



**NATIONAL  
WEATHER  
SERVICE**

# NWS Grand Forks Spring Flooding Update

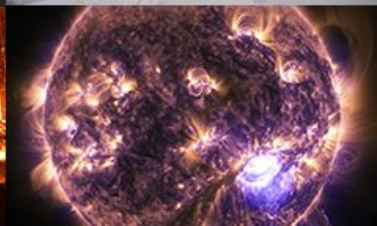
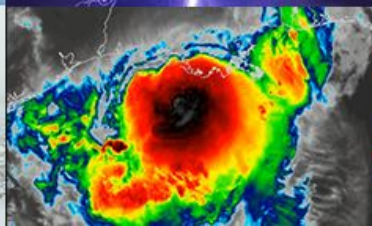
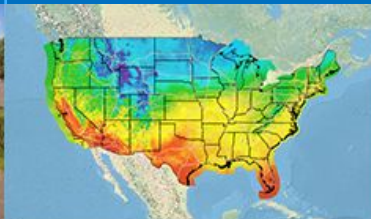
**Amanda Lee**

Service Hydrologist  
NWS Grand Forks

**Jim Kaiser**

Warning Coordination Meteorologist  
NWS Grand Forks

April 17, 2023

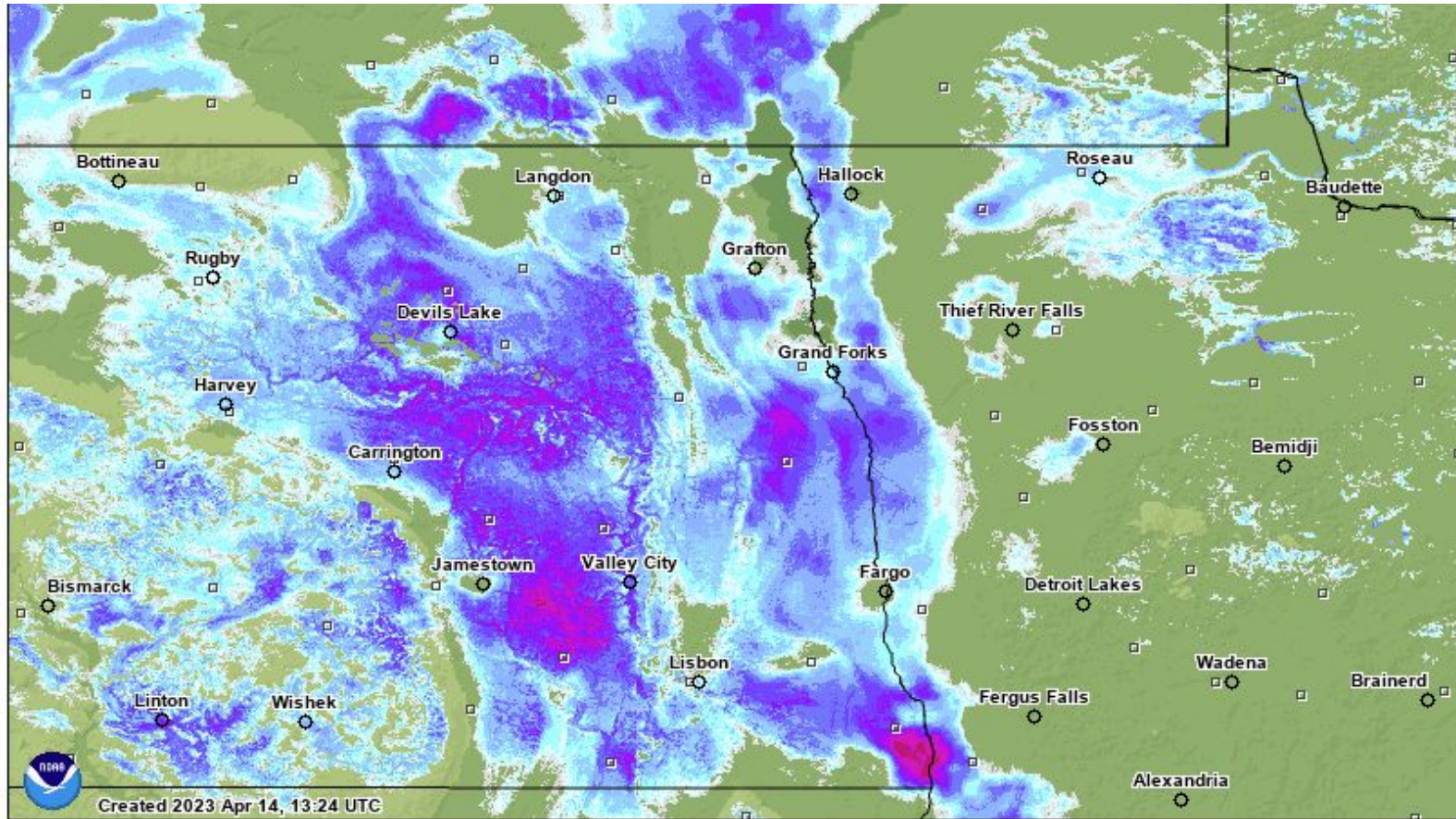
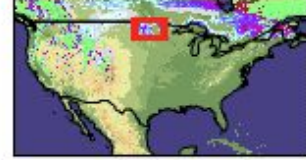


# Key Points

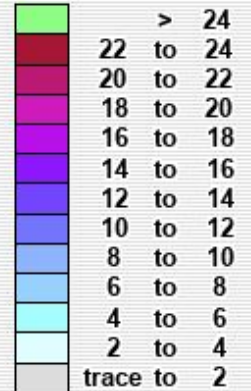
- Mainstem Red River: moderate to major flooding is expected.
  - Southern Valley crests expected this weekend into early next week.
  - Northern Valley crests expected next week into early May.
- Minnesota Tributaries: minor to moderate flooding has occurred or is expected.
  - Most points have crested with the exception of Red Lake Wild Rice, and portion of the Snake.
  - Ice jam at Crookston over the weekend, near its peak now.
- North Dakota Tributaries: minor to major flooding is expected.
  - Runoff across southeastern ND will increase dramatically over the next 24 hrs, especially for the Maple and lower Sheyenne Rivers.
- **Any future precipitation has the potential to impact river levels through the first few weeks of May.**



# Modeled Snow Depth - April 14, 2023



## Inches of depth



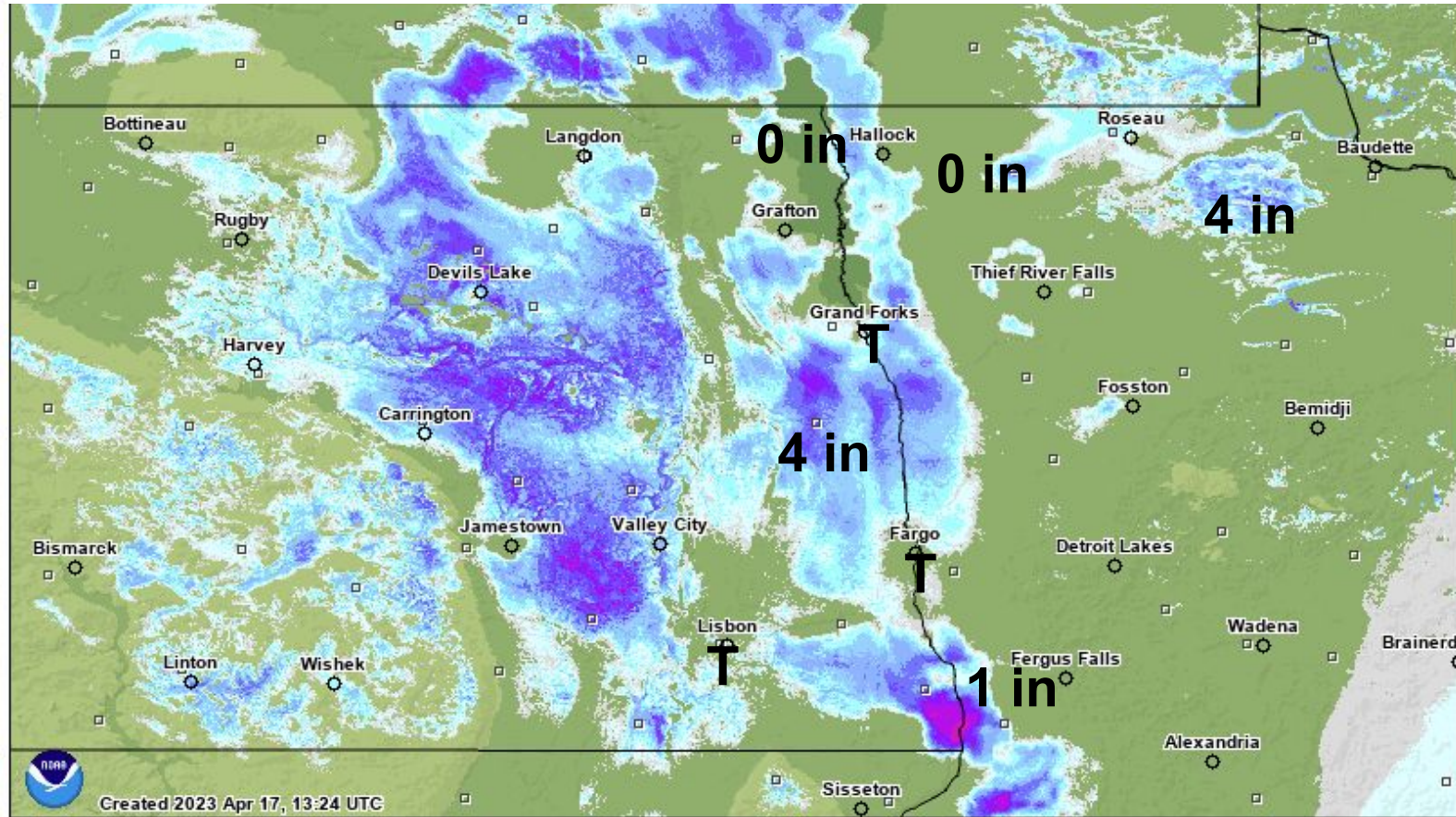
[White Box] Not Estimated

## Elevation in feet

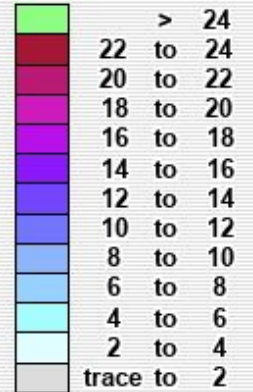


Created 2023 Apr 14, 13:24 UTC

# Modeled Snow Depth - April 17, 2023



## Inches of depth



Not Estimated

## Elevation in feet



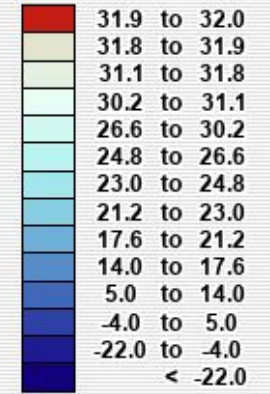
Created 2023 Apr 17, 13:24 UTC



# Modeled Snowpack Temperature - April 17, 2023



## Degrees Fahrenheit



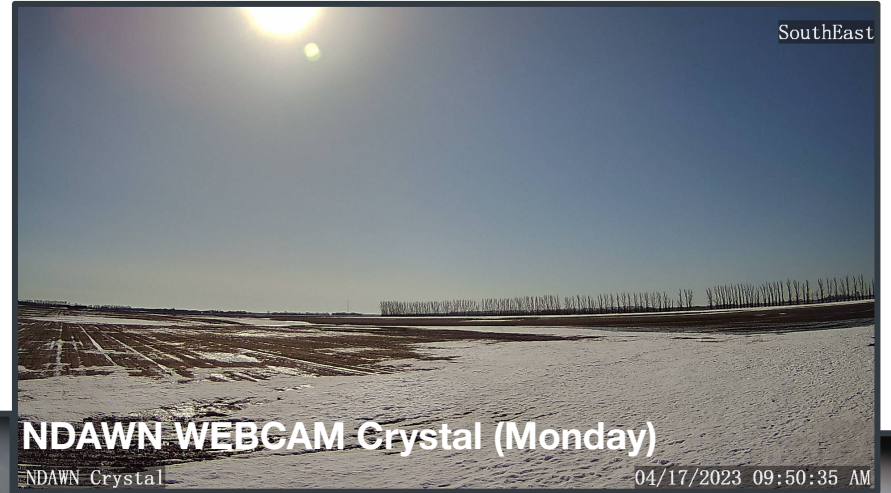
White box: Not Estimated

## Elevation in feet



Created 2023 Apr 17, 13:16 UTC

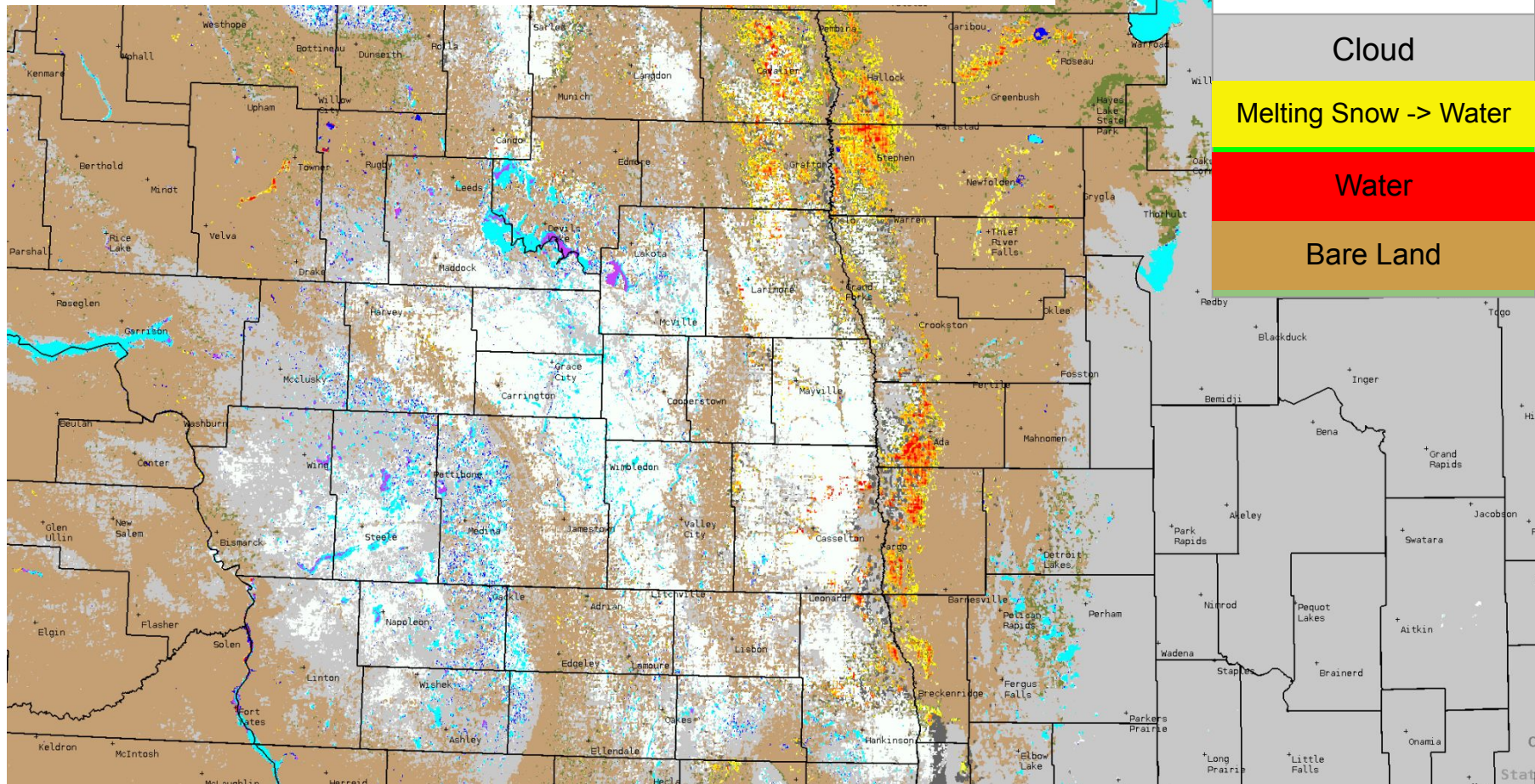
# Eastern ND



# Western MN



Sunday, April 16, 2023 - 3:30 pm



Snow/Ice

Cloud

Melting Snow -> Water

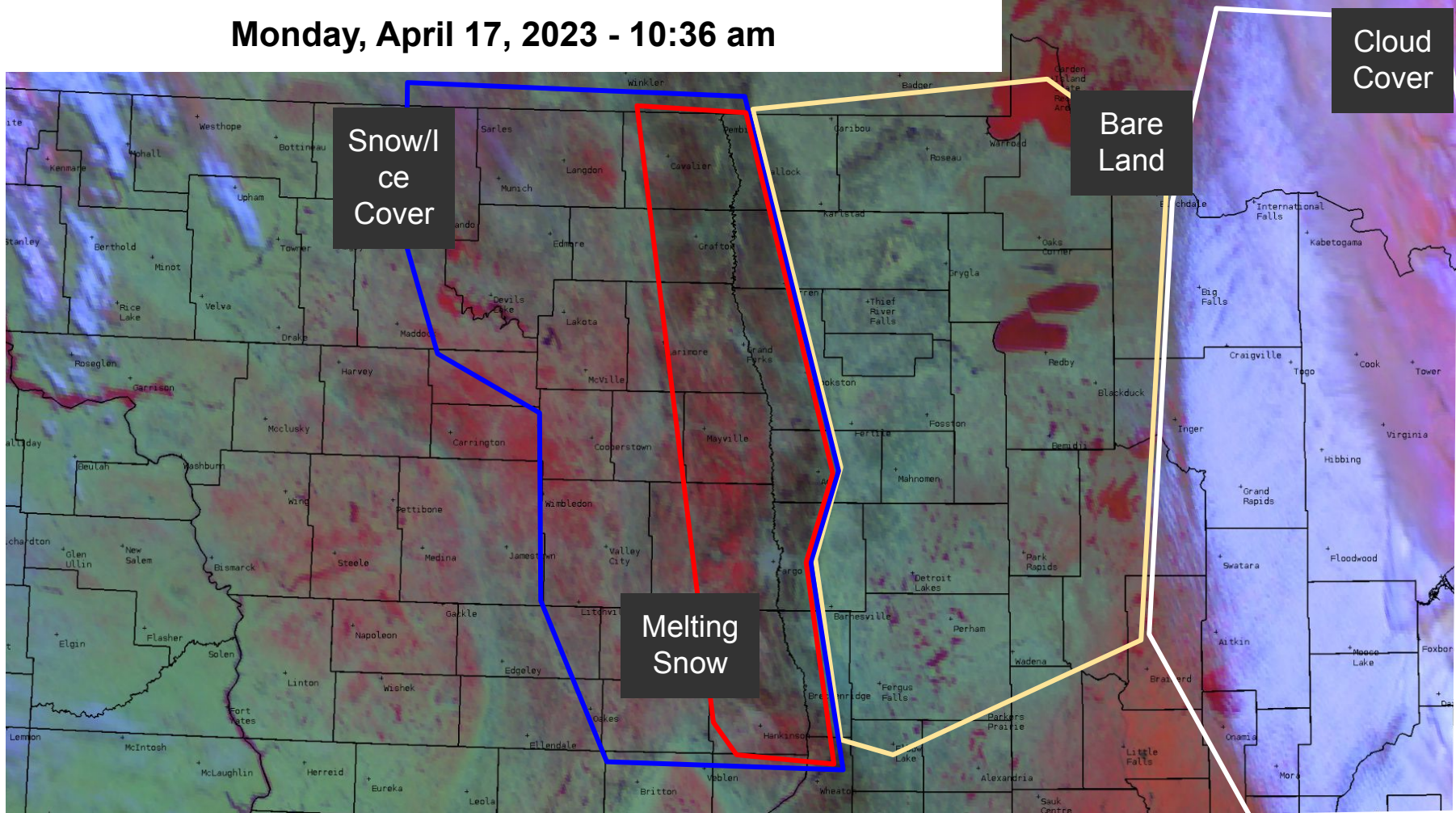
Water

Bare Land



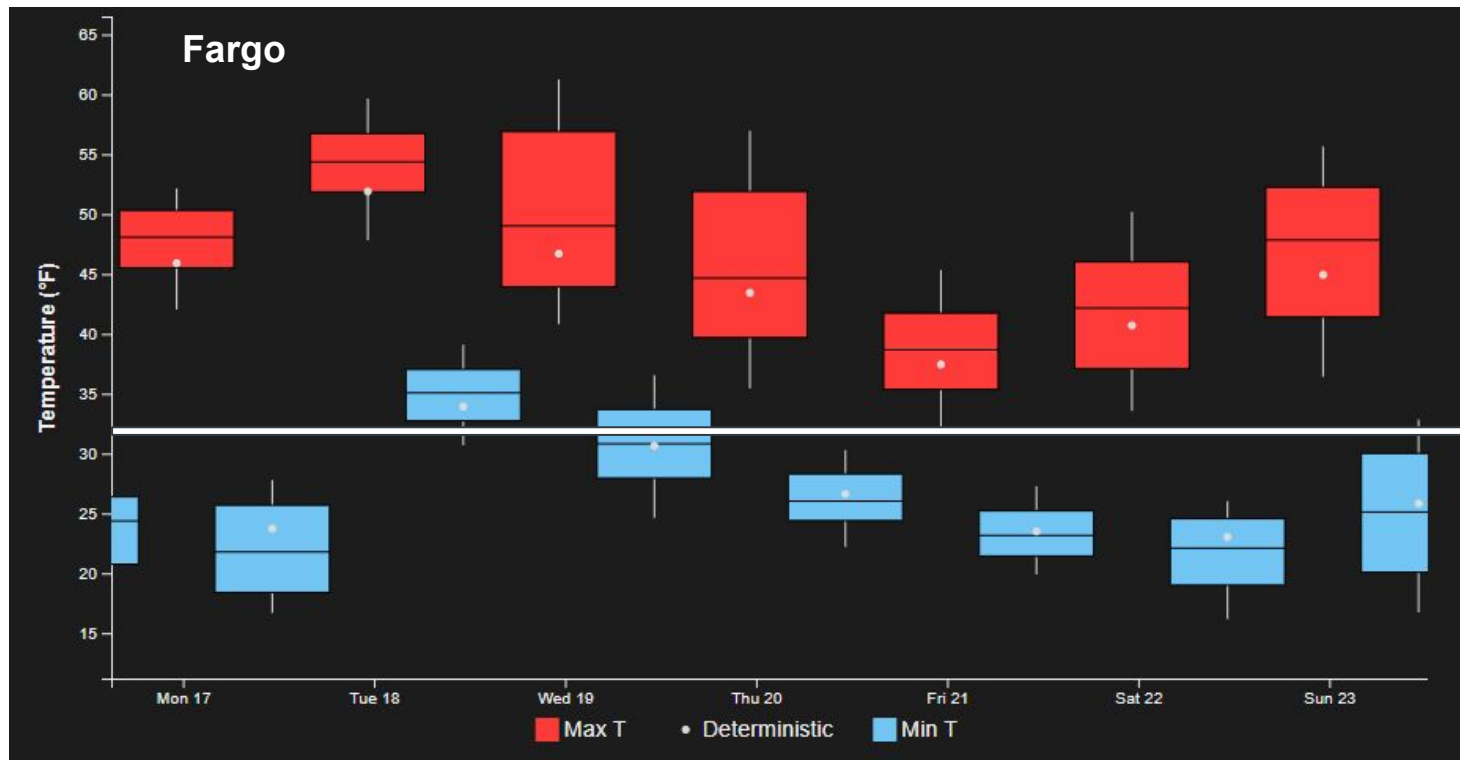


Monday, April 17, 2023 - 10:36 am





# Temperature Outlook





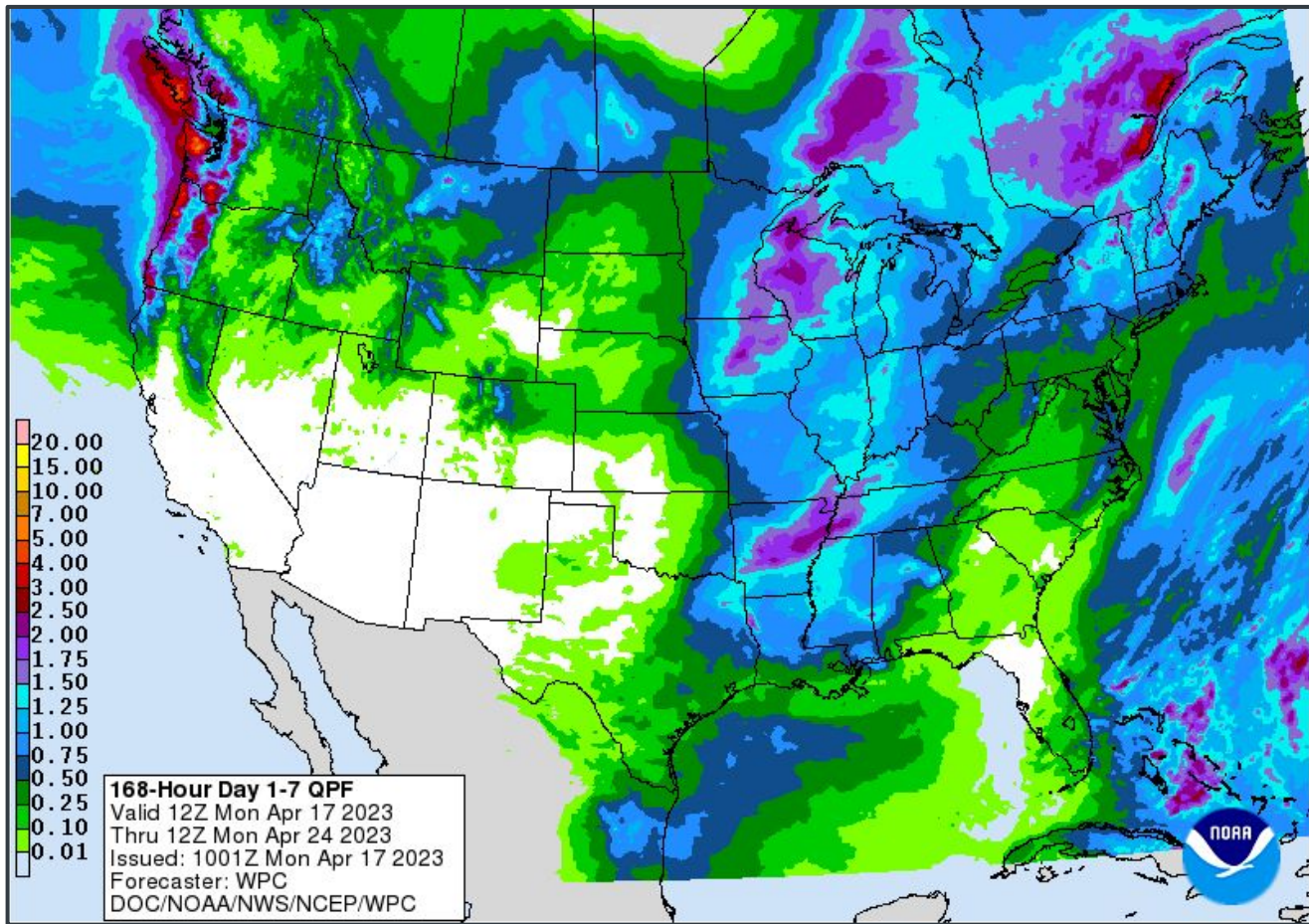
# Precipitation Outlook



Precipitation amounts beyond the river model forecast precipitation period are denoted by low, medium, or high chances of receiving the amounts indicated below.

| Legend        | Date          | Type      | 0.01 - 0.25" | 0.26 - 0.50" | 0.51 - 1.00" | 1.00" + |
|---------------|---------------|-----------|--------------|--------------|--------------|---------|
| 100%<br>High  | Tue, April 18 | Rain/Snow | High         | Low          | Low          | -       |
| 70%<br>Medium | Wed, April 19 | Rain/Snow | High         | Medium       | Low          | -       |
| 40%<br>Low    | Thu, April 20 | Rain/Snow | High         | Medium       | Low          | -       |
| 10%           | Fri, April 21 | Snow      | Medium       | Low          | -            | -       |
|               | Sat, April 22 | Snow      | Low          | -            | -            | -       |
|               | Sun, April 23 | -         | -            | -            | -            | -       |



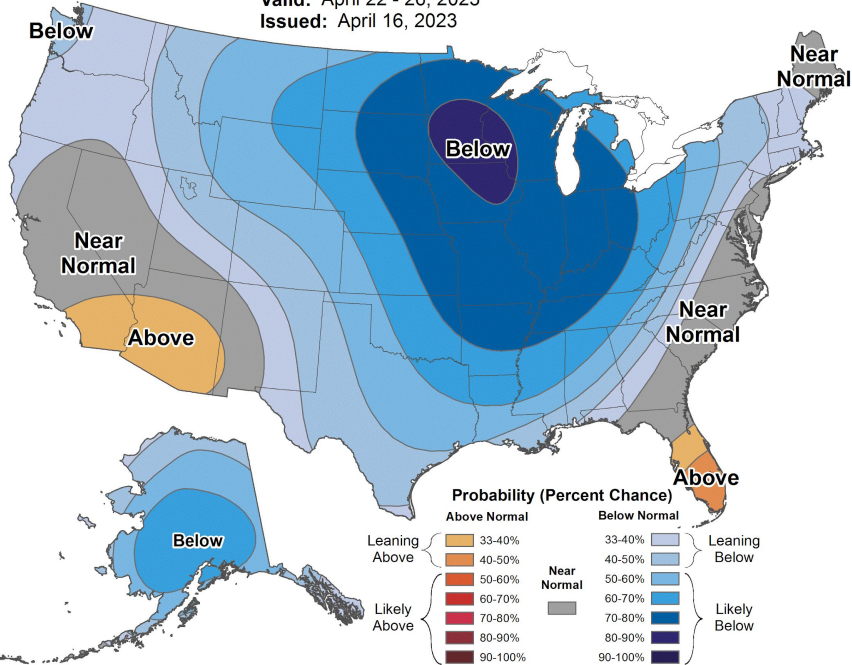




# 6-10 Day Temperature Outlook



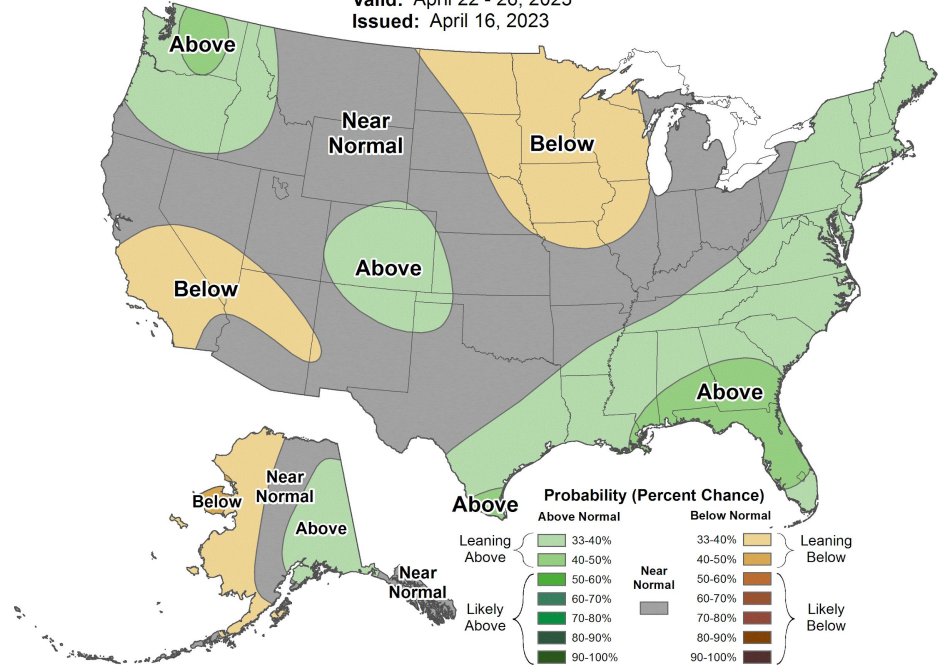
Valid: April 22 - 26, 2023  
Issued: April 16, 2023



# 6-10 Day Precipitation Outlook



Valid: April 22 - 26, 2023  
Issued: April 16, 2023

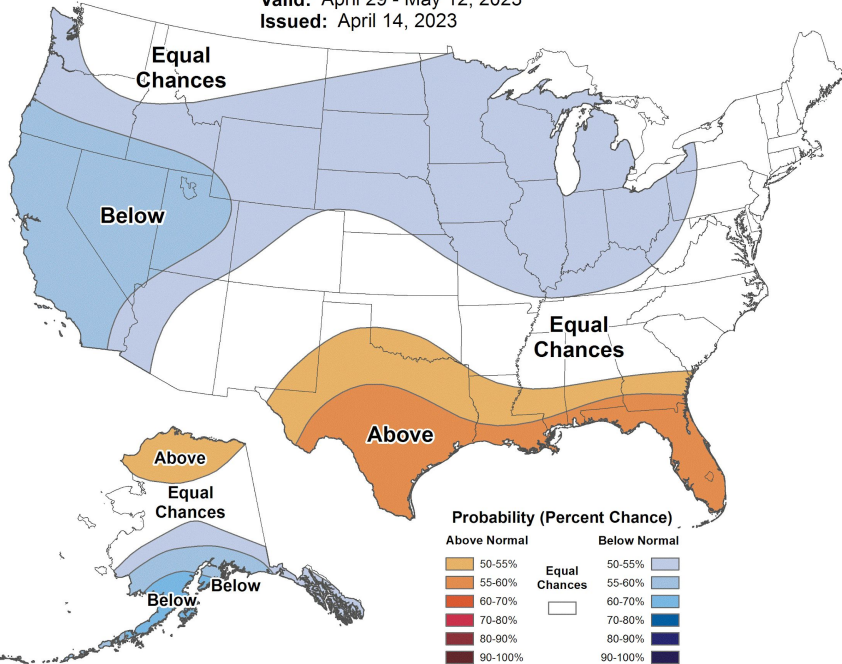




# Weeks 3-4 Temperature Outlook



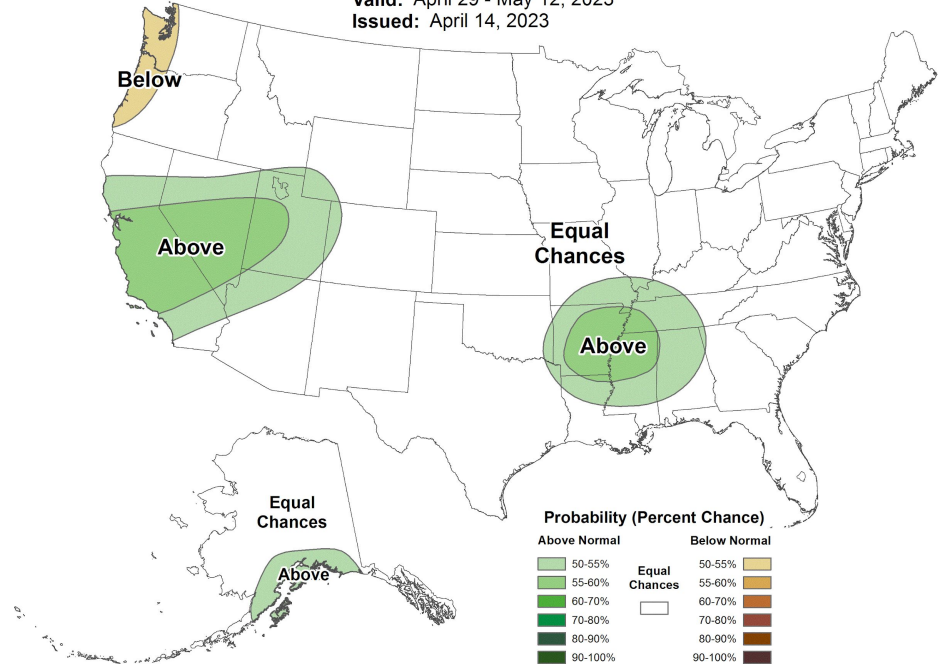
Valid: April 29 - May 12, 2023  
Issued: April 14, 2023



# Weeks 3-4 Precipitation Outlook



Valid: April 29 - May 12, 2023  
Issued: April 14, 2023

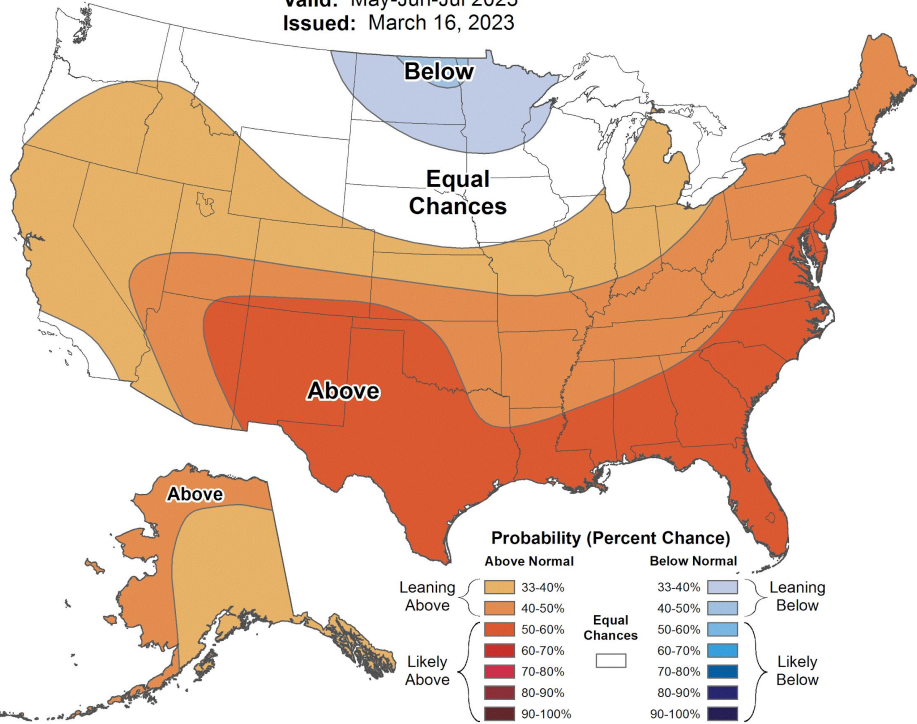




# Seasonal Temperature Outlook



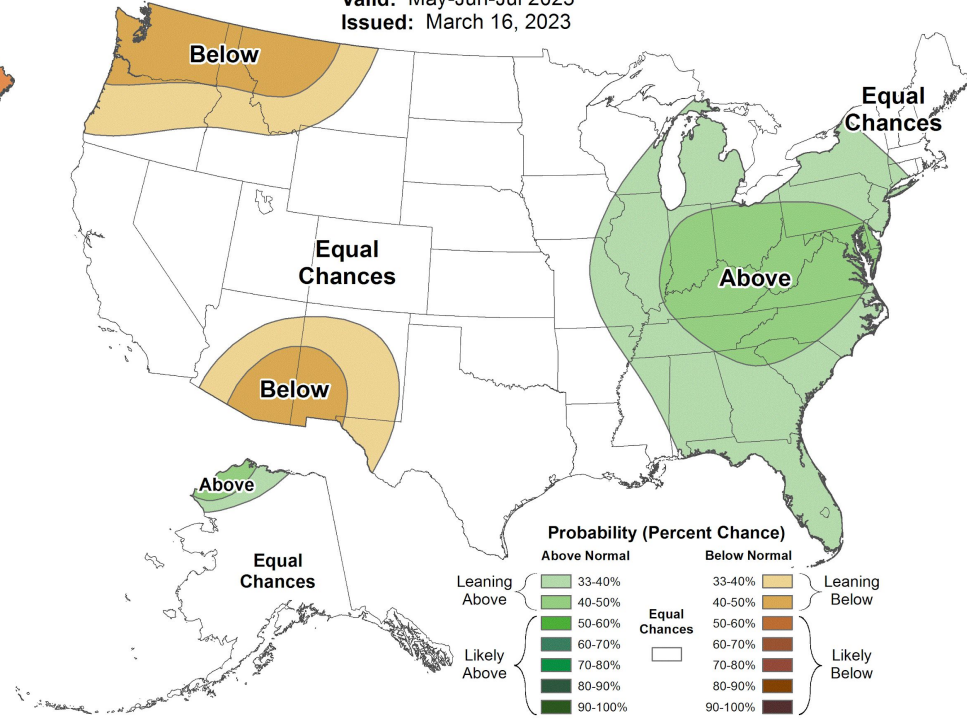
Valid: May-Jun-Jul 2023  
Issued: March 16, 2023



# Seasonal Precipitation Outlook



Valid: May-Jun-Jul 2023  
Issued: March 16, 2023



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