Northeast Spring Flood Outlook - 2023

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- Relatively little snow most of the winter
- …then late season snow!
- Northeast flood potential is increasing

Jason Elliott
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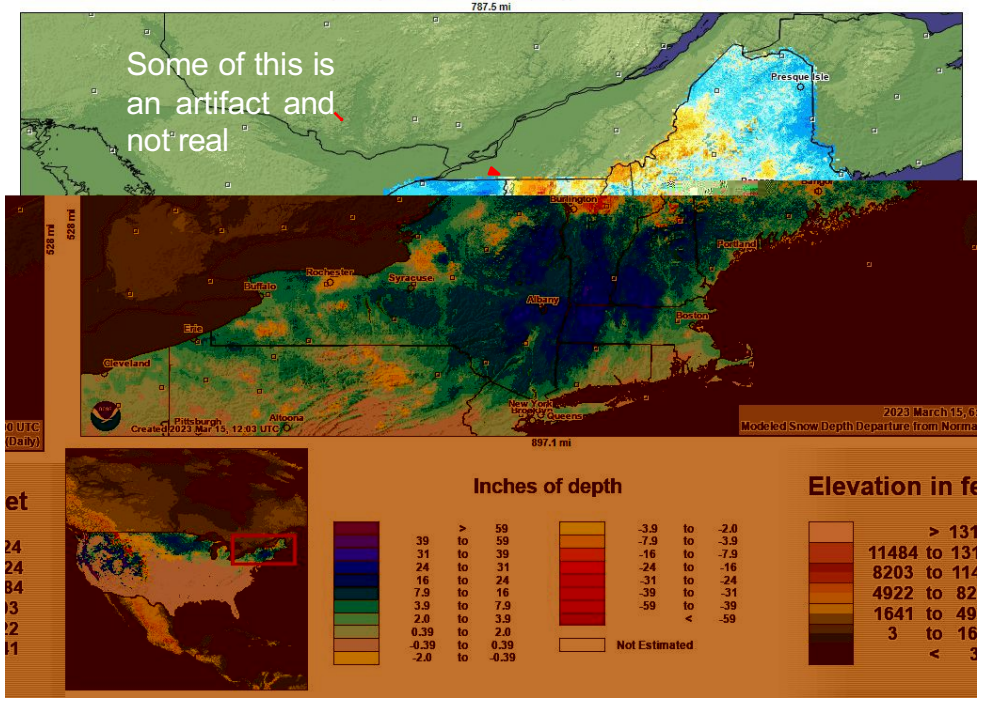
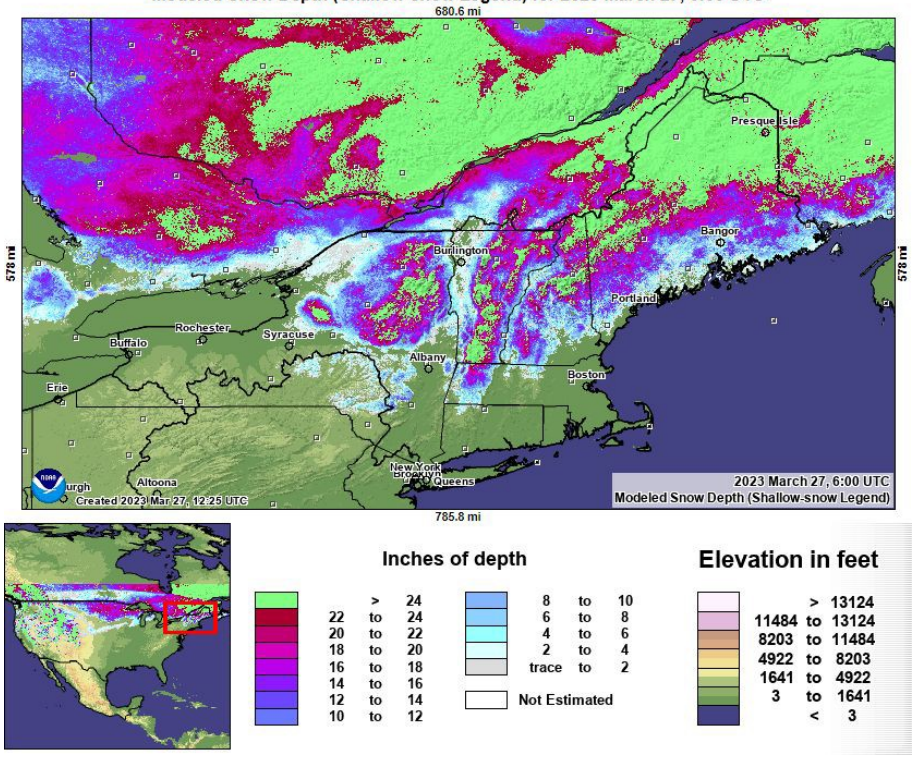
Modeled Snow Depth Departure from Normal (Daily) for 2023 March 15, 6:00 UTC



Modeled Snow Depth (Shallow-snow Legend) for 2023 March 27, 6:00 UTC



BRIEFING VALID: 3/30/2023

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Factors for Flood Potential

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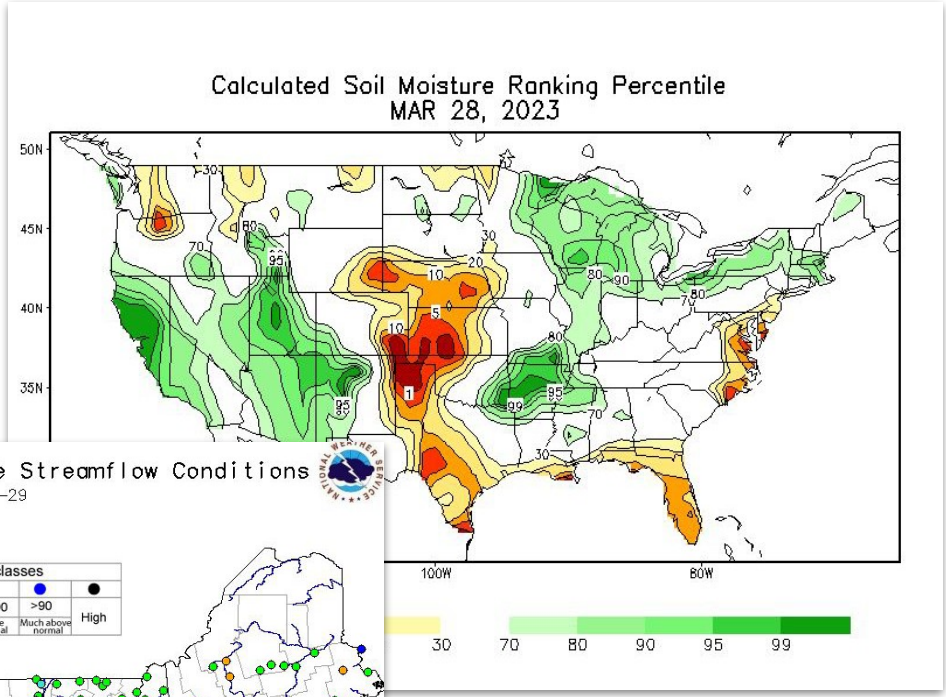
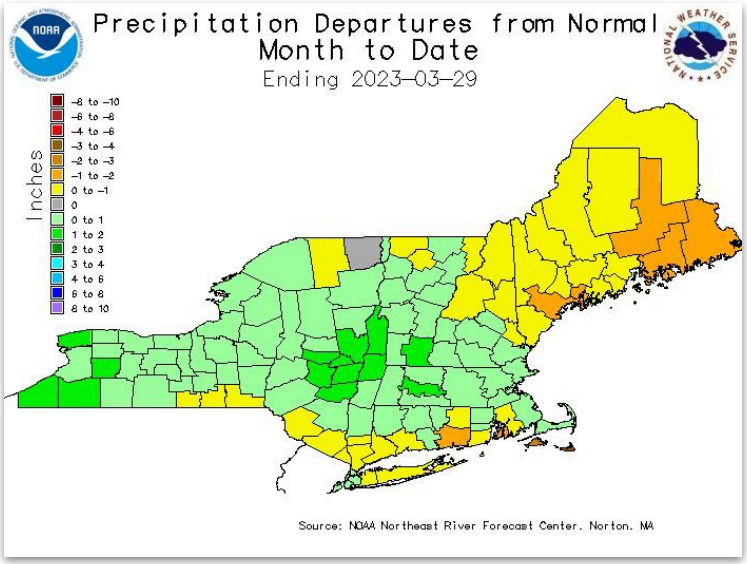
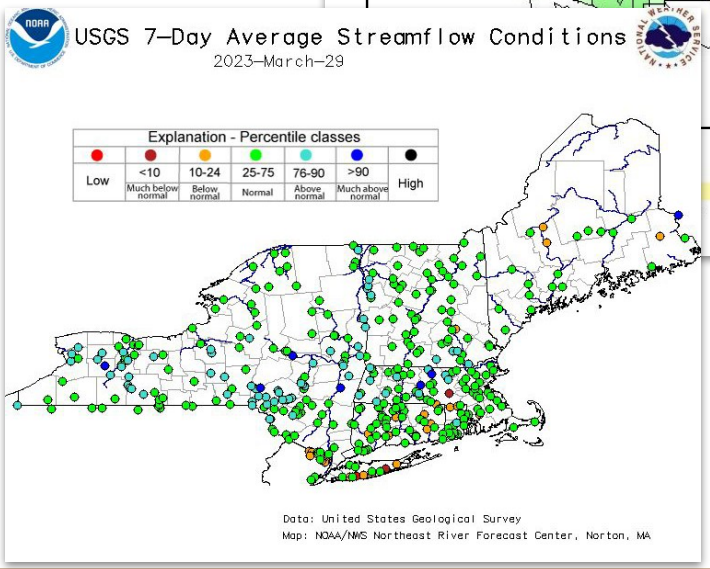
- Soil Moisture & Groundwater Recovery
- Wet March – much of it in the form of snow
- Above Normal snowpack and significant snow water in the higher elevations

Remember, heavy rain can cause flooding even if none of these extra factors exist







New England Lake Levels

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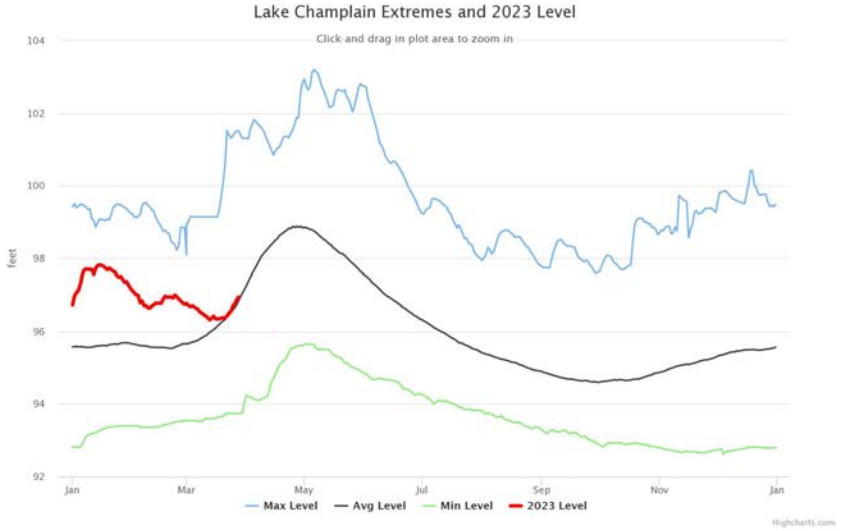
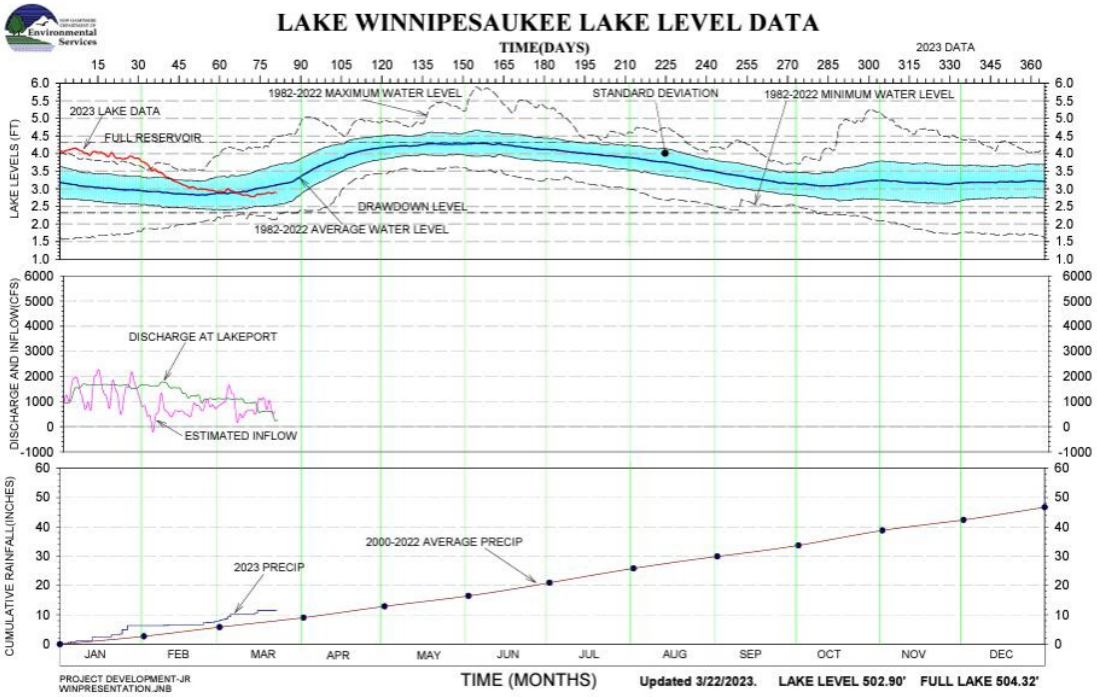


- Lakes were high in early winter but have now settled closer to normal
- Fill season is underway!



New York Lake Levels / Water Supply

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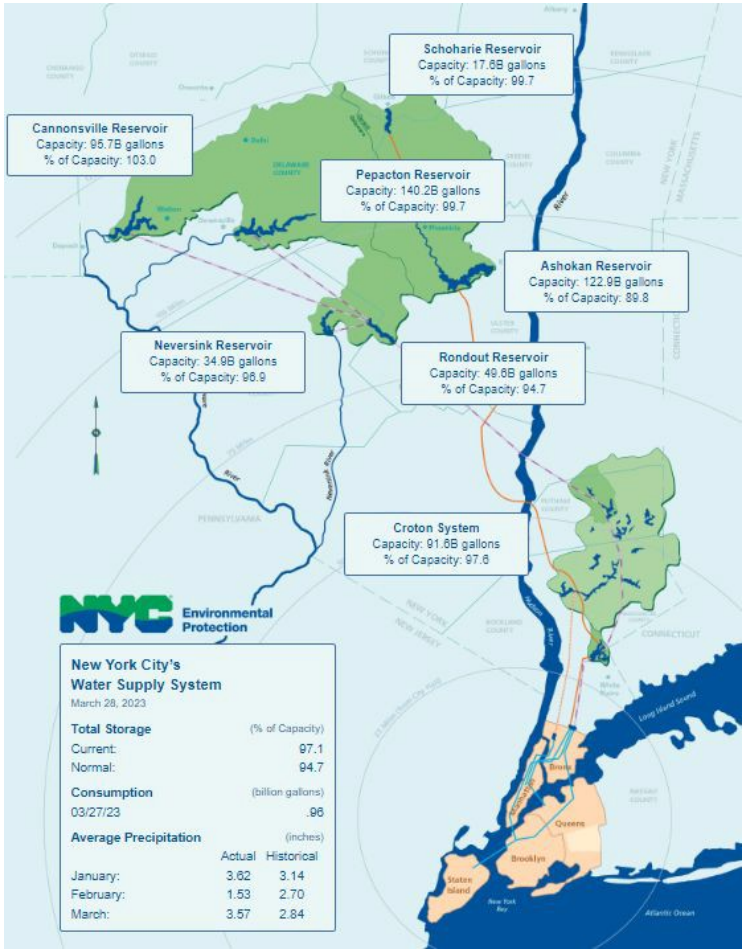

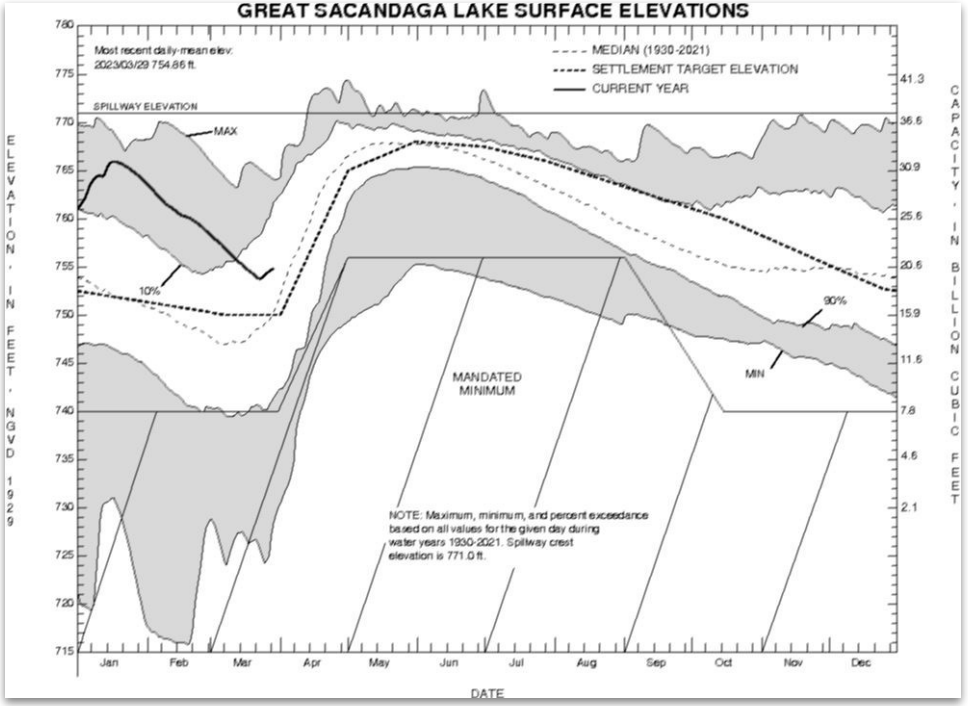

- NYC system above normal storage for the end of March (recent increase)
- Other NY lakes are a mixed bag (some above, some below)

Ensemble Streamflow Predictions

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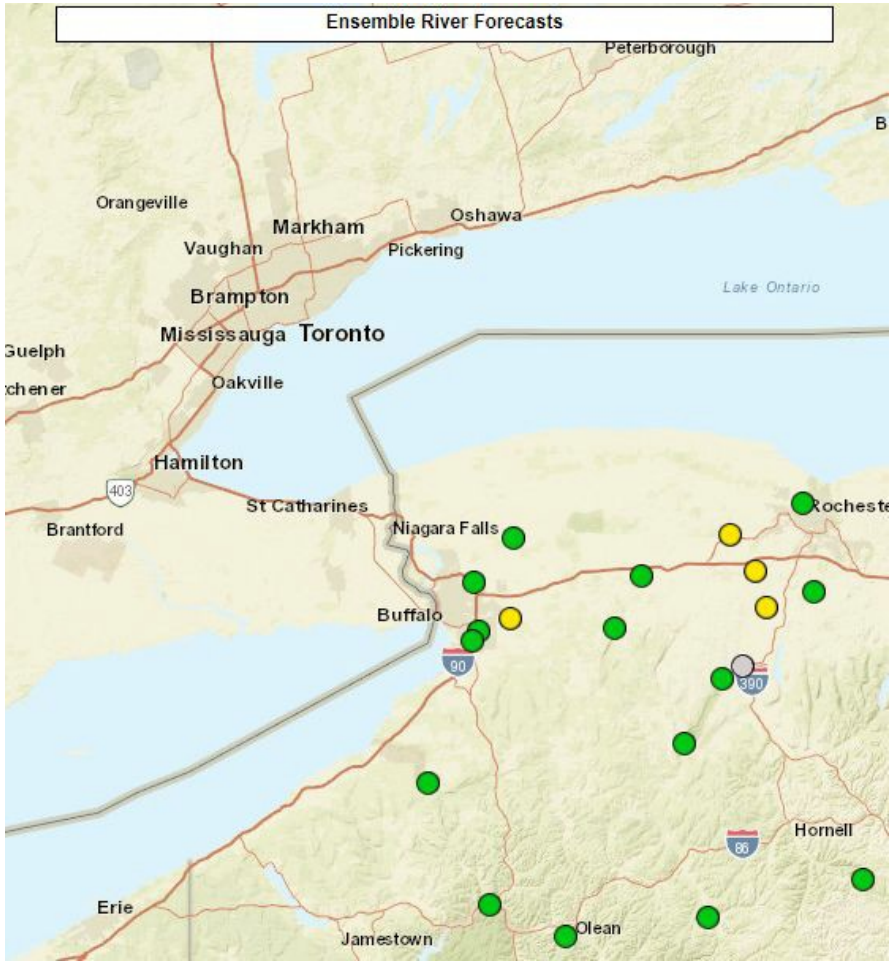

Chance of Exceedance		
30%	Level	70%
	Action	
	Minor Flood	
	Moderate Flood	
	Major Flood	
= less than 30% chance of reaching Action level		
= no critical levels defined for this point		

For Western NY:
Generally within-bank rises expected this weekend (April 1 - 2)

Potential for renewed rises the second half of next week (April 5 - 8)

Ensemble Streamflow Predictions

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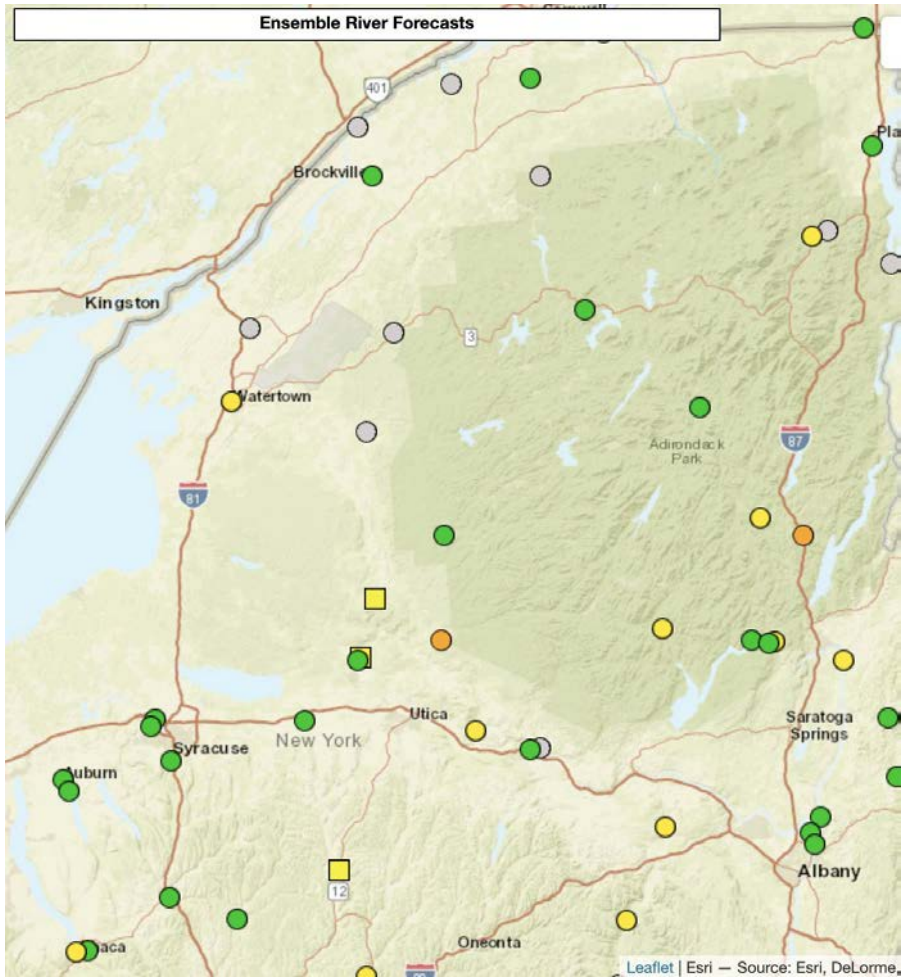
Most of the locations shown in yellow or orange have their highest flood potential in 7-10 days



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	Action	
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<u>For the rest of New York:</u>
Generally within-bank rises expected this weekend (April 1 - 2)

Potential for renewed rises throughout next week depending on lake releases and snowmelt (April 3 - 9)

Ensemble Streamflow Predictions

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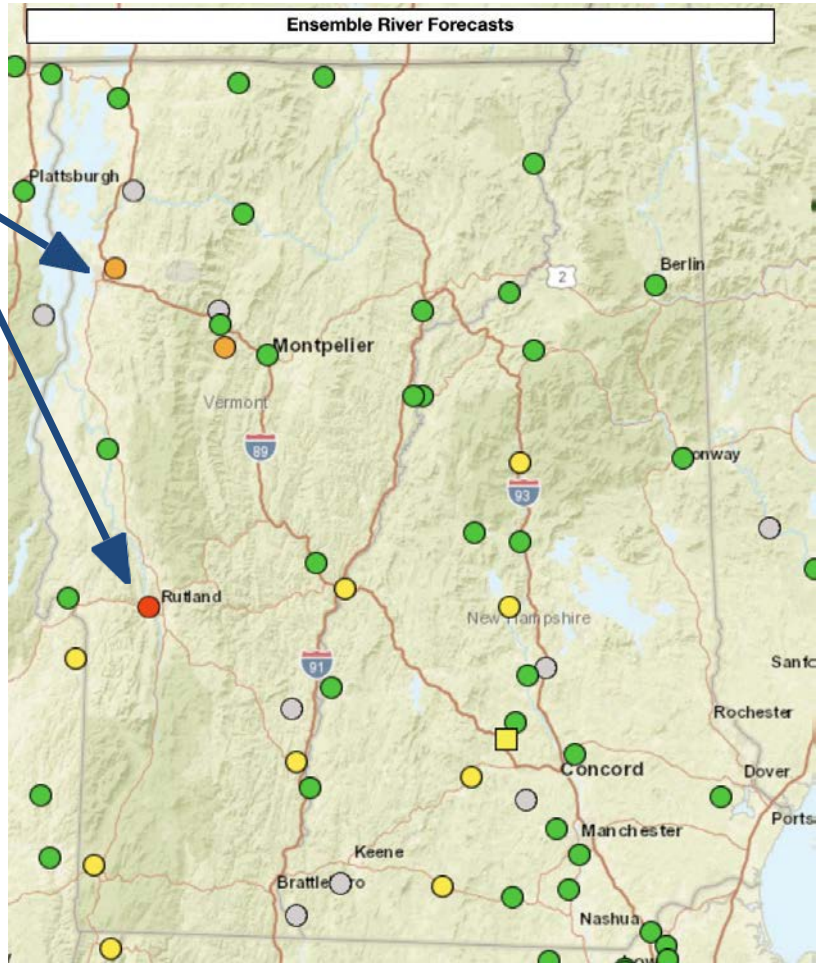
Most likely areas for flooding are in Vermont in the coming days



Chance of Exceedance		
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<u>For Vermont & New Hampshire:</u>
Minor flooding possible in portions of Vermont this weekend
(April 1 - 2)

Generally within-bank rises expected this weekend elsewhere
(April 1 - 2)

Potential for renewed rises the second half of next week, but lower flood potential
(April 5 - 9)

Ensemble Streamflow Predictions

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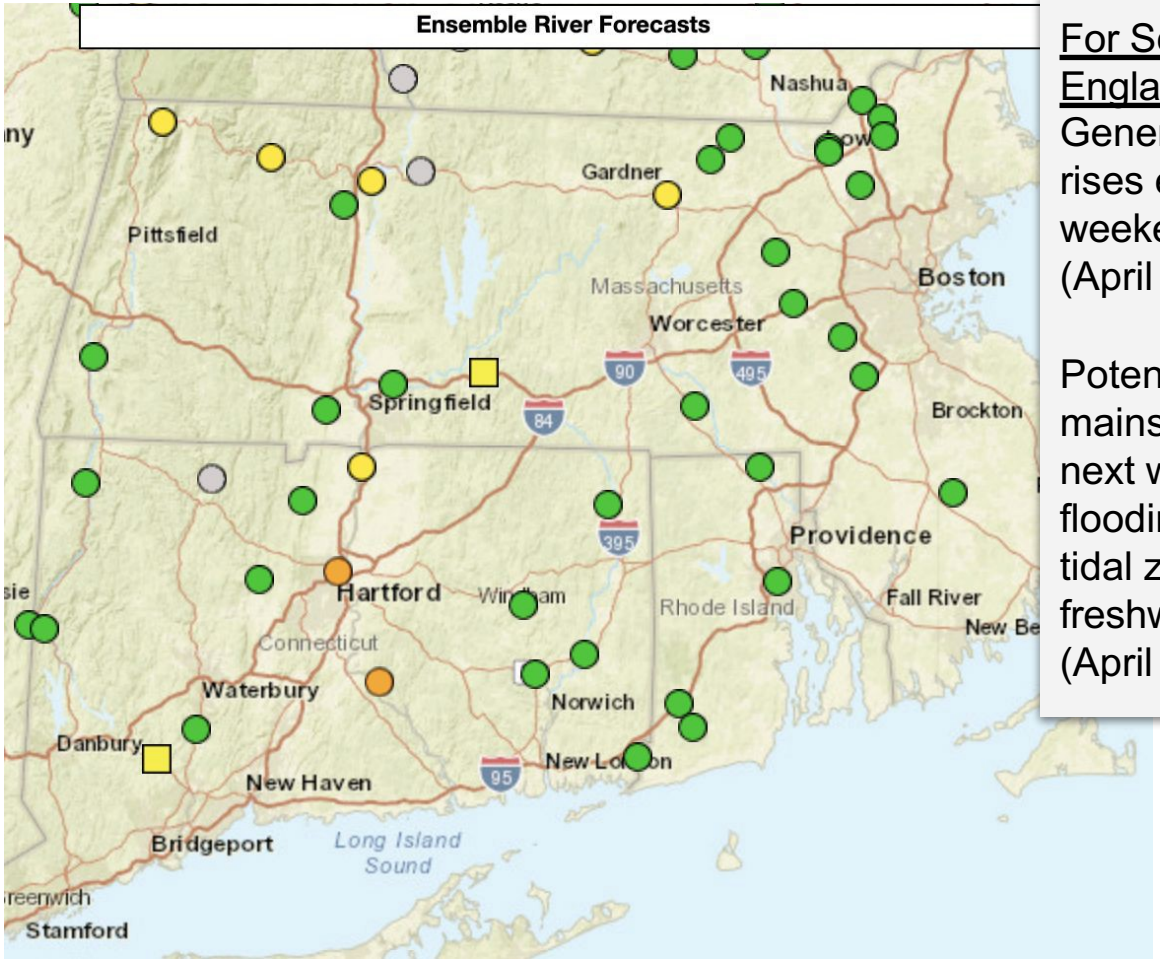

Chance of Exceedance		
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	Action	
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= no critical levels defined for this point		

<u>For Southern New England:</u>
Generally within-bank rises expected this weekend
(April 1 - 2)

Potential for rises on the mainstem Connecticut next week with minor flooding possible in the tidal zone – from freshwater
(April 4 - 9)

Ensemble Streamflow Predictions

Northeast
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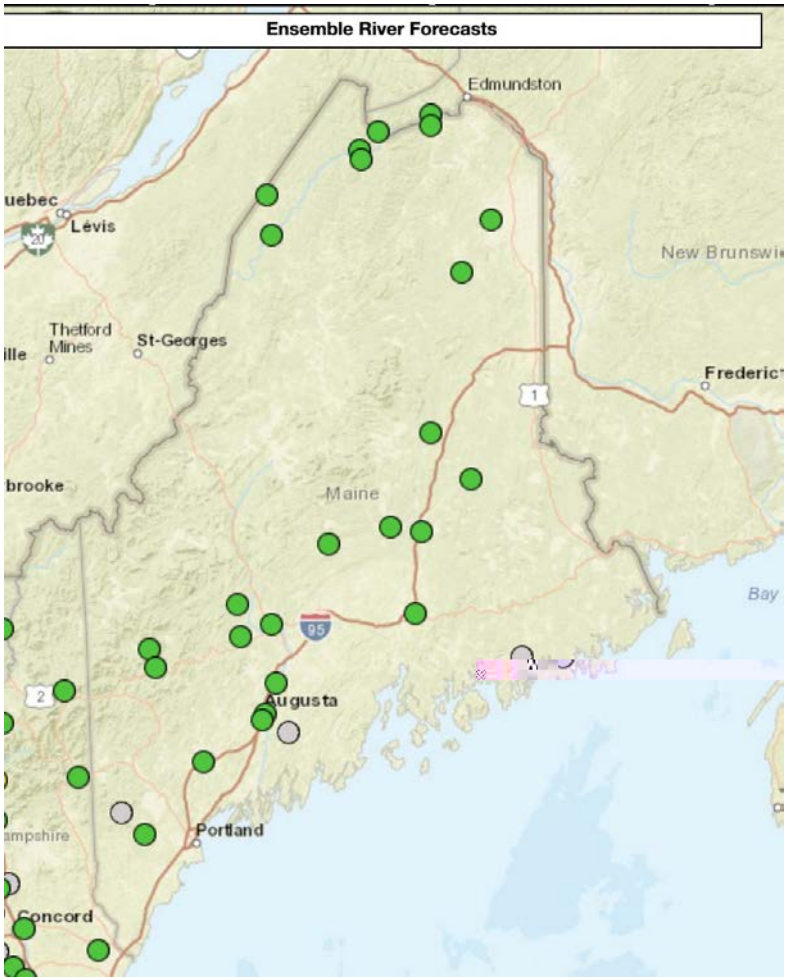

Chance of Exceedance		
30%	Level	70%
	Action	
	Minor Flood	
	Moderate Flood	
	Major Flood	
= less than 30% chance of reaching Action level		
= no critical levels defined for this point		

For Maine:

No short term concerns (through April 9th); snowpack stays mostly locked in and rises are expected to be minimal

CPC 8-14 Day Outlook

Northeast
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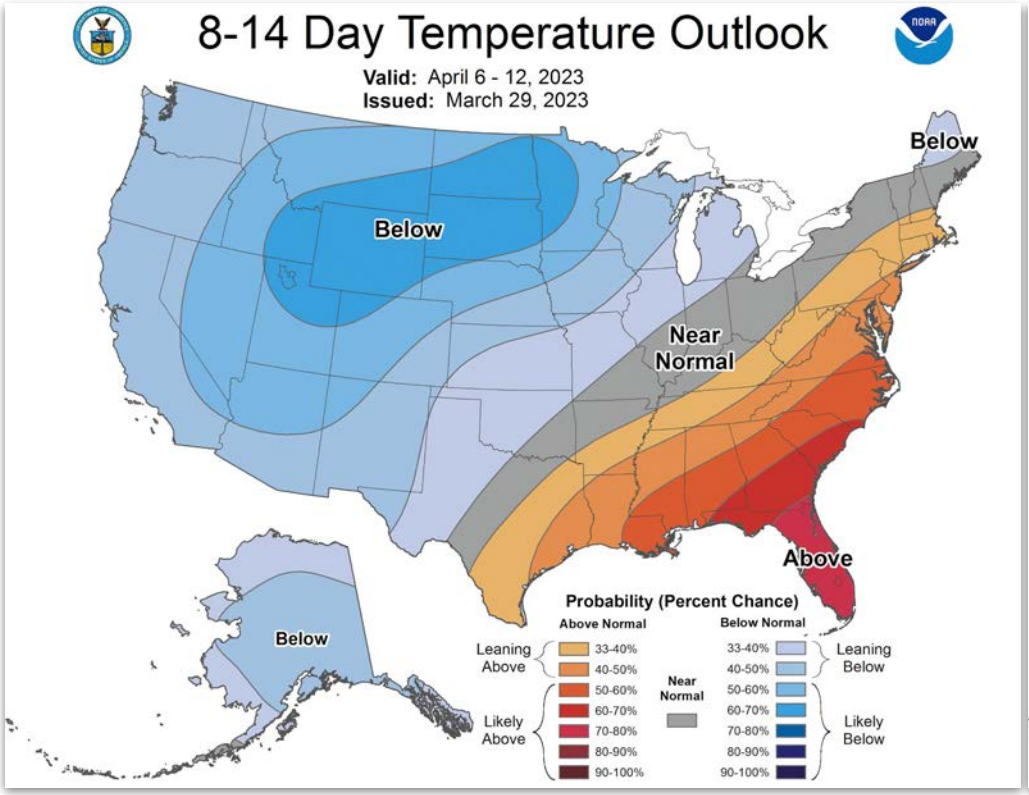

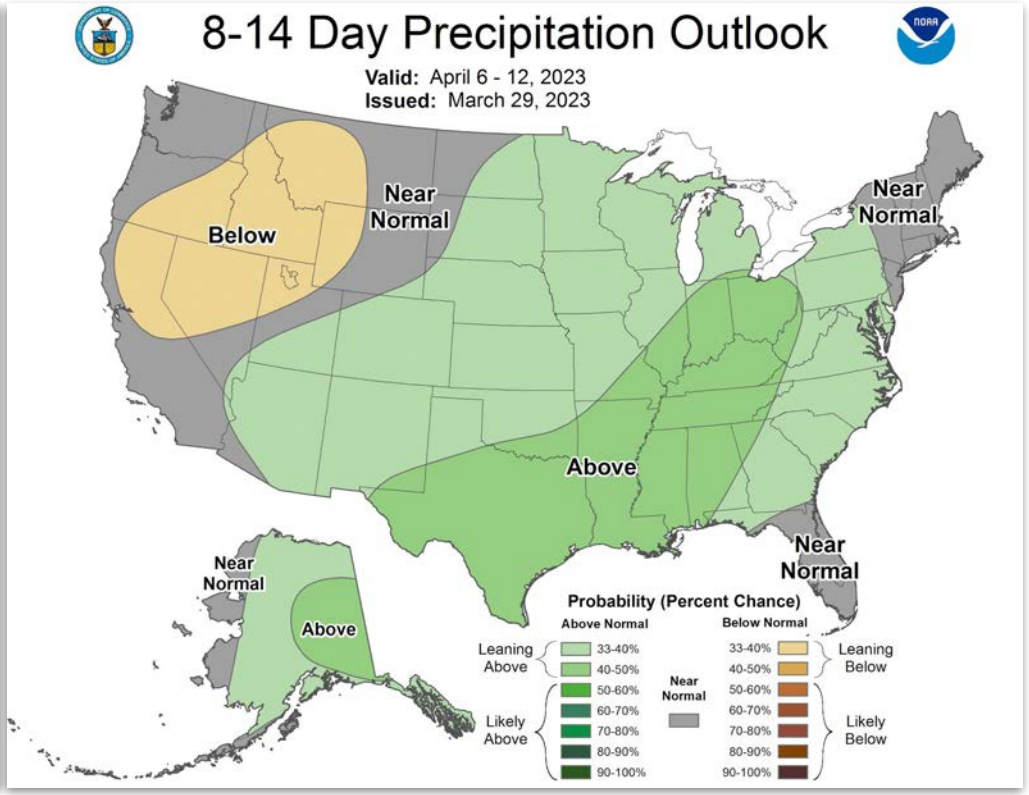

Transition period ahead

CPC Week 3-4 Outlook

Northeast
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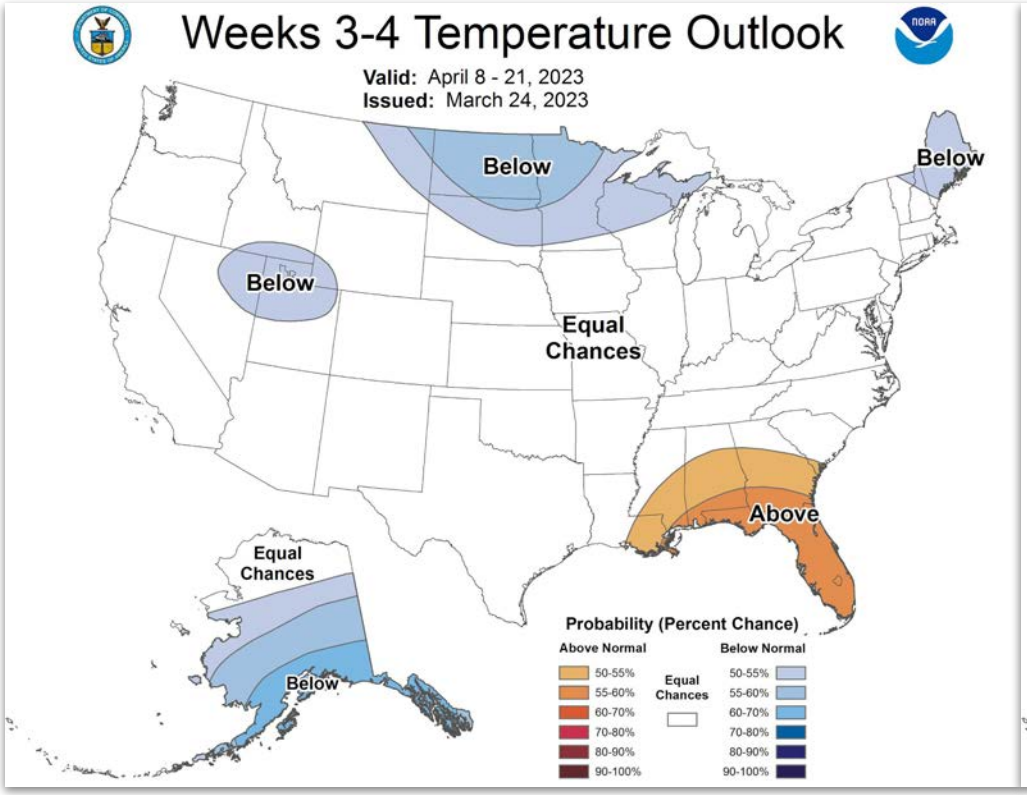

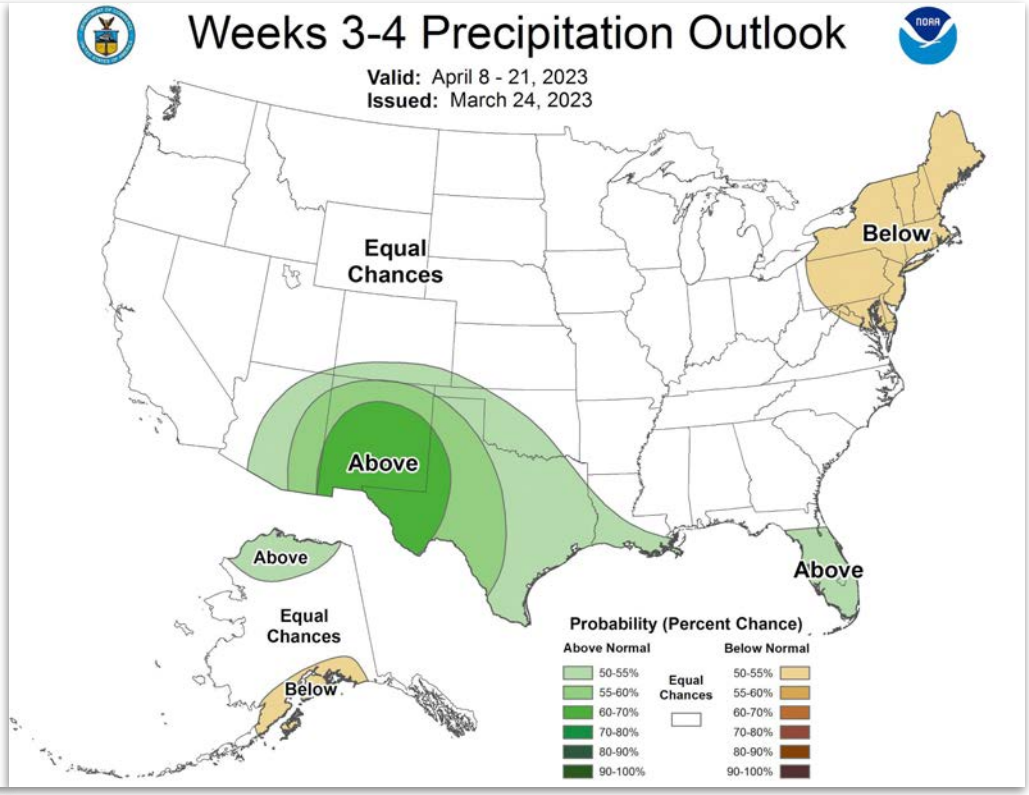

Maybe turning drier after a pattern shift for mid April?

CPC 90 Day Seasonal Outlook

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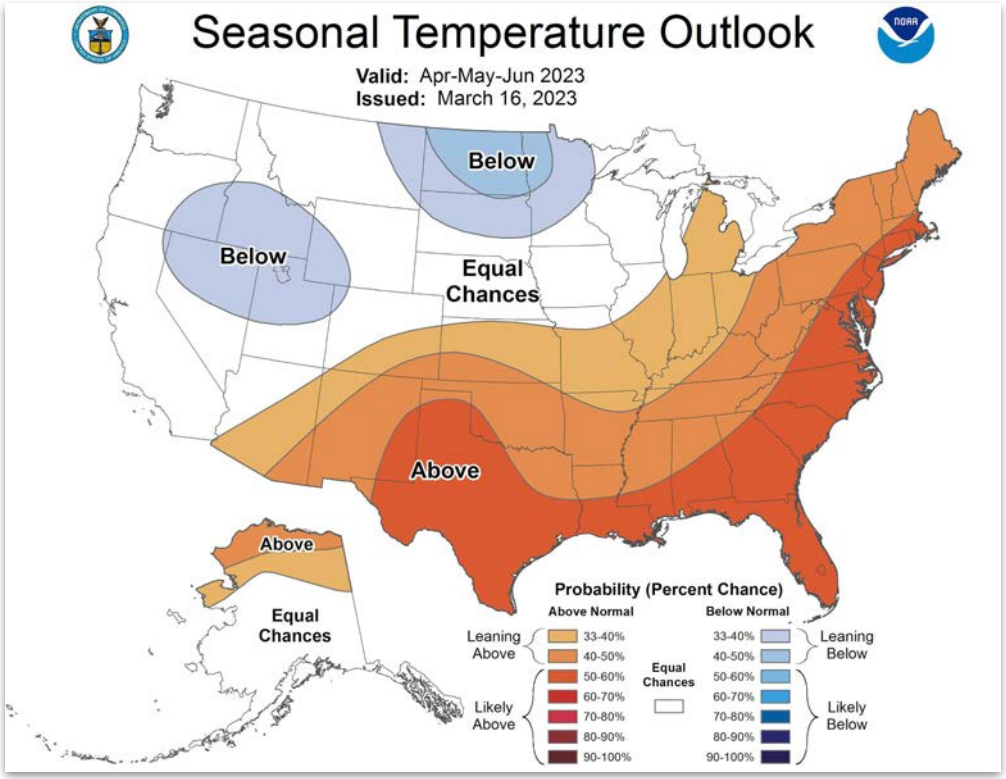

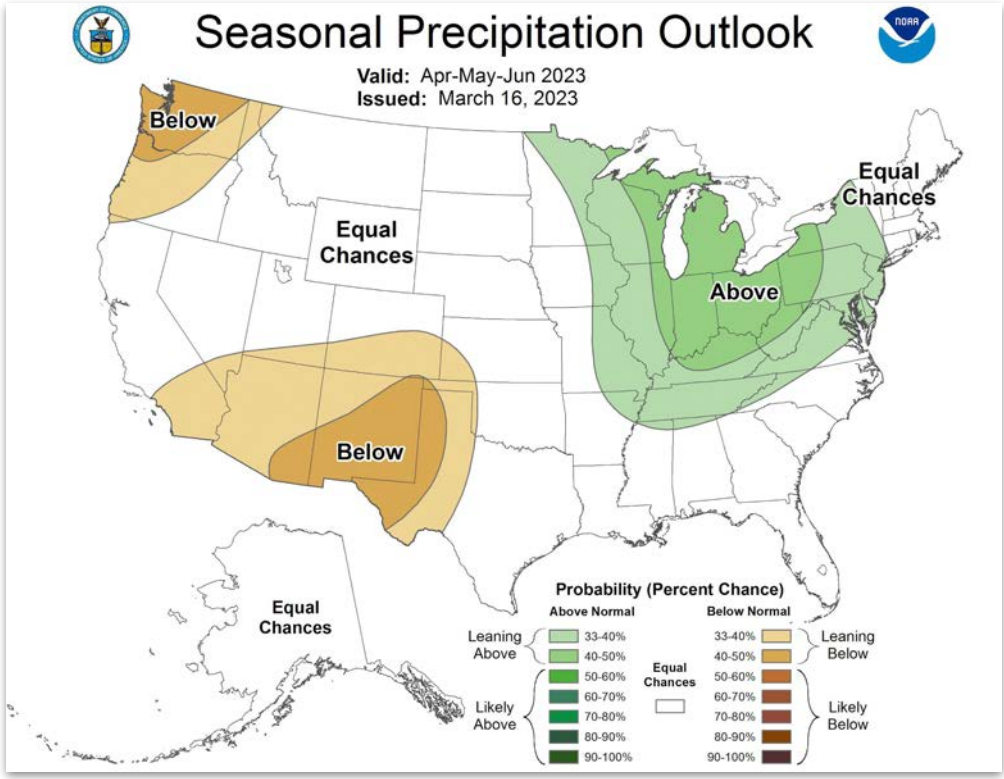

Seasonal outlook for April through June favors above normal temperatures, with a slight lean toward above normal precipitation in NY

Long Range Outlook

Northeast
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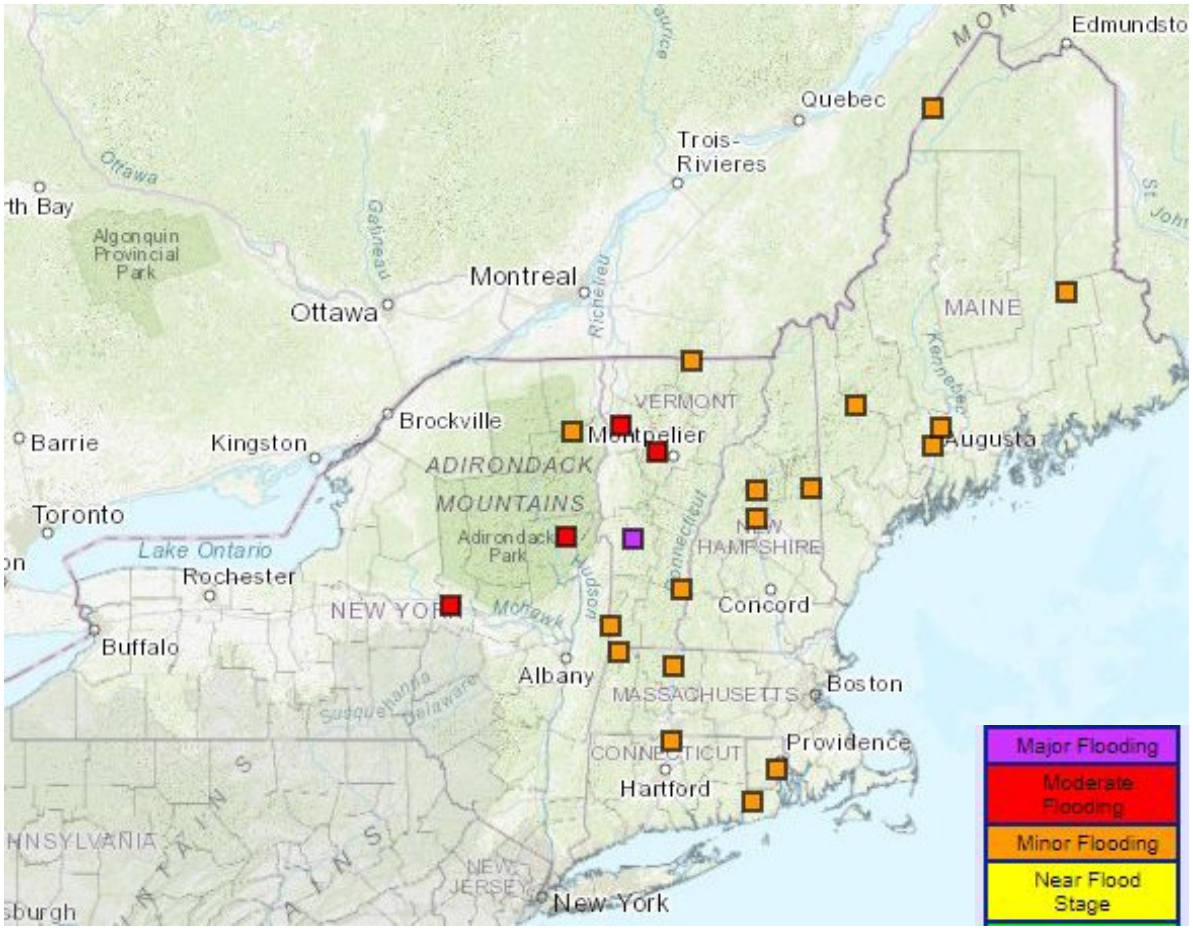
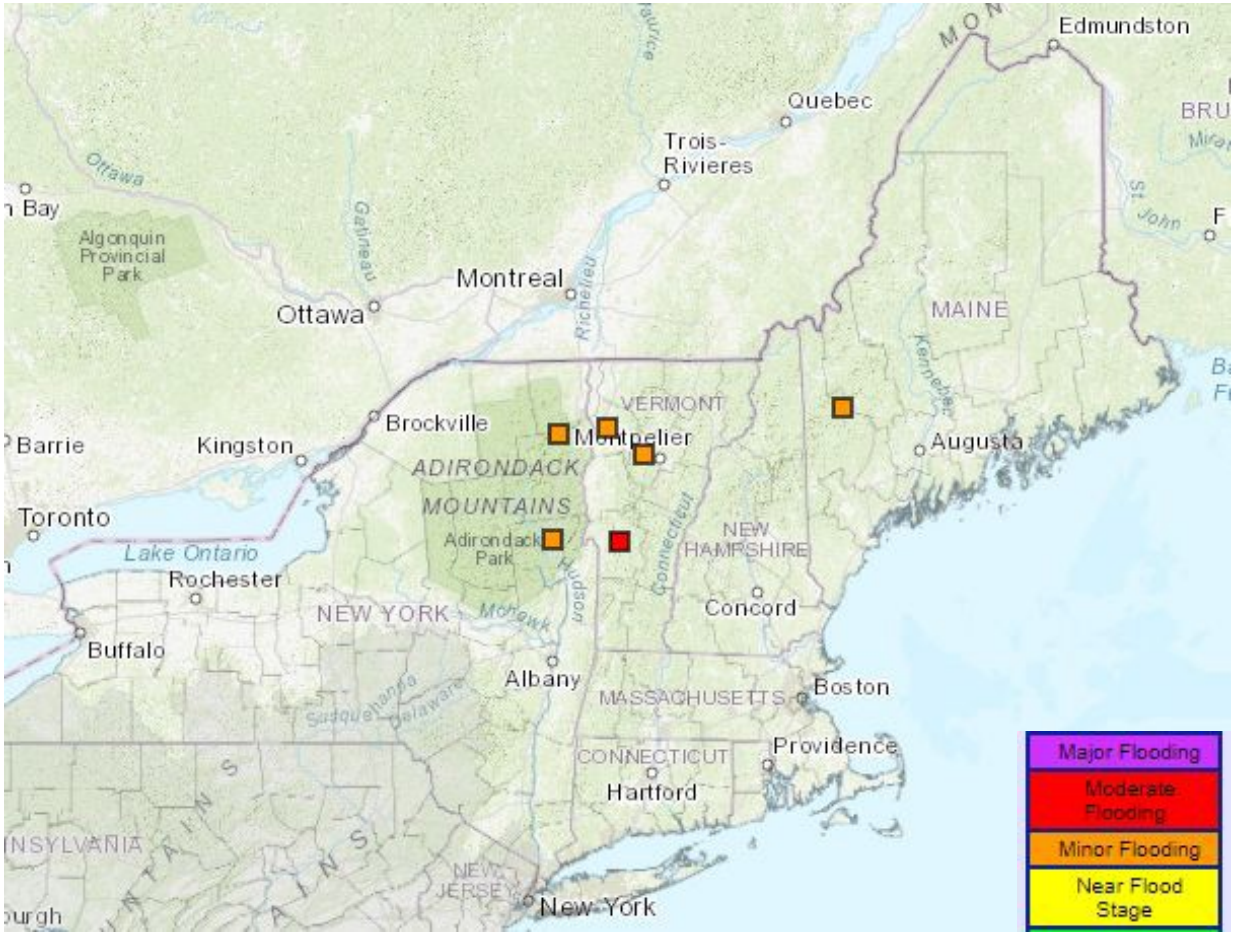


This graphic shows river forecast locations where there is a 25% chance or more of reaching the thresholds shown during April-May-June

This potential is near, or even a little below, the typical risk – historically – for the same time of year

Long Range Outlook

Northeast
RIVER FORECAST CENTER



This graphic shows river forecast locations where there is a 50% chance or more of reaching the thresholds shown during April-May-June

This potential is near, or even a little below, the typical risk – historically – for the same time of year

Streams to watch:
Swift River / Roxbury, ME
Mad River / Moretown, VT
Winooski River / Essex Junction, VT
Otter Creek / Center Rutland, VT
Schroon River / Riverbank, NY
EB AuSable River / AuSable Forks, NY

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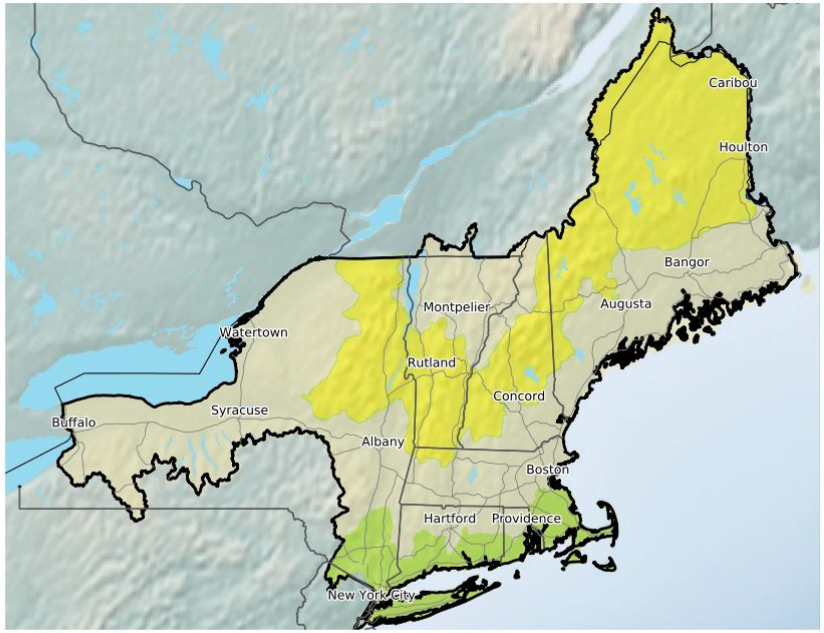
Winter/Spring Flood Potential Outlook
Valid: 03/30/2023 08:00 AM - 04/13/2023 08:00 AM EDT



National Weather Service
Northeast RFC
03/29/2023 08:43 PM EDT

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LEGEND - River Flood Risk

- Much Above
- Above
- Below
- Much Below
- Normal

Shaded areas are NERFC forecast region

Lines are interstate highways