### 2025 Spring Flood Outlook #1

February 13, 2025 1:13 PM

NWS Hastings Hydrologic Area: Central/South Central Nebraska and North Central Kansas





# **Spring Flood Outlook - Overview**

#### Spring Flood Risk Across Central/South Central NE and North Central KS is Generally: Below Normal (Overall) to Near-To-Below Normal (shorter term ice jam risk)

- Local area snowpack is currently fairly minimal (mainly 2-5" depth...0.10-0.40" liquid content)
- Mountain snowpack in the North/South Platte River Basins is near to below normal with plenty of storage space in some reservoirs upstream of our area such as Lake McConaughy
- Soil moisture is overall drier than normal and should be capable of absorbing plenty of moisture once the ground thaws...thus limiting spring flood potential
- Current streamflow on most of our rivers is averaging near normal to below normal
- The CPC longer range precipitation outlook (March-May) indicates a mix of "equal chances" in our area along with a slight lean toward below normal precip (no clear above normal indicators)
- Shorter-term possible ice jam risk late Feb-early March: Ongoing/upcoming very cold temperatures especially next 7-10 days will grow ice, with expectation of a late-Feb warm-up causing some melt/ice movement.
- NOTE: Isolated flooding is still possible even in dry years and when the overall flood risk is low.





### **Spring Flood Outlook - Risk Factors**

February 13, 2025 1:13 PM

**Central/South Central Nebraska and North Central Kansas** 

**Overall Spring Flood Risk** 

\*\* Below Normal (except near-to-below short term ice jam potential) \*\*

Contributing Factors	Shorter Term: Late Feb-early March	Longer Term: Late March - May
Local Area Snowpack	Low	Low
Mountain Snowpack	Low	Low
River Ice/Frozen Ground	Low-to-Elevated	Low
Soil Moisture	Low	Low
Streamflow	Low	Low
Precipitation Outlook	Low	Low



#### **Bottom Line Up Front**

- **Below Normal OVERALL Spring Flood Risk:** Biggest factors are drought/drier soil and seasonal precipitation not forecast to be above normal.
- Near-to-Below Normal Shorter Term Ice Jam Flood Risk (Platte/Loup Rivers):

Ongoing/upcoming very cold temperatures especially next 7-10 days will grow ice, with expectation of a late-Feb warm-up causing some melt/ice movement.

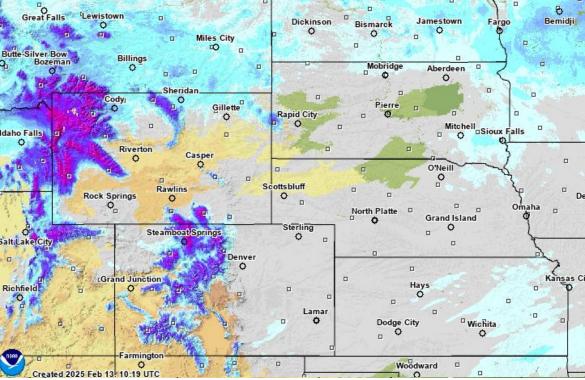
- **Streamflow:** Our main rivers are mostly running with below to near normal flow.
- Precipitation Outlooks: CPC indicates a mix of "equal chances" and a slight lean toward below normal precip March-May



### **Regional Snowpack**

#### **Key Messages**

- → Only fairly shallow snow depth within/near our forecast area
- → Mainly no more than 2-5" snow...water equivalent 0.10-0.40"







## 2024-25 Seasonal Snow-To-Date

All but far southeast areas still "well behind schedule"...despite recent Feb. 11-12 snow

#### As of Feb 12, 2025:

#### Grand Island

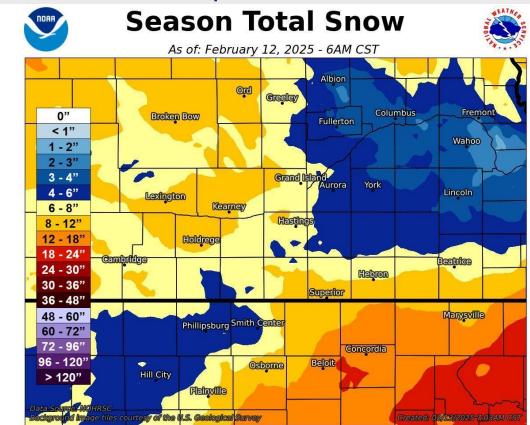
Seasonal Snow (since fall 2024):

Current8.0"Normal18.5"Departure-10.5"

#### Grand Island

#### Liquid Equivalent Precipitation:

Since December 1, 2024 (meteorological winter) Liquid 0.85" Normal 1.77" Departure -0.92"



National Weather Service Hastings, NE

February 13, 2025





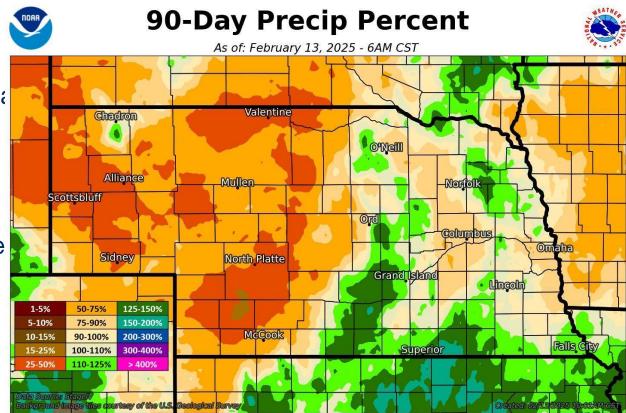
# **Precipitation Trends Last <u>90 Days</u>**

February 13, 2025 1:13 PM

Mix of Above/Below Normal...BUT Still Some Influence From a Wet November

#### **Key Messages**

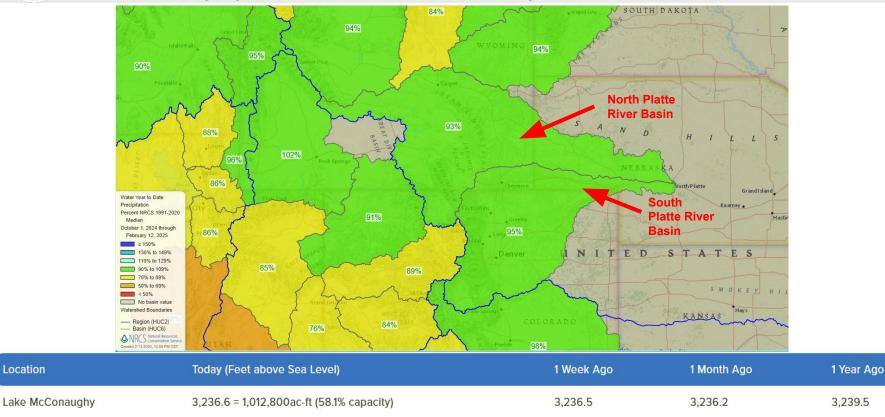
- → Precipitation % of normal last 90 days
- → Mix of above/below normal in our forecast area
- $\rightarrow$  HOWEVER, some of the above normal areas still being influenced by a wet November (well below normal for many since then)





### Western Moisture/Snowpack

Near-to-Slightly Below Normal Water Year Precipitation in Basins That "Feed" Platte River





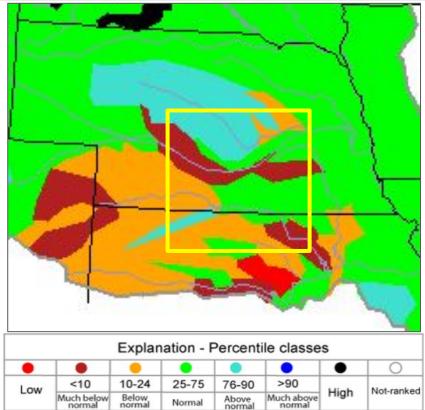
Location



#### February 13, 2025 1:13 PM

### **Key Messages**

→ Most rivers are currently running normal-to-below normal within our forecast area





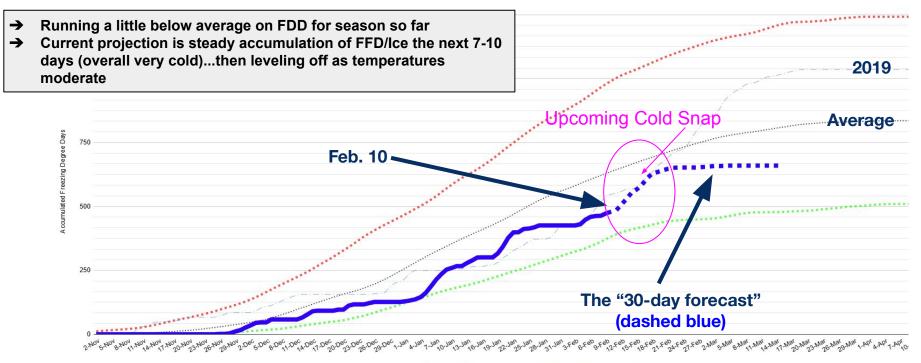
# Freezing Degree Days (FDD)

Grand Island - Below Normal FDD Indicates Overall-Warmer Winter-So-Far

Accumulated Freezing Degree Days for Grand Island, NE

February 13, 2025

1:13 PM



•• 90% •• 10% •• Average ---- • 2019 •• Forecast - 2025



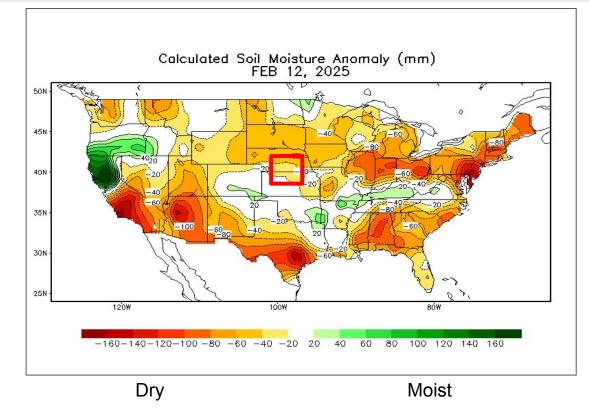
# WEATHER OF THE STORE

# **Soil Moisture Versus Normal**

**Slightly Below Normal Prevailing Locally** 

#### **Key Messages**

- → At least slightly below normal prevailing over our area
- Soil should be able to absorb a good deal of spring moisture once thaws







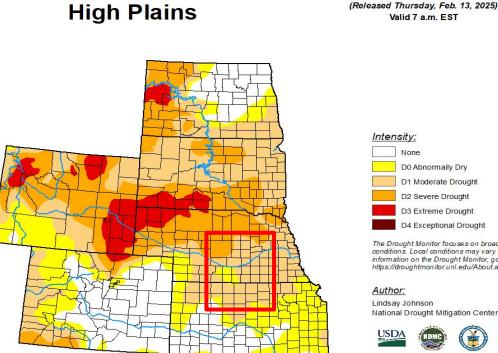
## Latest U.S. Drought Monitor

#### Mostly Moderate Drought (D1) Across Our Forecast Area

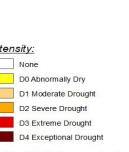
#### February 13, 2025 1:13 PM

#### **Key Messages**

- → Mostly Moderate Drought (D1) across our forecast area
- → VERY LITTLE change over the winter so far
- $\rightarrow$  Soil should be able to absorb a good deal of spring moisture once thaws



U.S. Drought Monitor



February 11, 2025

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

Lindsay Johnson National Drought Mitigation Center

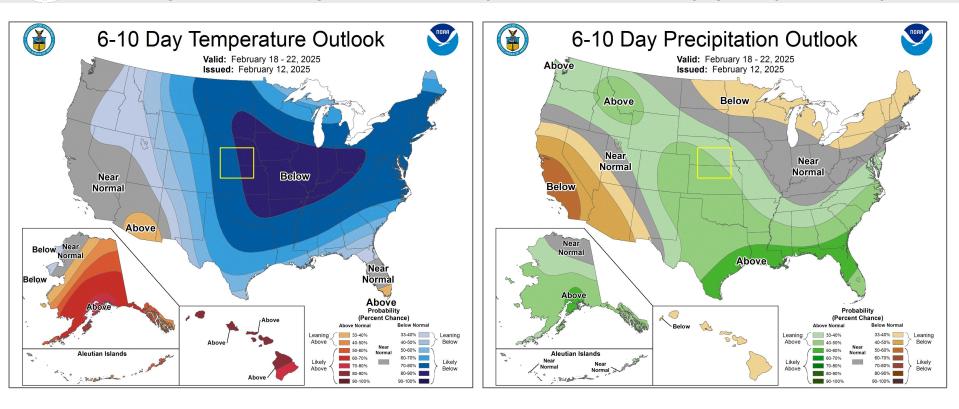




# 6-10 Day

6-10 Day Outlook (Feb. 18-22)

**Turning Much Colder Again With Potentially More Snow Chances (especially Feb. 18-19)** 





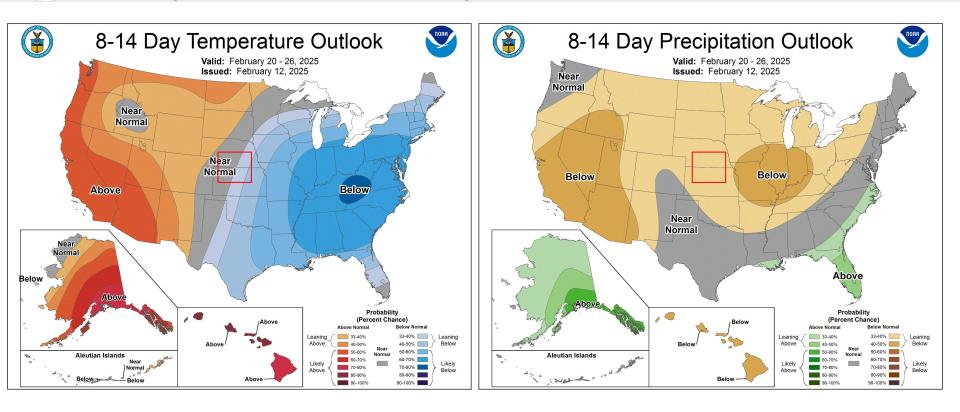
National Weather Service Hastings, NE

February 13, 2025

## 8-14 Day Outlook (Feb. 20-26)

February 13, 2025 1:13 PM

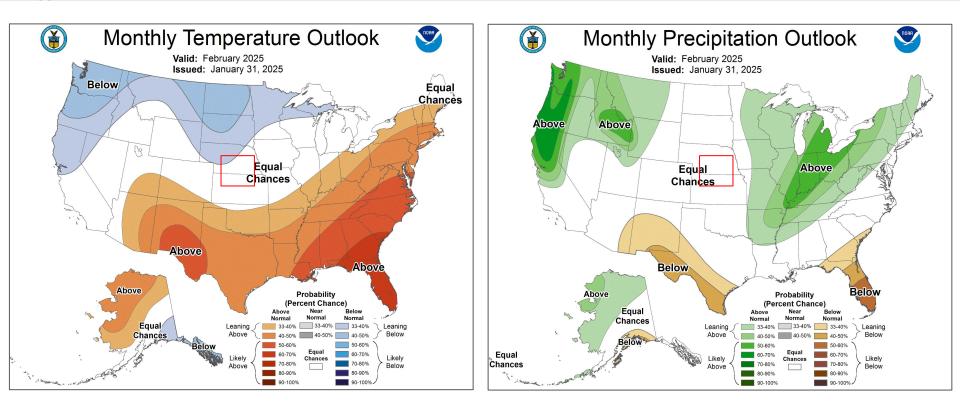
Trending Back Toward Near-Normal Temps/Overall-Drier Toward End of Month





### February One-Month Outlook

NOTE: Since this was issued two weeks ago, February temperature trend has leaned colder



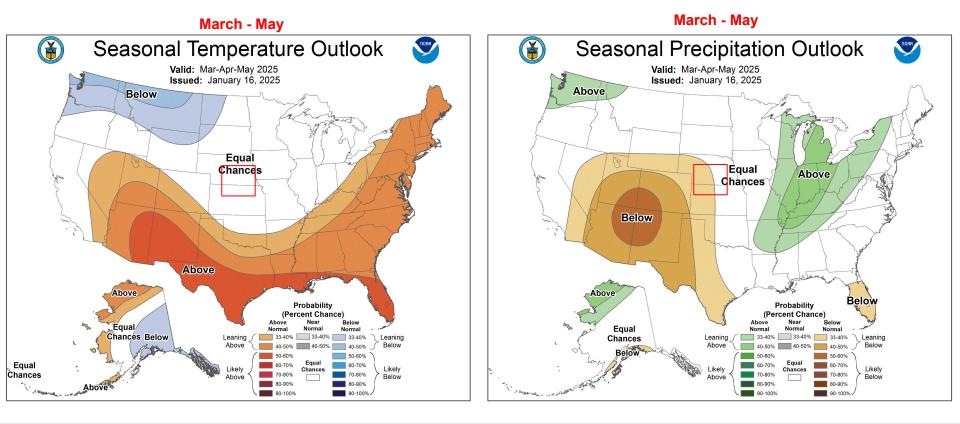
National Oceanic and Atmospheric Administration U.S. Department of Commerce

National Weather Service Hastings, NE

February 13, 2025

### **Three Month Outlook (March-May)**

No strong indicators across our region...slight lean toward below normal precip in our west





#### National Weather Service Hastings, NE

February 13, 2025

### This Concludes 2025 Spring Flood Outlook #1

February 13, 2025 1:13 PM

NEXT ISSUANCE: Thursday, Feb. 27, 2025



National Oceanic and Atmospheric Administration U.S. Department of Commerce