

2024 Spring Fire Weather Outlook



Whipple Hollow Prescribed Burn

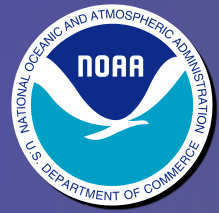
Brooke Taber

2024 BTV Spring Fire Weather Meeting

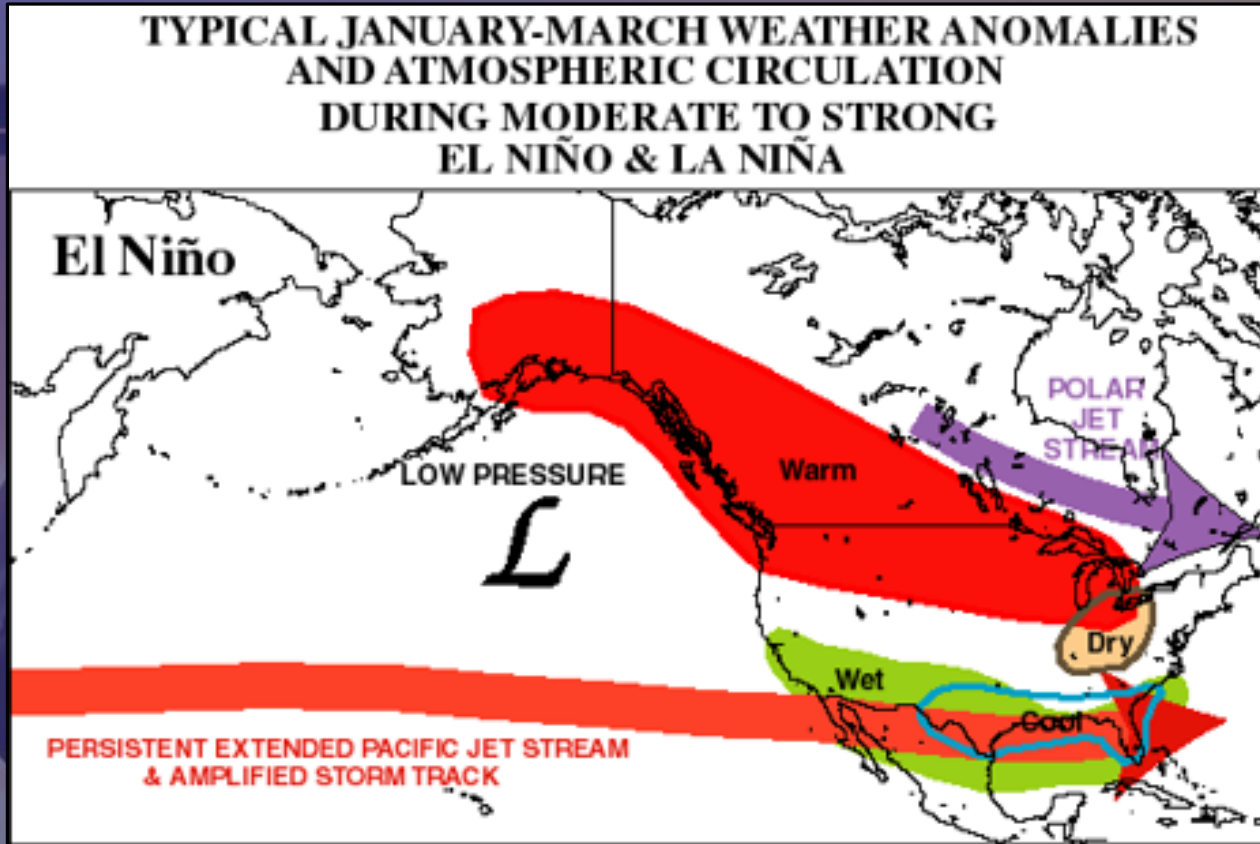
13 March 2024

Discussion Items

- **Winter 2023-24 Pattern**
- **Precipitation and snowfall totals to date**
- **Precipitation and temperature outlooks**
- **Drought Monitor and Predictive Services Outlook**
- **2024 Fire Weather Outlook**



Winter 2023-24 Pattern with El Niño

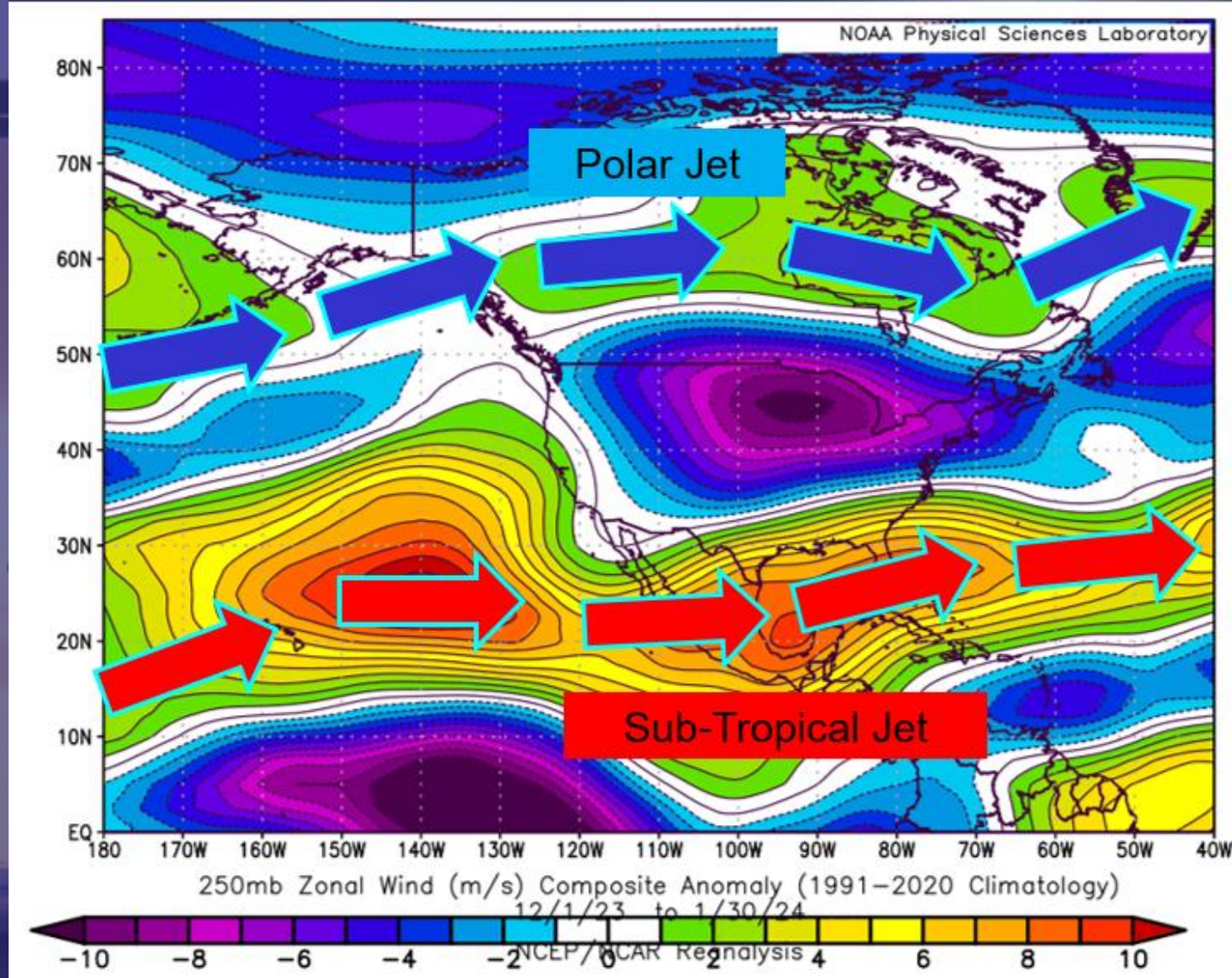


Jet Stream

- Fast ribbon of air 25,000 to 35,000 feet above surface
- Divides warm air to the south and cool air to the north
- Helps in the development and track of cyclones



Winter Jet Position

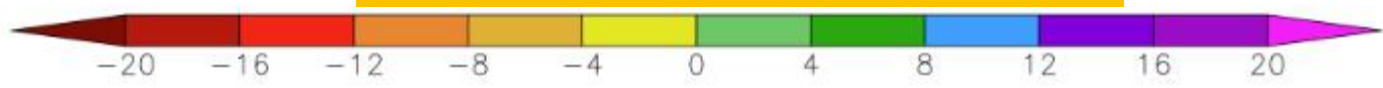
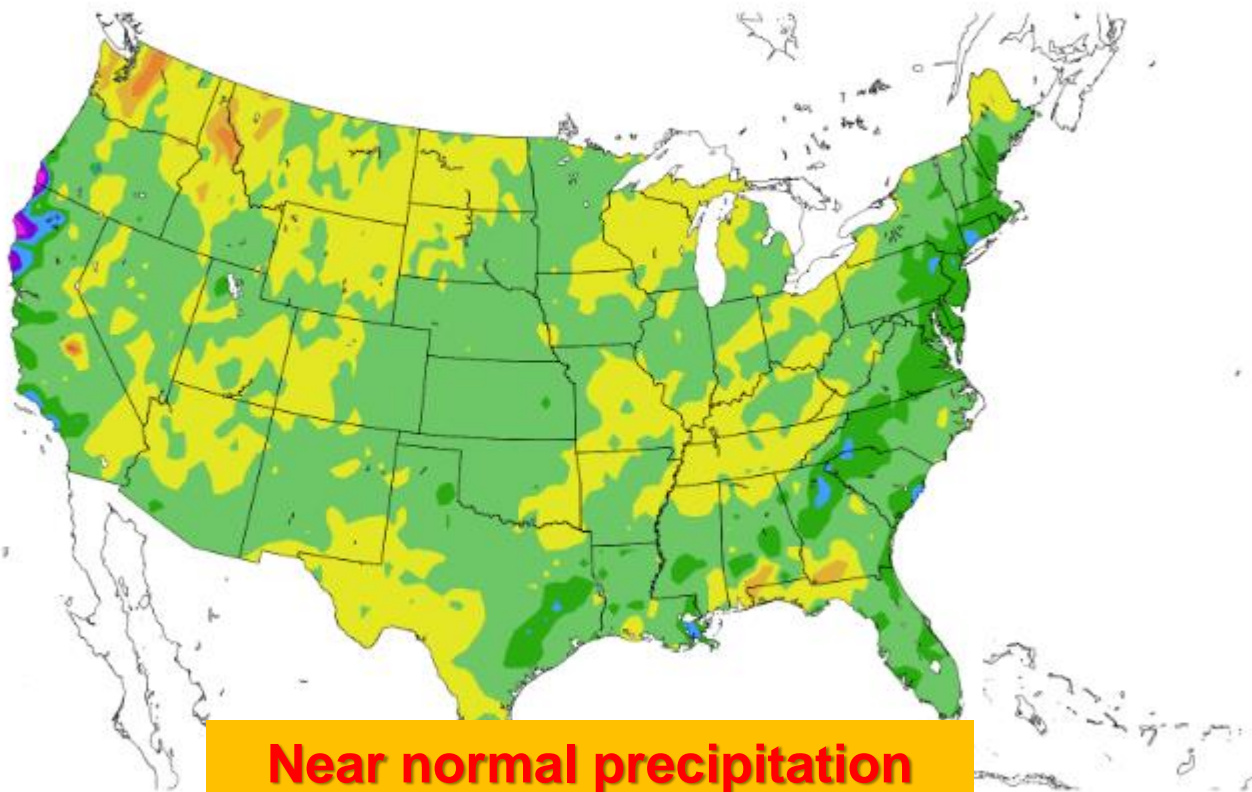


Precipitation Totals and Departures Last 90 Days

<https://hprcc.unl.edu/>

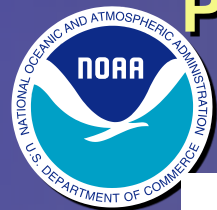


Departure from Normal Precipitation (in)
12/12/2023 – 3/10/2024



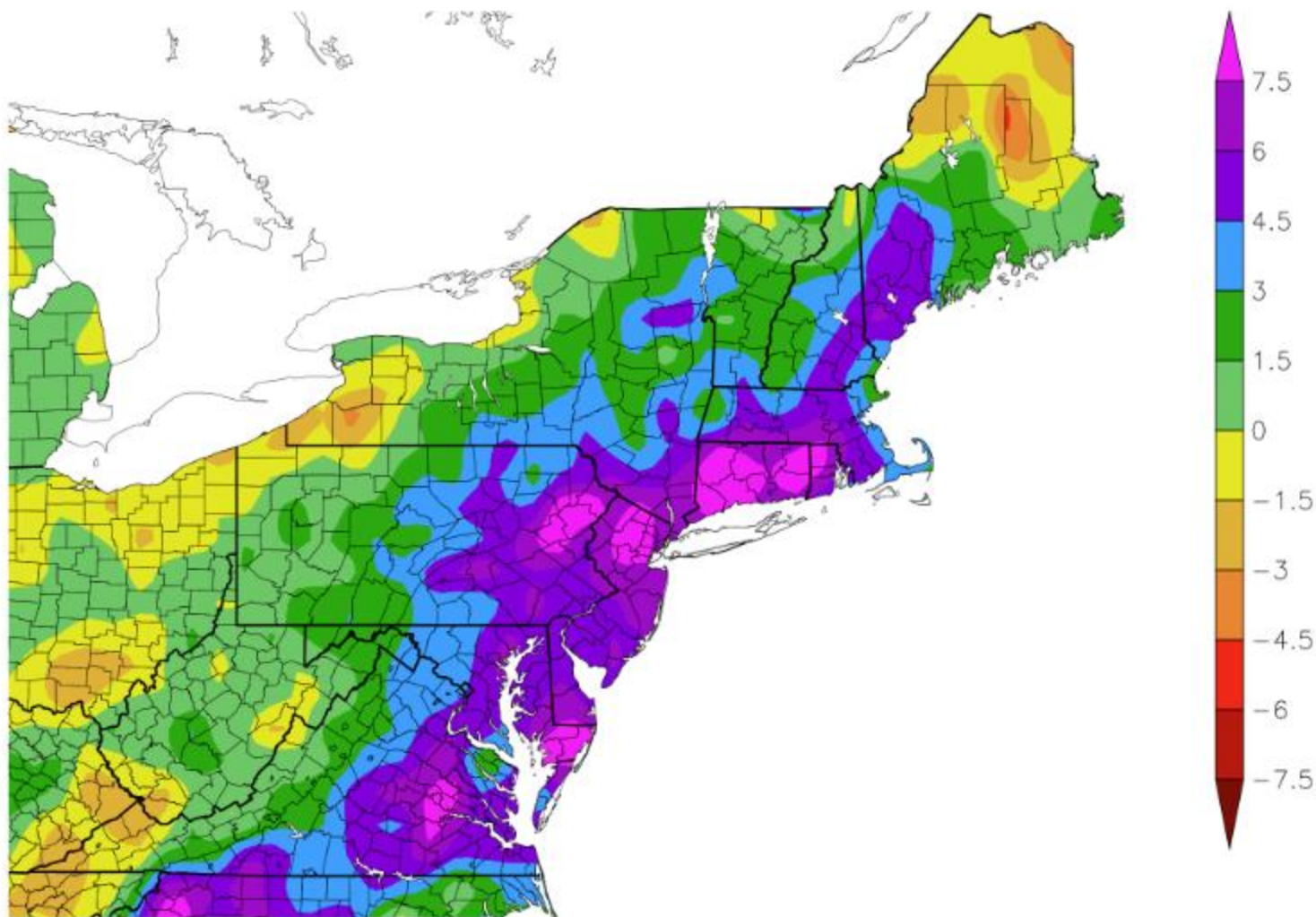
Precipitation Totals and Departures Last 90 Days

<https://hprcc.unl.edu/>



Departure from Normal Precipitation (in)

12/12/2023 - 3/10/2024












Drought Monitor



Map released: Thurs. March 7, 2024

Data valid: March 5, 2024 at 7 a.m. EST

Intensity

-  None
-  D0 (Abnormally Dry)
-  D1 (Moderate Drought)
-  D2 (Severe Drought)
-  D3 (Extreme Drought)
-  D4 (Exceptional Drought)
-  No Data

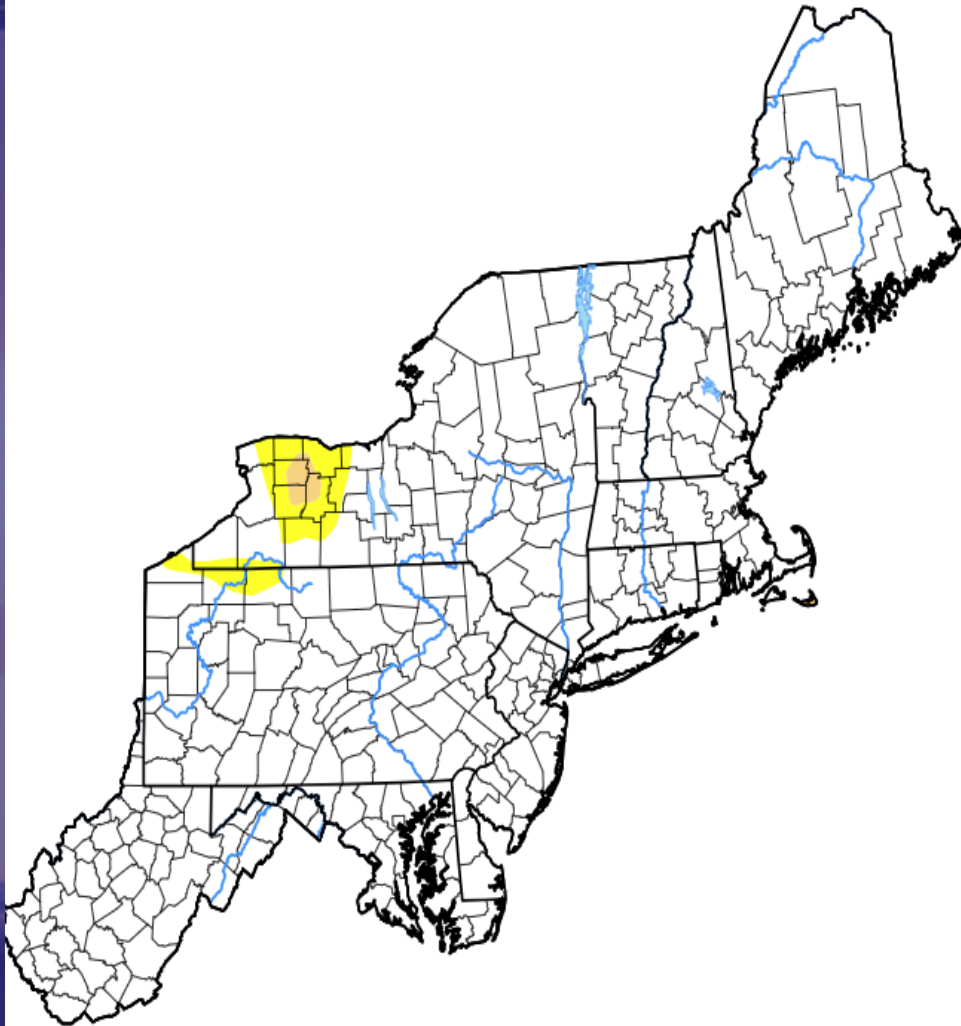
Authors

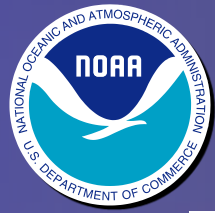
United States and Puerto Rico Author(s):

[Curtis Riganti](#), National Drought Mitigation Center

Pacific Islands and Virgin Islands Author(s):

[Denise Gutzmer](#), National Drought Mitigation Center

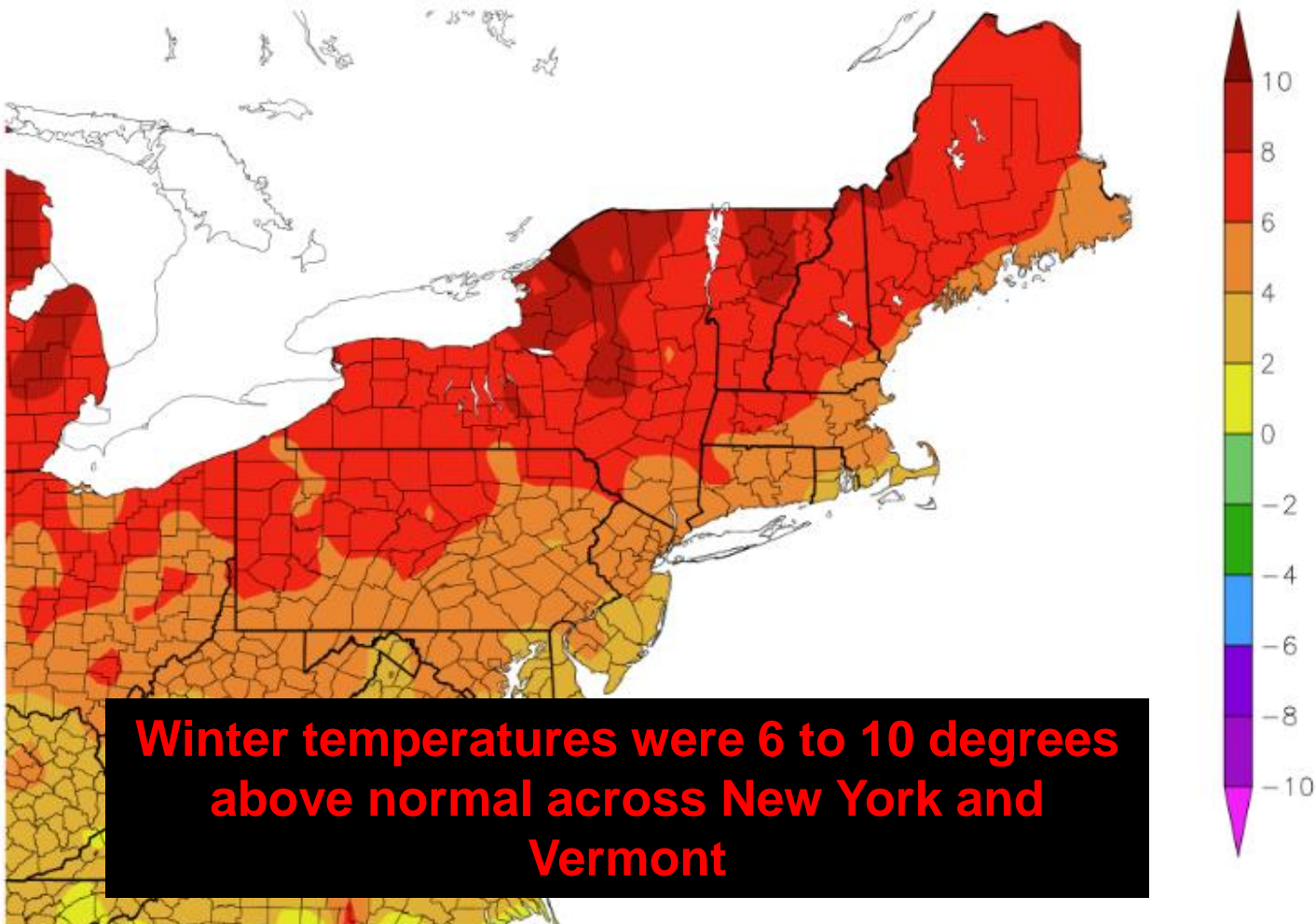




Pattern Impact on Temperatures Last 90 Days



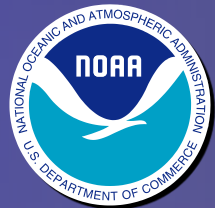
Departure from Normal Temperature (F)
12/12/2023 - 3/10/2024



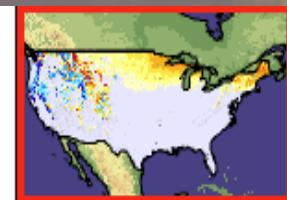
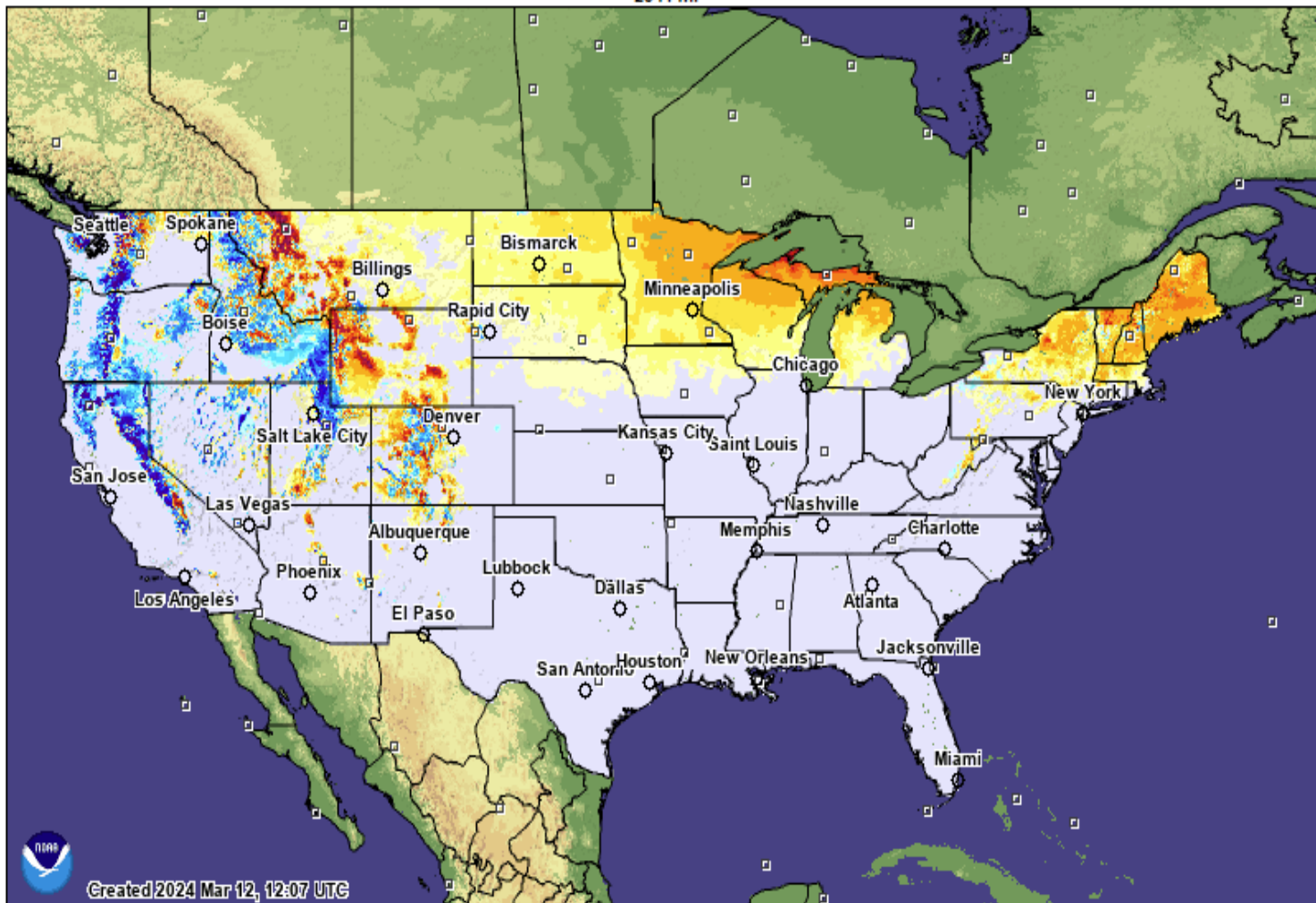
Winter temperatures were 6 to 10 degrees above normal across New York and Vermont

Pattern Impact on Snow Coverage as of 05 March 2023

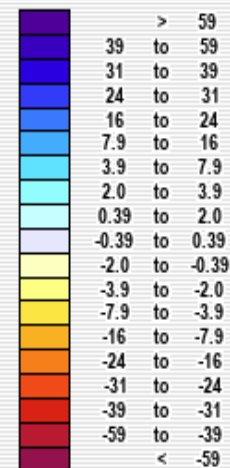
<https://www.nohrsc.noaa.gov/>



Modeled Snow Depth Departure from Normal (Daily) for 2024 March 12, 6:00 UTC
2341 mi

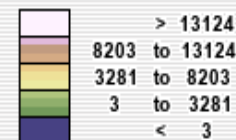


Inches of depth



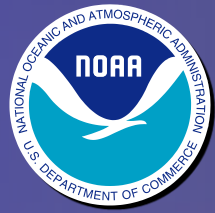
Not Estimated

Elevation in feet



Created 2024 Mar 12, 12:07 UTC

4175 mi



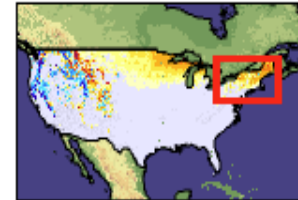
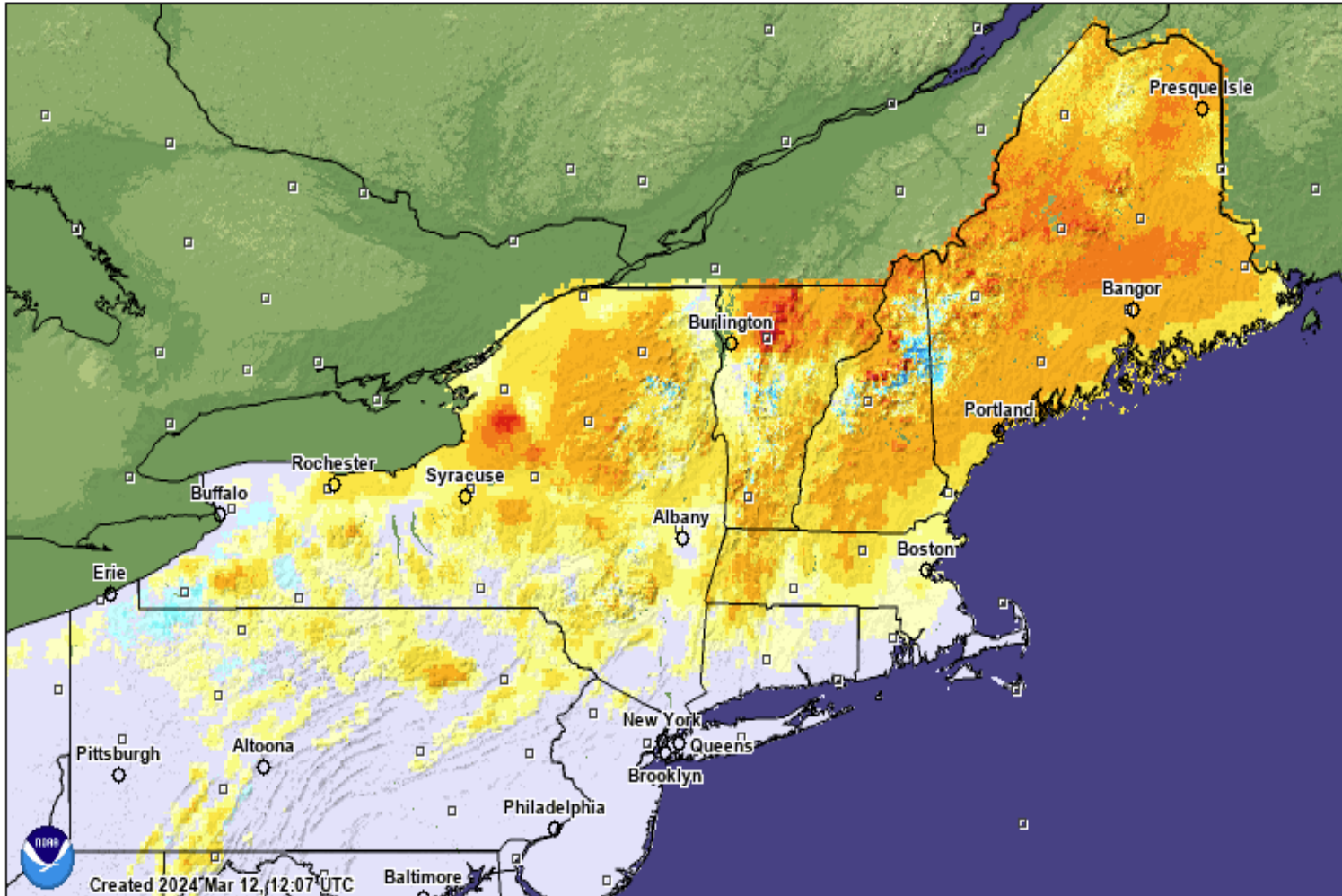
Northeast Snow Depth as of 12 March 2024

<https://www.nohrsc.noaa.gov/>

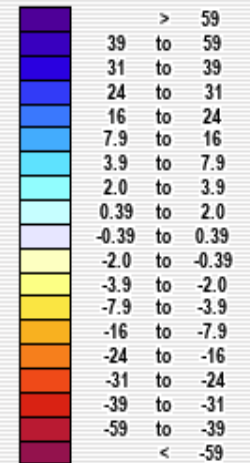


Modeled Snow Depth Departure from Normal (Daily) for 2024 March 12, 6:00 UTC

693.7 mi

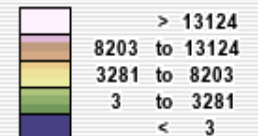


Inches of depth



Not Estimated

Elevation in feet



Created 2024 Mar 12, 12:07 UTC

797.0 mi

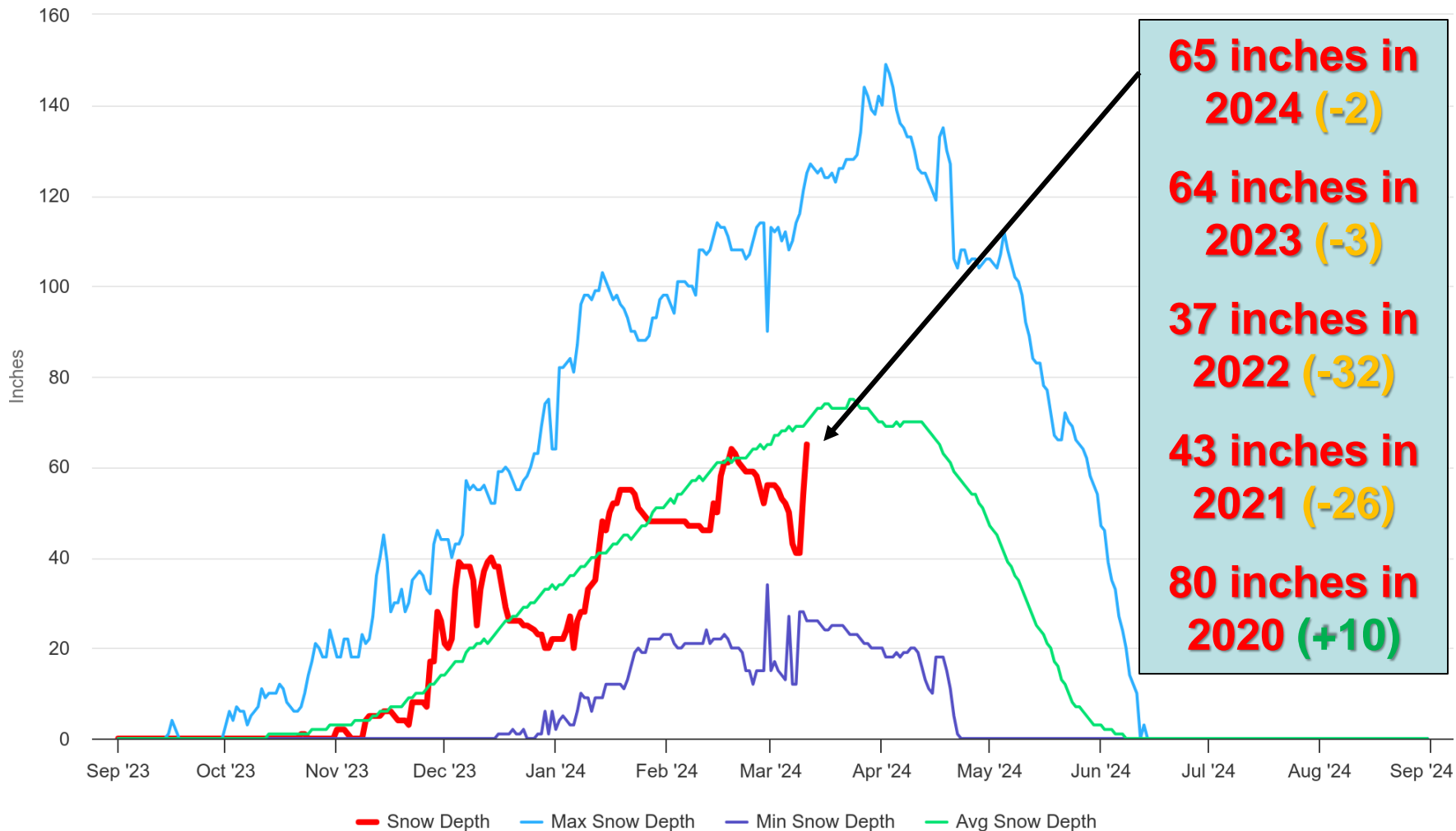


Snow Depth at Mount Mansfield in 2024 vs. Average

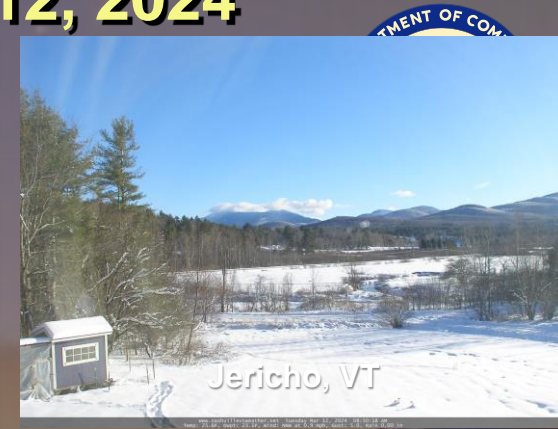


Mount Mansfield Snow Depth for 2023-2024

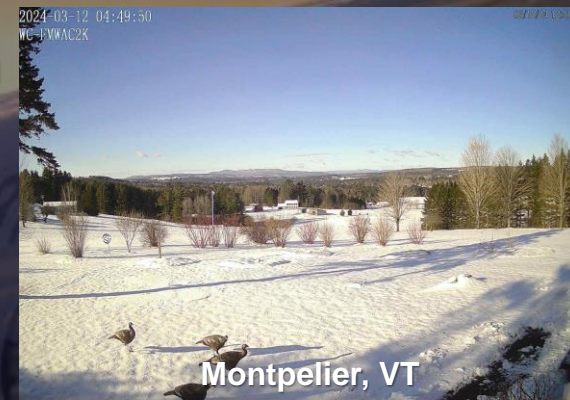
Click and drag in plot area to zoom in

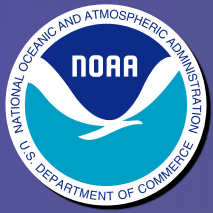


Web Cam Pictures as of March 12, 2024



Snow depth ranging from nothing to 12 inches, much higher in the mountains

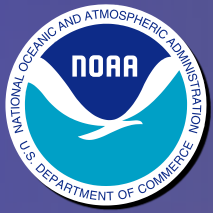




2023-2024 Winter to Date



- 6 to 10 degrees above normal temperatures for winter of 2024.
- Near normal precipitation, slightly less St Lawrence Valley.
- Highly elevational dependent snow pack with much below normal in the valley and near normal at summits.



Outlook/Predictions



- 8 to 14 Day Outlook
- Monthly Outlook
- Spring Outlook/Predictive Services
- My Thoughts



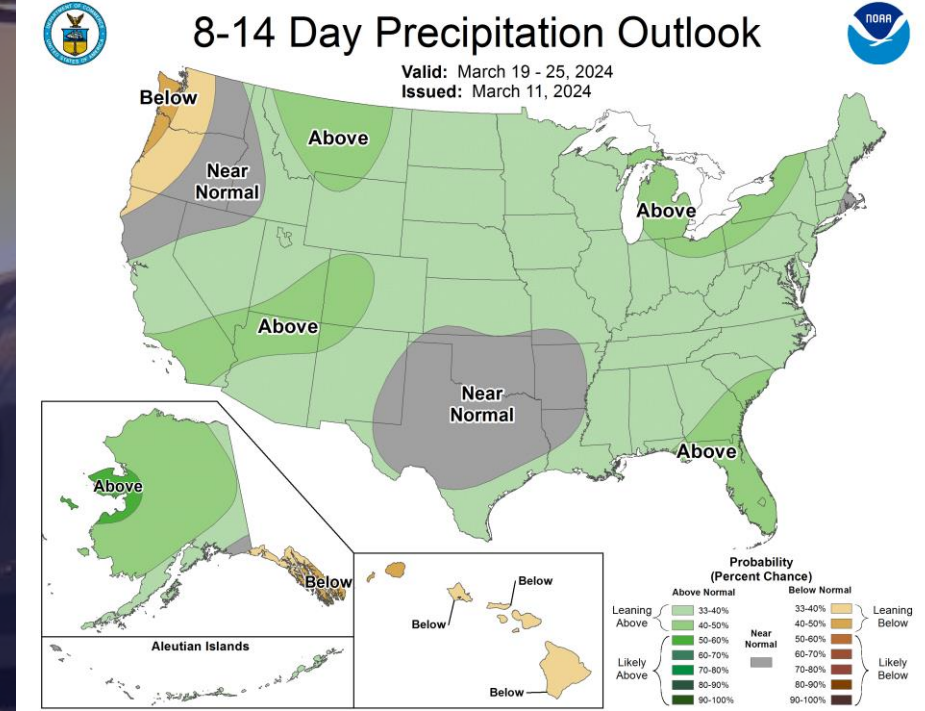
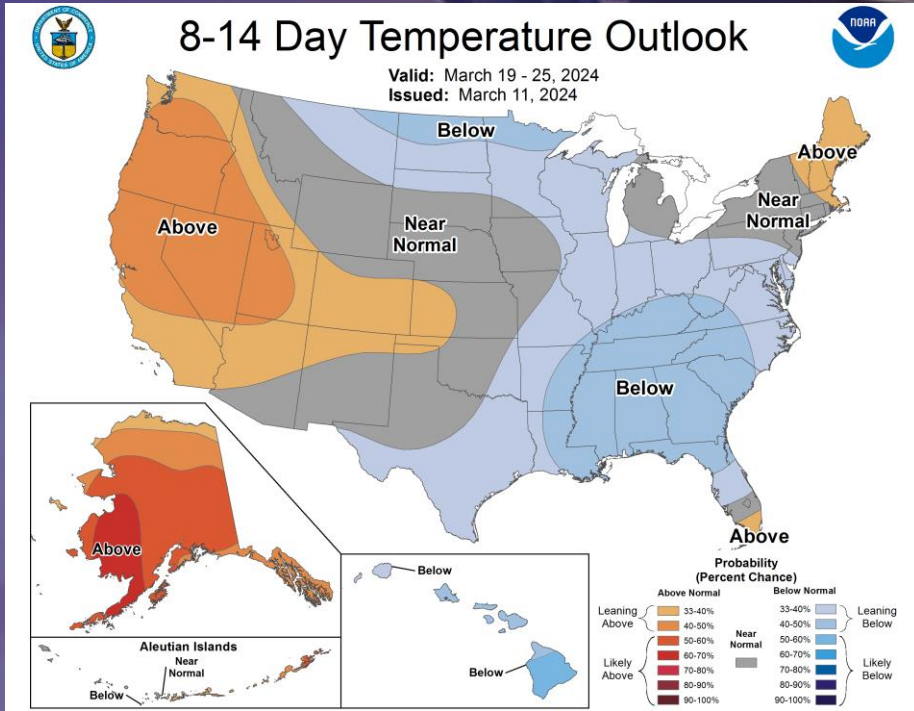
8 to 14 Day Outlook



<https://www.cpc.ncep.noaa.gov/>

Temperature

Precipitation



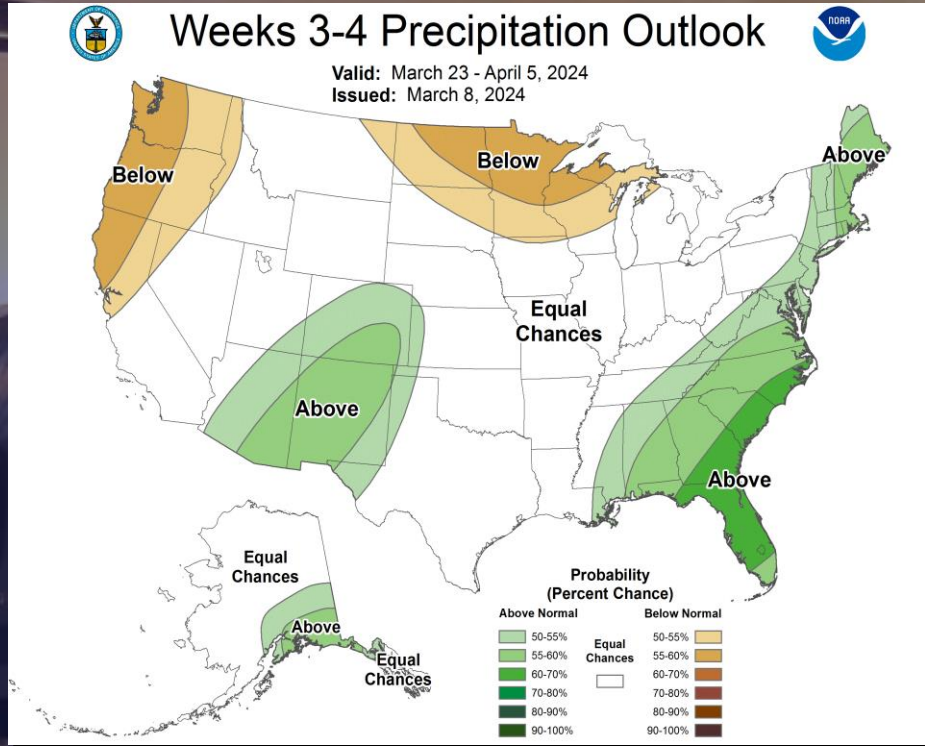
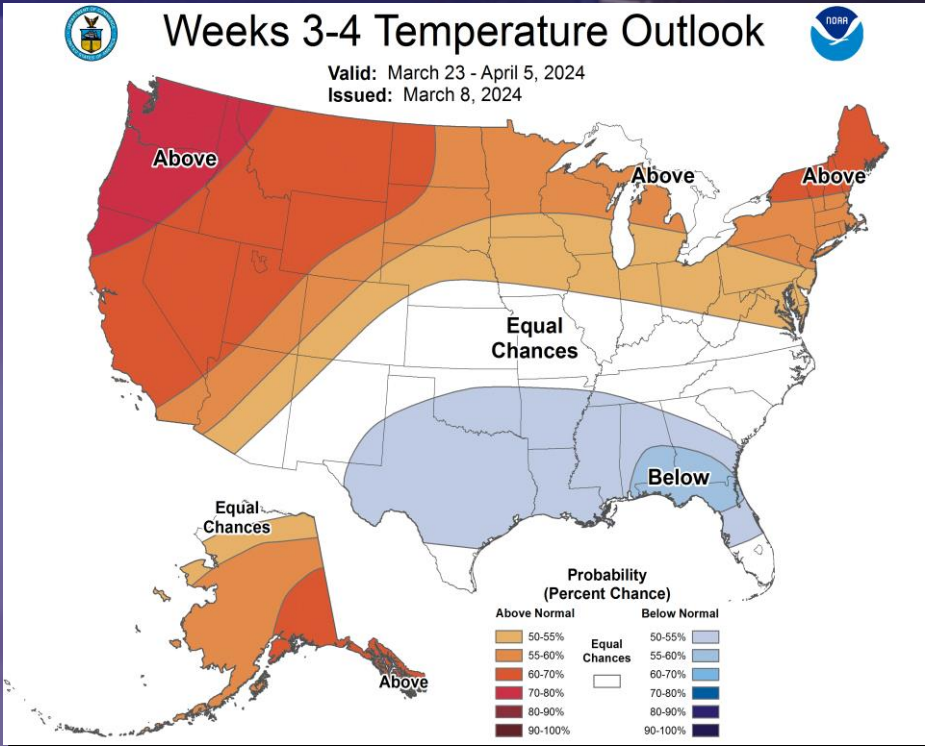


Outlook March 23rd thru April 5th



Temperature

Precipitation



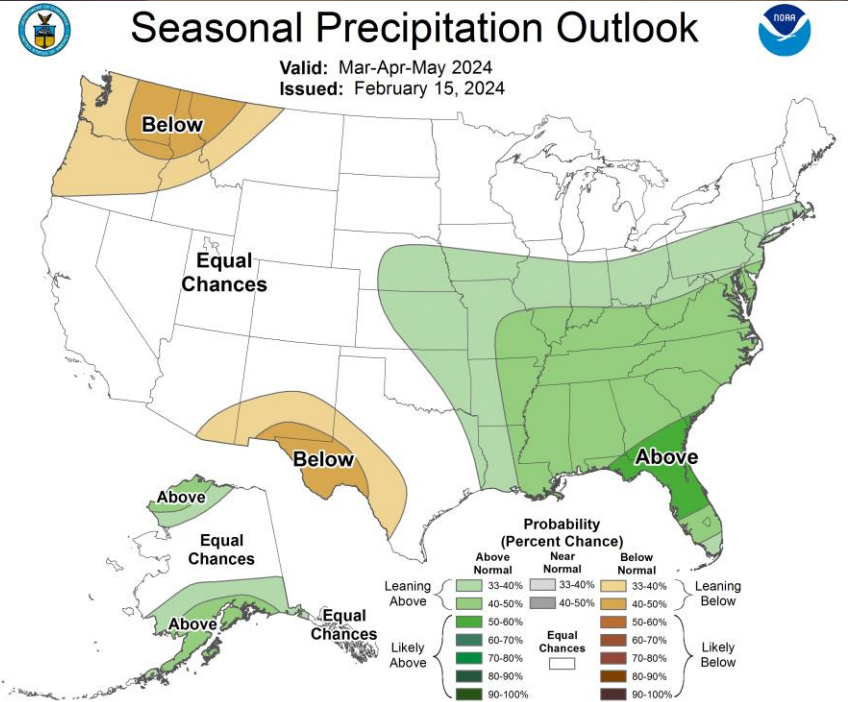
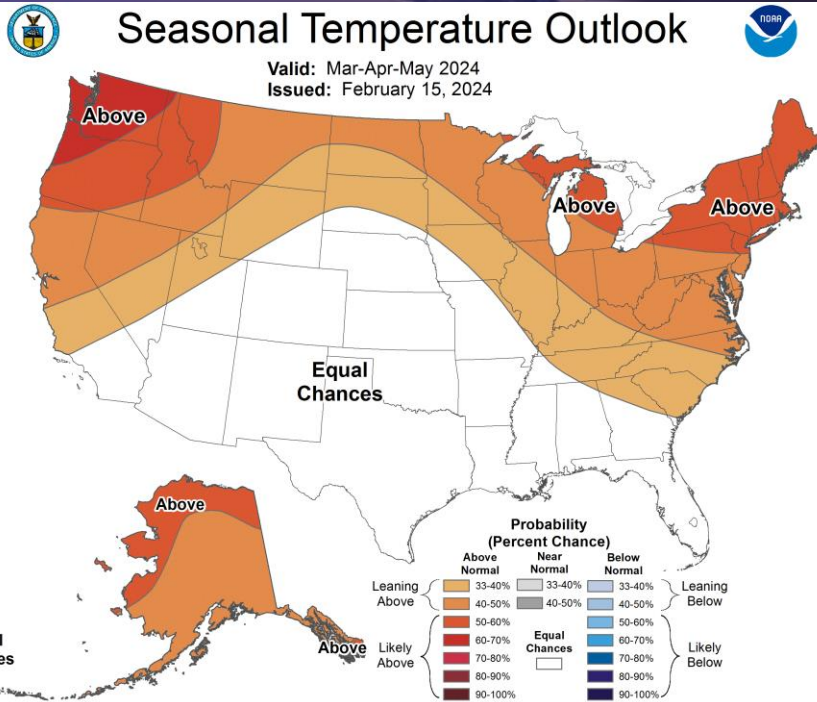


90 Day Temp/Precip Outlook



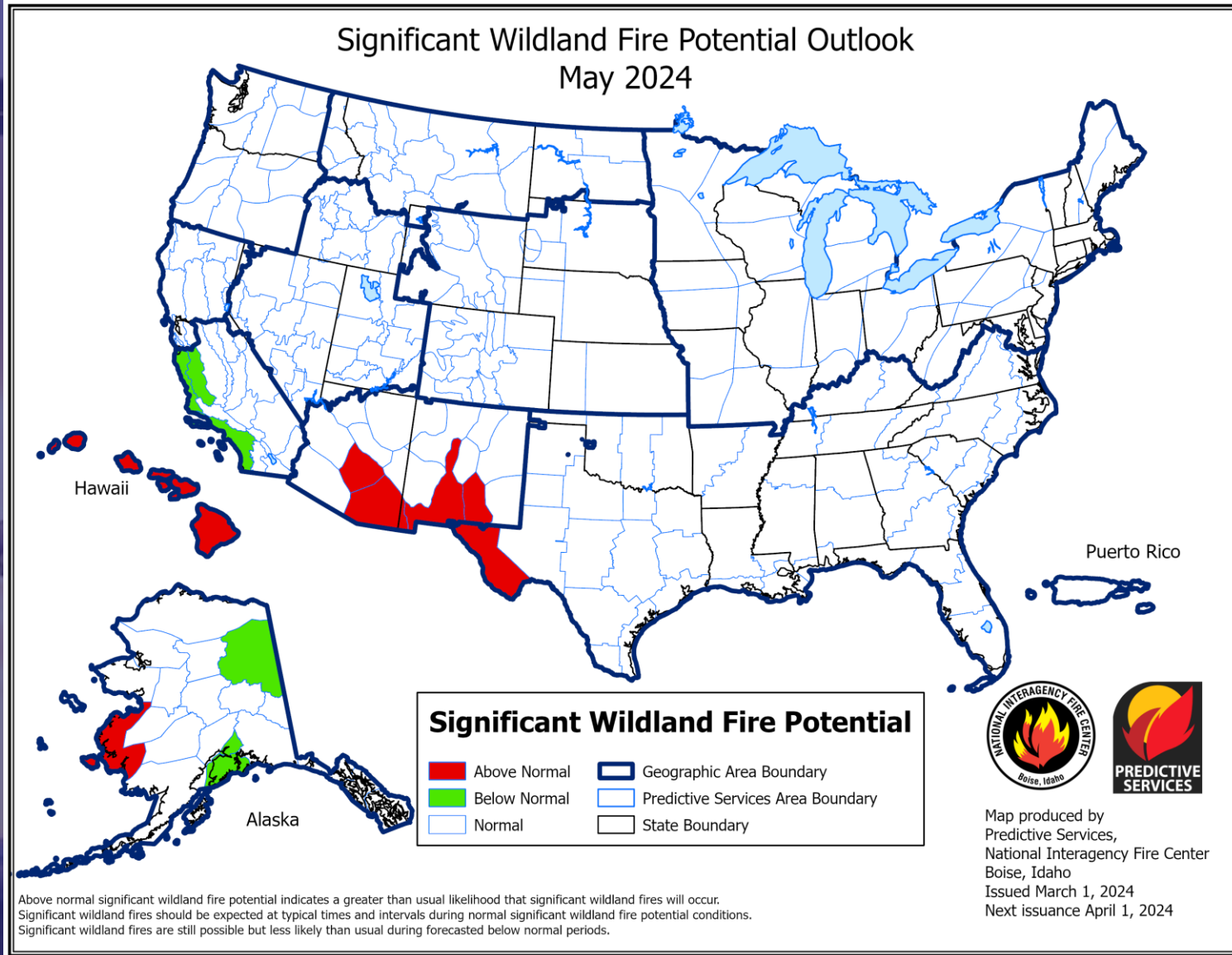
Temperature

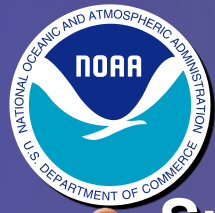
Precipitation





Significant Wildland Fire Potential Outlook for March, April, & May





2024 Fire Weather Outlook



- Snow pack much below normal valleys near normal summits.
- Precipitation is near normal across northern New York and Vermont year to date

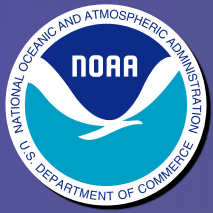
******Outlook for the Spring of 2024******

- **Near normal precipitation and above normal temperatures** for Spring of 2024
- Near to slightly above normal fire activity expected this spring (Similar to 2016) as we transition from strong El Nino to Neutral
 - *Results in several active days possible from late March into early May (south to north as snow melts/fuels dry)*
- Higher potential for above normal activity Pacific NW and northern Rockies this summer/fall.



Useful Websites

- **Climate Prediction Center for Precipitation, Temperature Outlooks and Drought Outlooks**
 - <https://www.cpc.ncep.noaa.gov/>
- **Precipitation Maps**
 - <https://water.weather.gov/precip/>
- **Interactive Temperature and Precipitation Maps**
 - <https://hprcc.unl.edu/maps.php?map=ACISClimateMaps>
- **Snowfall Maps**
 - <https://www.nohrsc.noaa.gov/interactive/html/map.html>
- **Precipitation Maps**
 - <https://www.weather.gov/nerfc/watersupply>
- **WFO Burlington Fire Weather Website**
 - <https://www.weather.gov/btv/firewx>



Start Up Date/Prescribed Burns/Open Discussion



- Start up date for NFDRS/Fire Weather Forecast March 20th thru Nov 30th
- Prescribed burns planned??