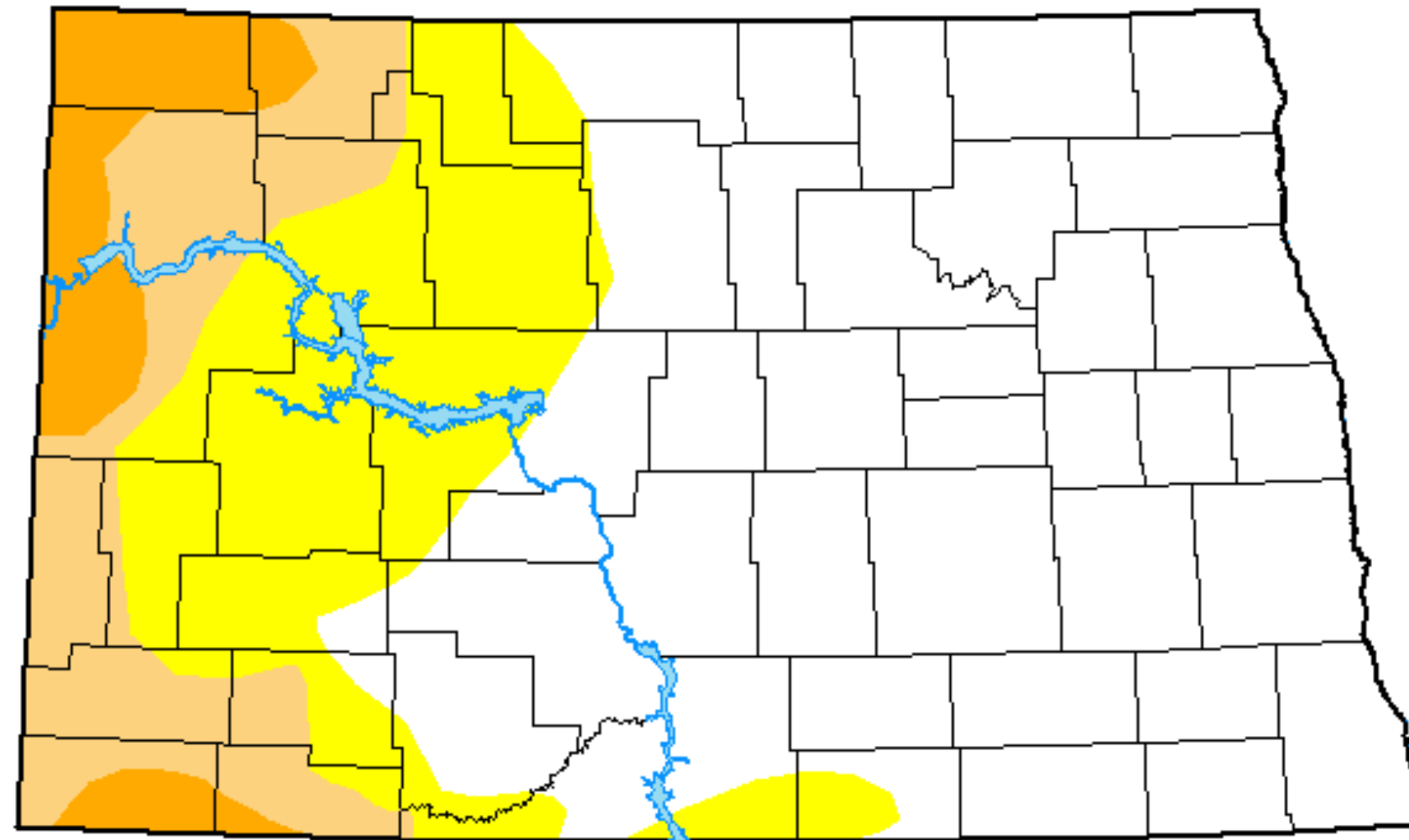
September 3, 2024
(Released Thursday, Sep. 5, 2024)
Valid 8 a.m. EDT



Current Drought Monitor

U.S. Drought Monitor North Dakota

September 3, 2024
(Released Thursday, Sep. 5, 2024)
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	62.83	37.17	16.77	5.74	0.00	0.00
Last Week 08-27-2024	64.22	35.78	14.72	4.48	0.00	0.00
3 Months Ago 06-04-2024	91.73	8.27	2.23	0.00	0.00	0.00
Start of Calendar Year 01-02-2024	70.11	29.89	15.72	6.78	0.00	0.00
Start of Water Year 09-26-2023	55.05	44.95	26.49	17.14	0.00	0.00
One Year Ago 09-05-2023	46.64	53.36	34.37	17.67	2.56	0.00

Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

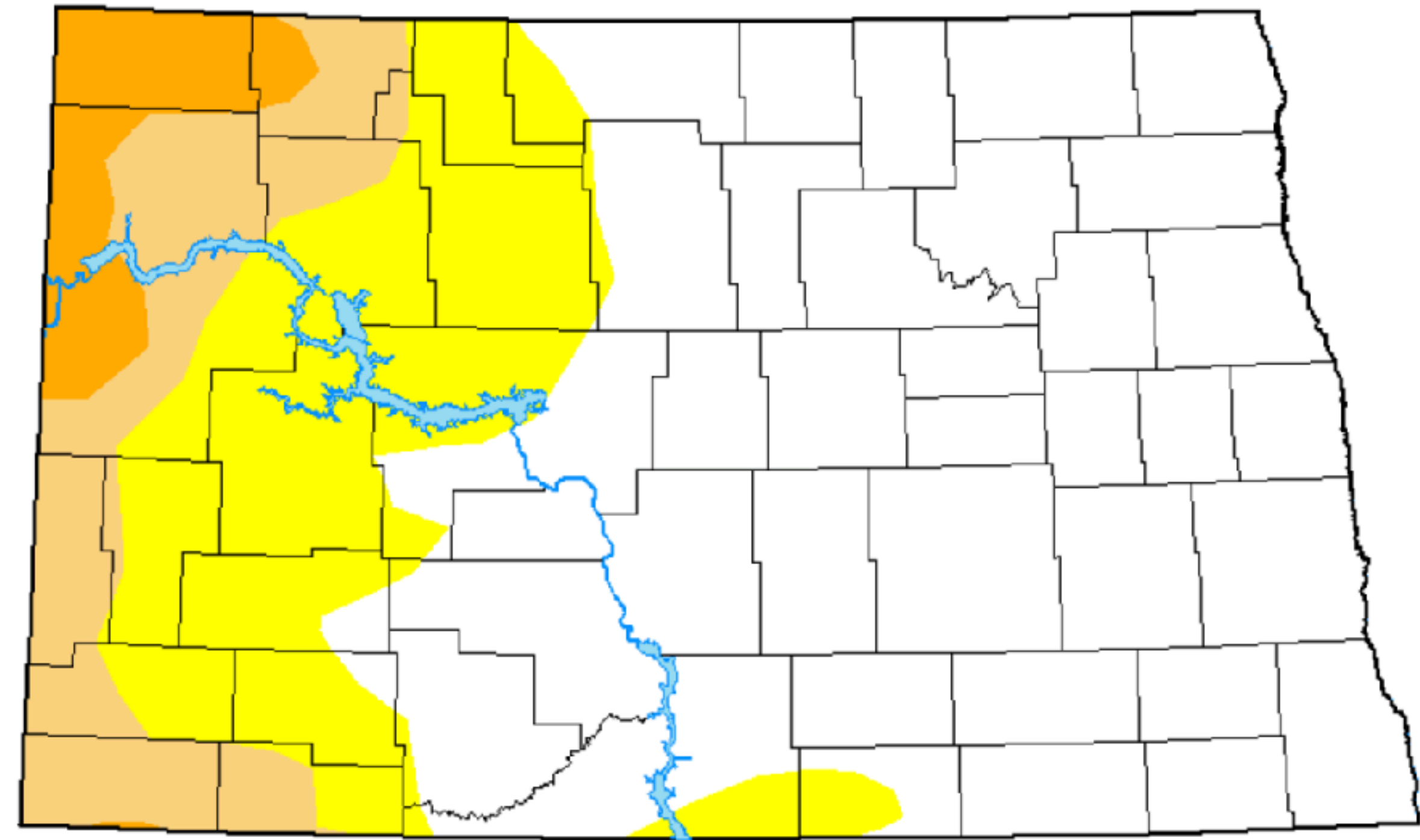
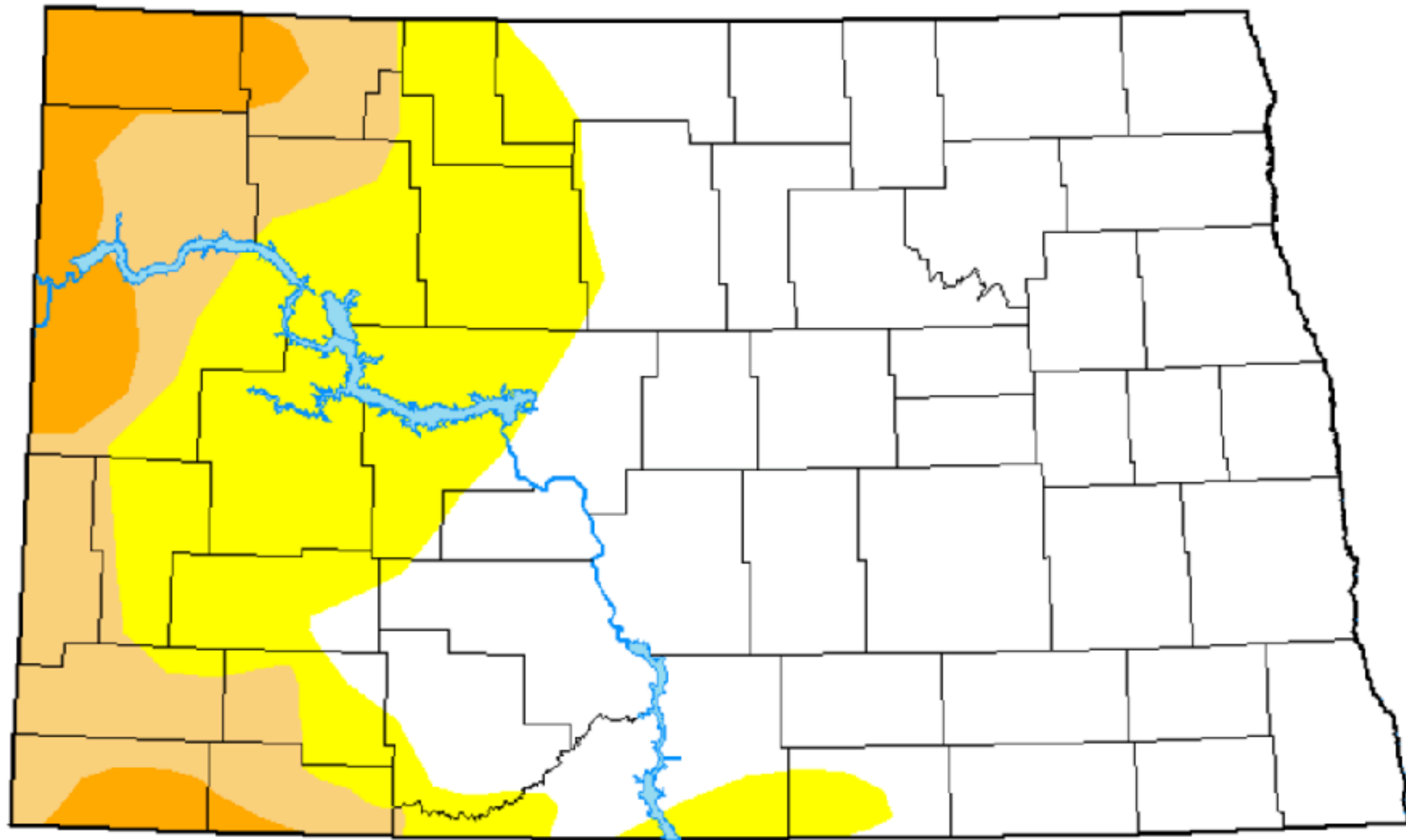
Author:

Lindsay Johnson
National Drought Mitigation Center



droughtmonitor.unl.edu

Current Drought Monitor

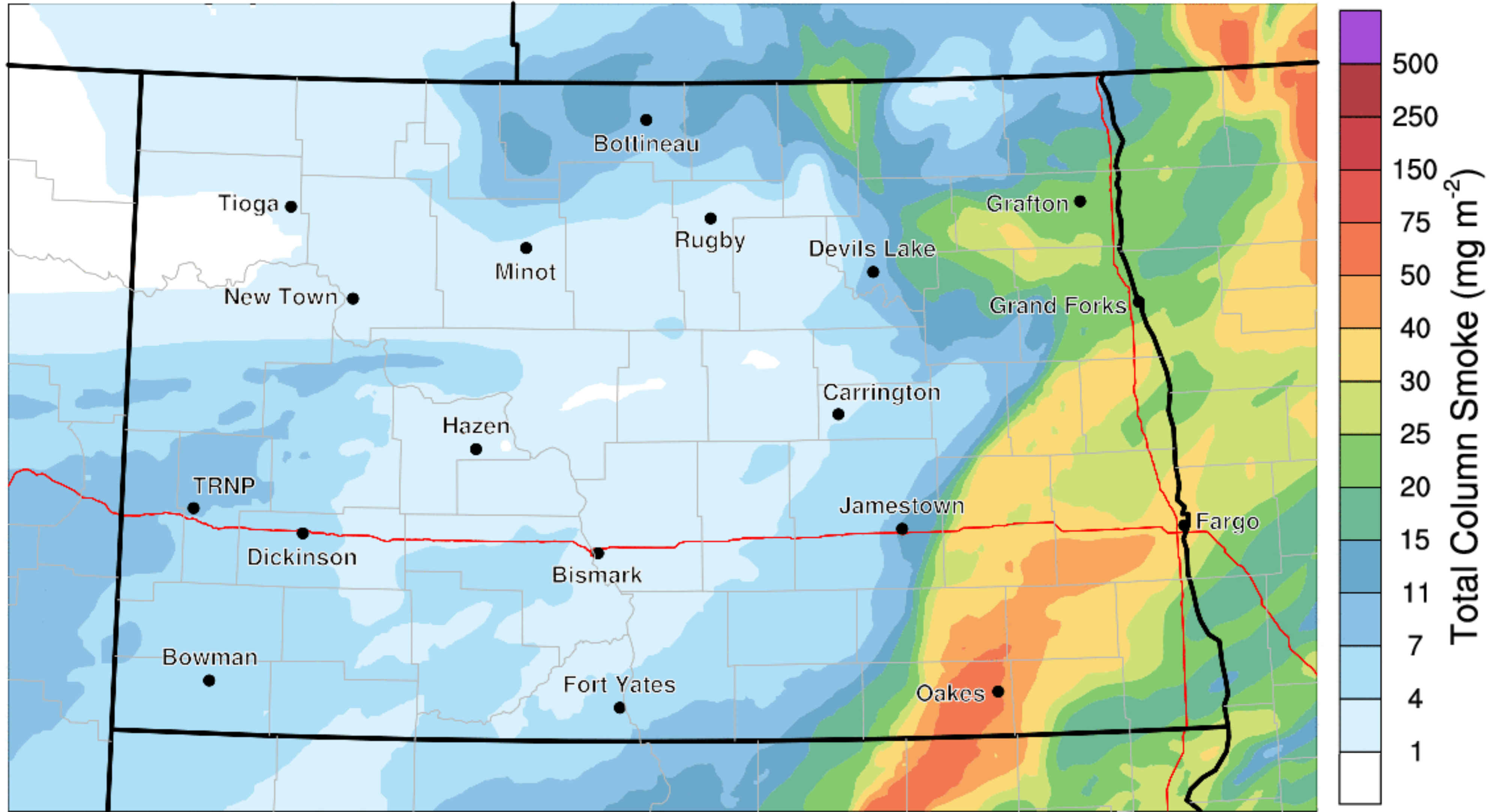


Two Week Comparison

HRRR Total Column Smoke

Initialized: Thu 09/05/24 1 AM CDT

Valid: Thu 09/05/24 2 AM CDT

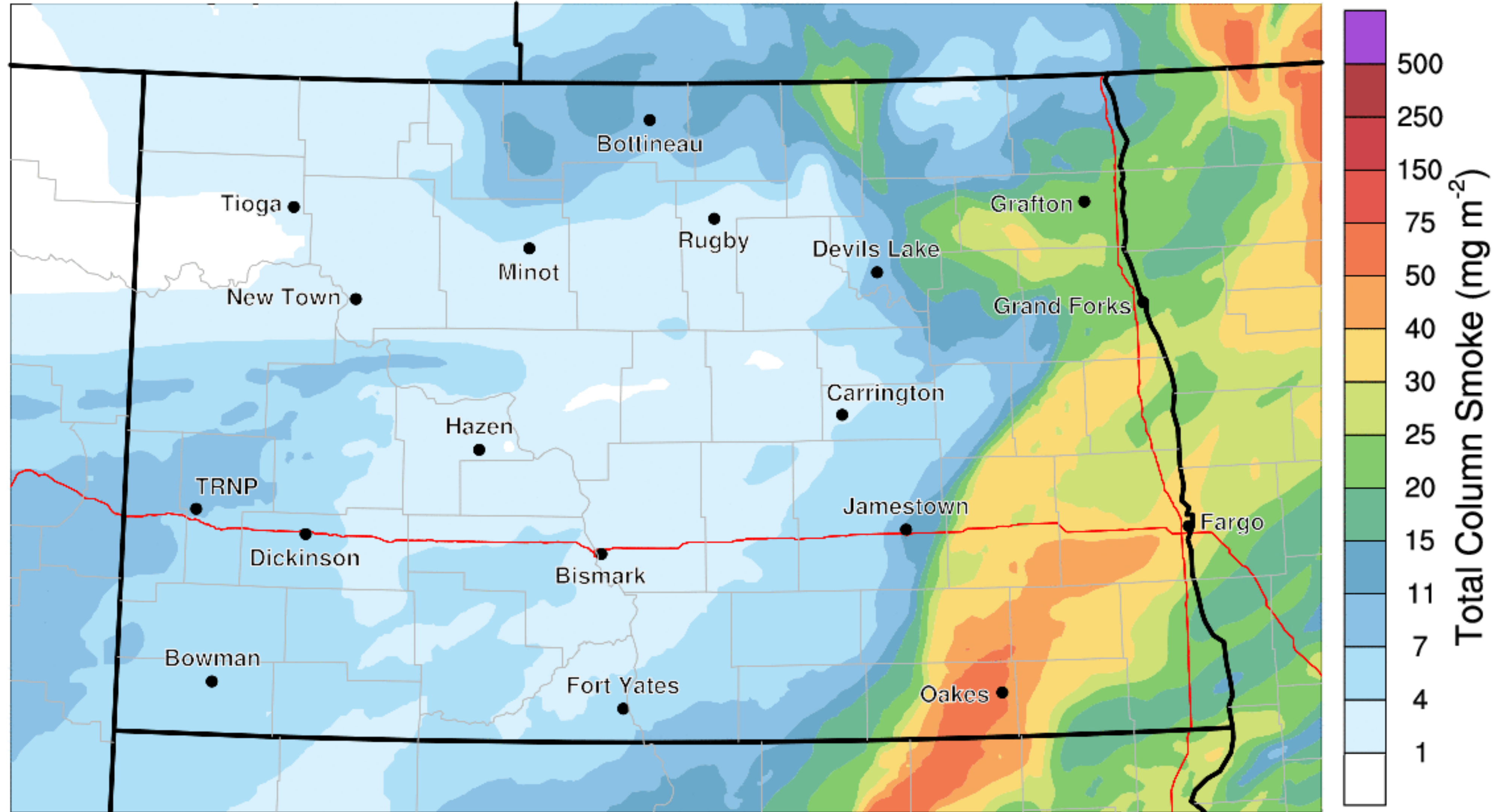


Smoke Forecast

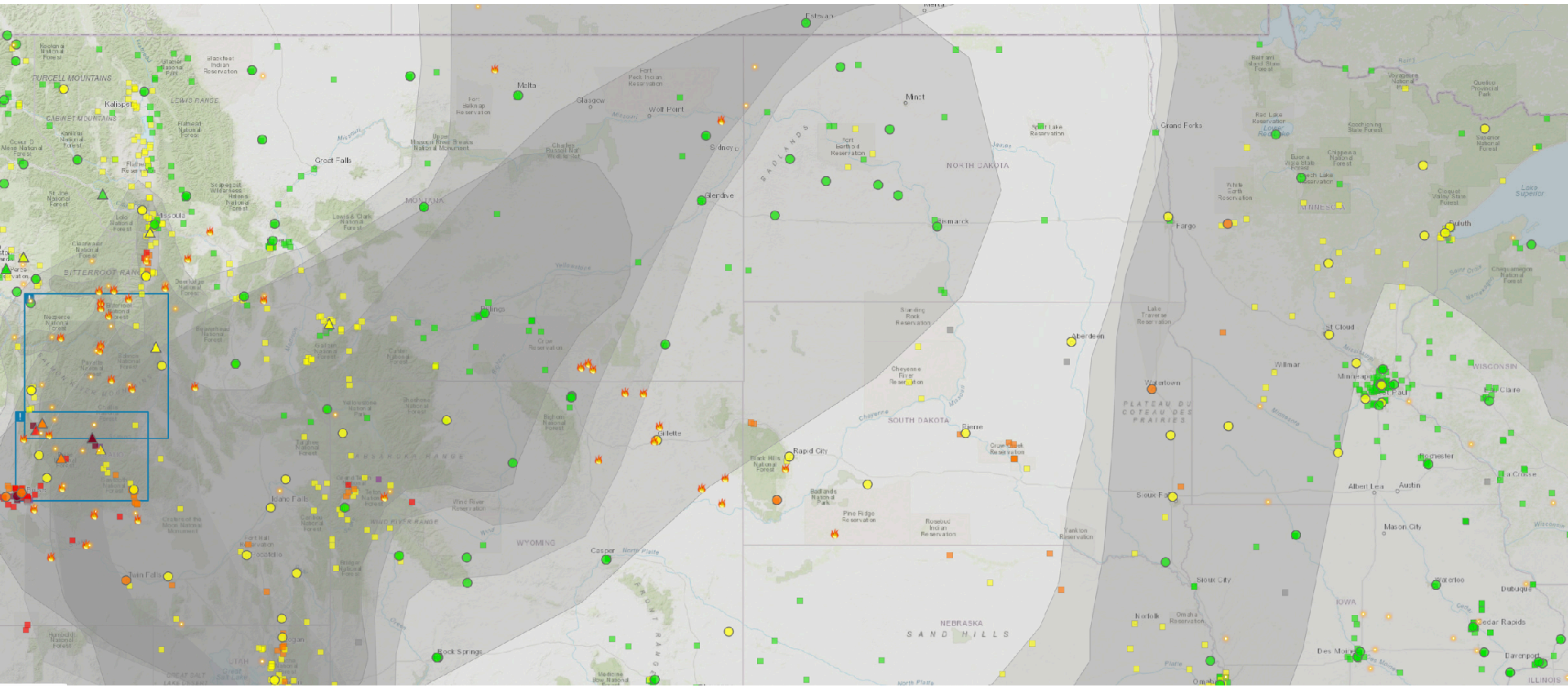
HRRR Total Column Smoke

Initialized: Thu 09/05/24 1 AM CDT

Valid: Thu 09/05/24 2 AM CDT



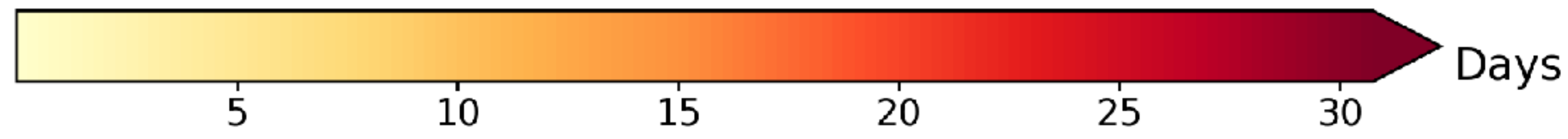
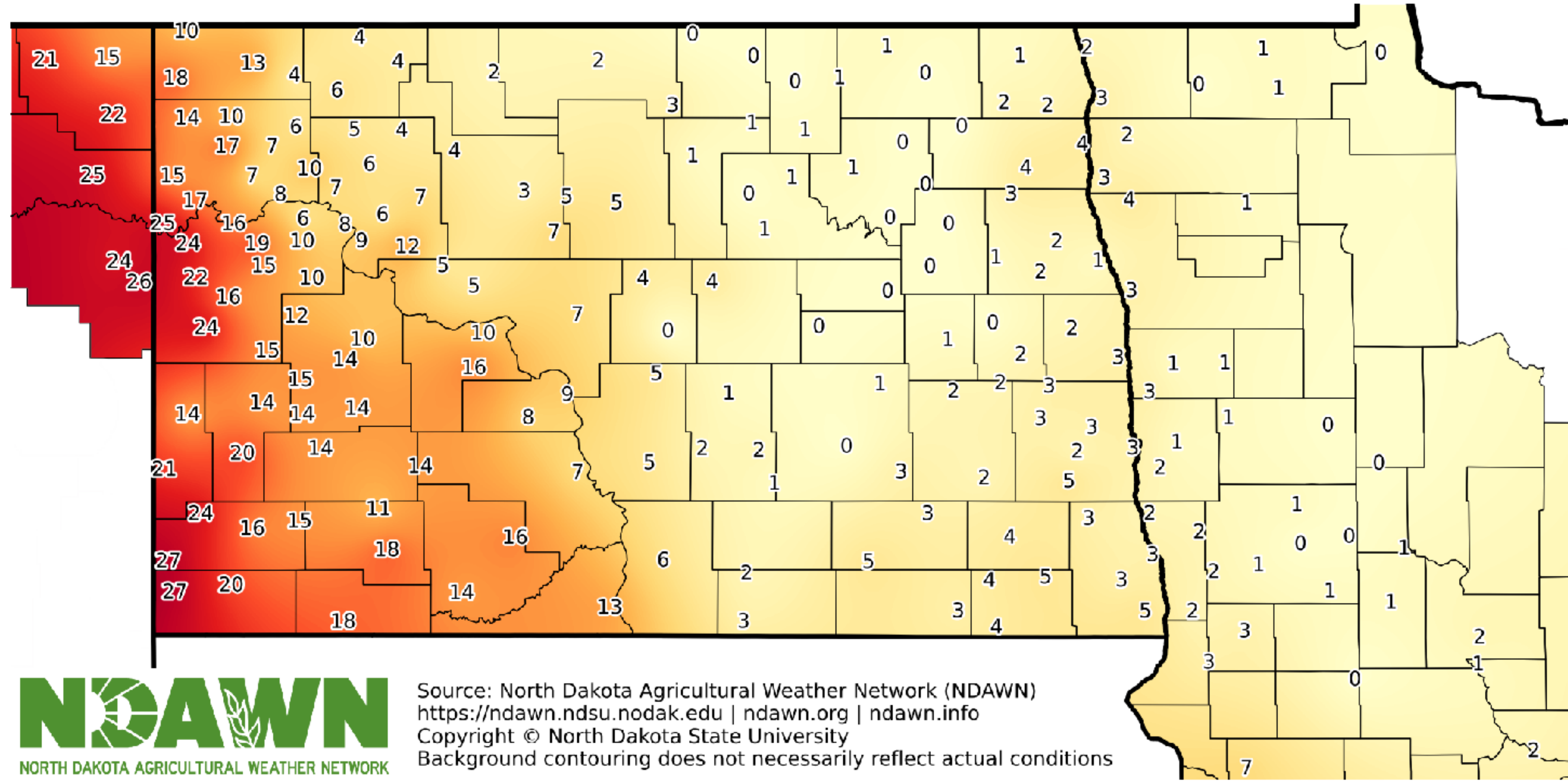
Smoke Forecast



Air Quality and Fire Location

Total Number of Days with Maximum Temperature 90 ° F+

Apr 01 2024 - Sep 04 2024



90° Days in 2024

Summary

Cool in Short Term (Few 30s next couple of mornings)

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Warmer Next two Weeks / Widespread Freeze Unlikely

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Occasional Smokey Days

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Warmer Next two Weeks / Widespread Freeze Unlikely

Occasional Smokey Days

Generally Dry Pattern for North Dakota

daryl.ritchison@ndsu.edu