

Northeast Spring Flood Outlook - 2023



Northeast
RIVER FORECAST CENTER

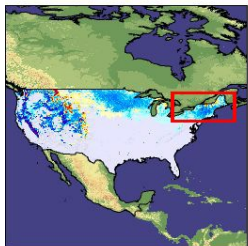
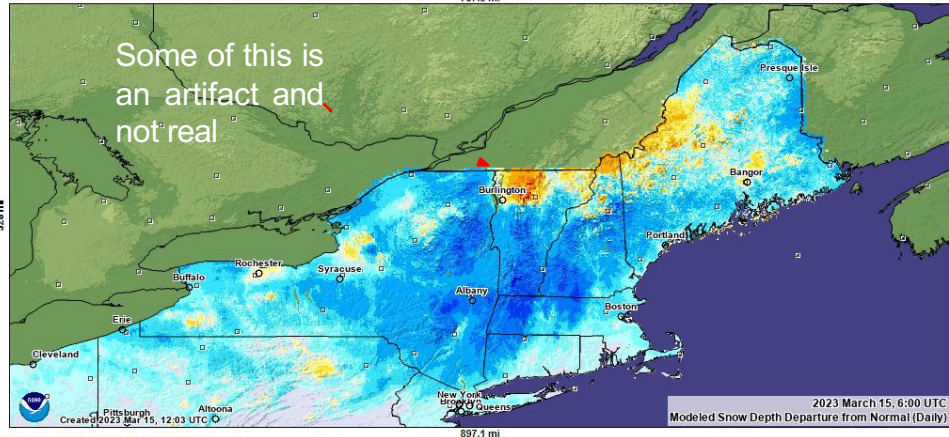
- Relatively little snow most of the winter
- ...then late season snow!
- Northeast flood potential is increasing

Jason Elliott

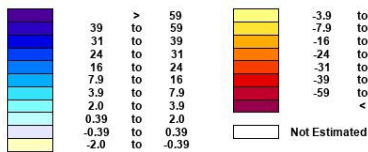
Service Coordination Hydrologist

jason.elliott@noaa.gov

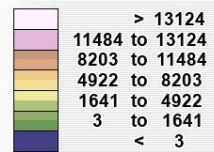
Modeled Snow Depth Departure from Normal (Daily) for 2023 March 15, 6:00 UTC



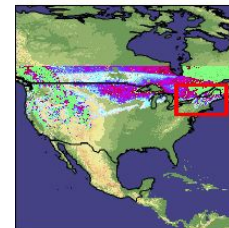
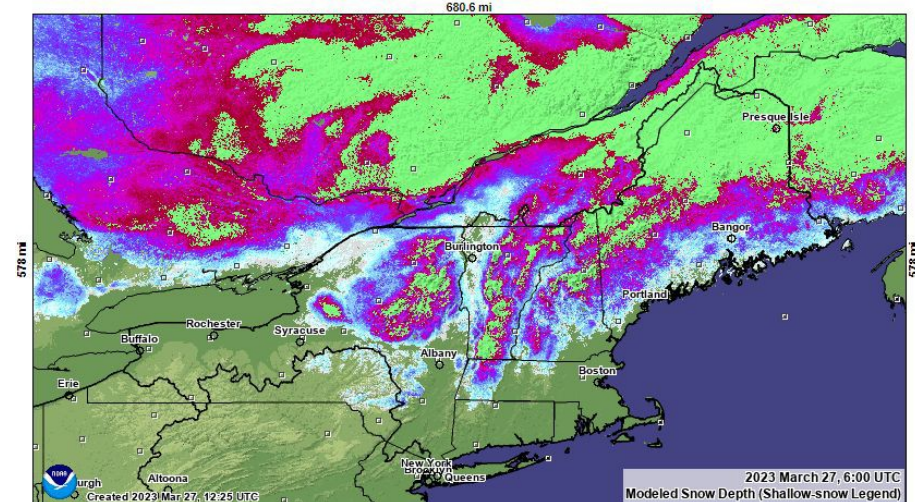
Inches of depth



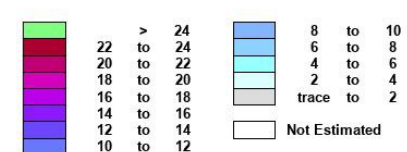
Elevation in feet



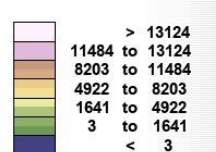
Modeled Snow Depth (Shallow-snow Legend) for 2023 March 27, 6:00 UTC



Inches of depth



Elevation in feet



BRIEFING VALID: 3/30/2023

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Factors for Flood Potential

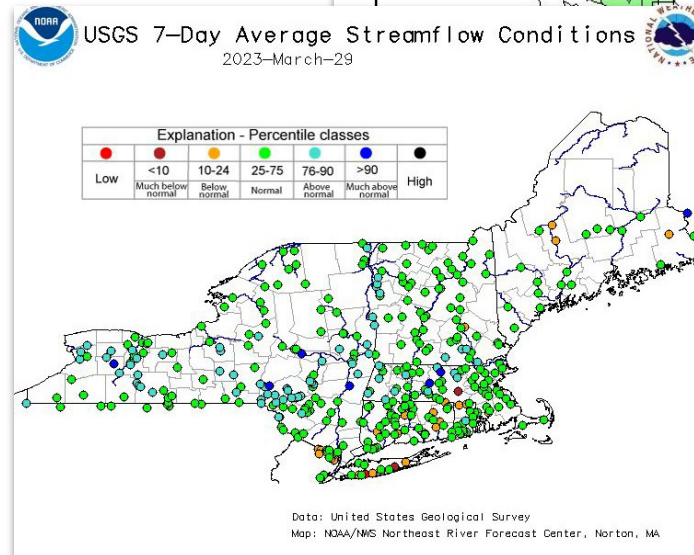
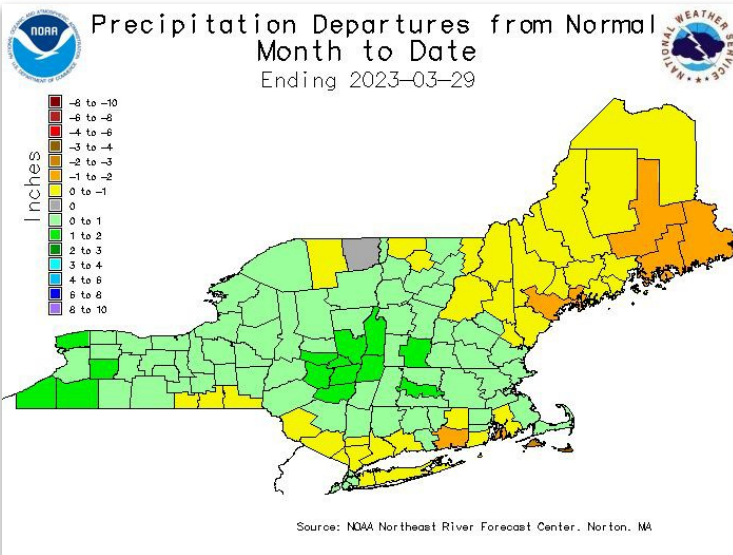
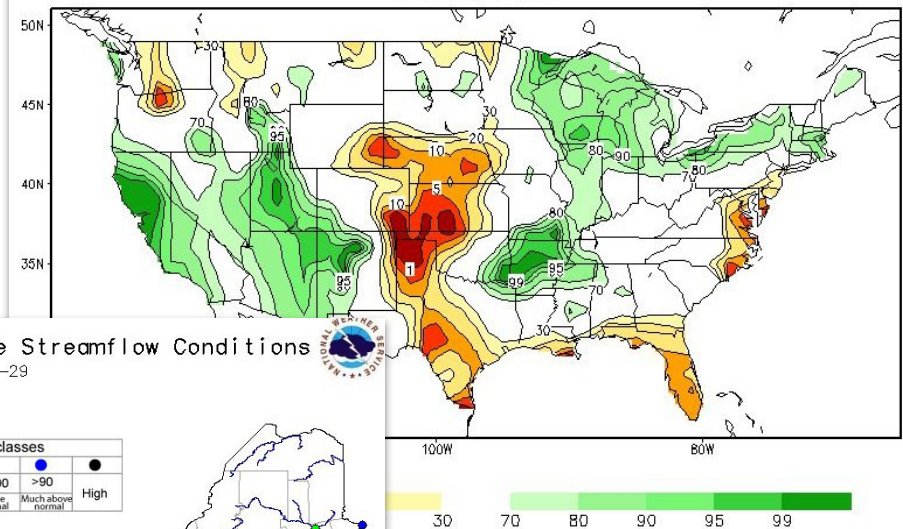


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- Soil Moisture & Groundwater Recovery
- Wet March – much of it in the form of snow
- Above Normal snowpack and significant snow water in the higher elevations

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

Calculated Soil Moisture Ranking Percentile
MAR 28, 2023

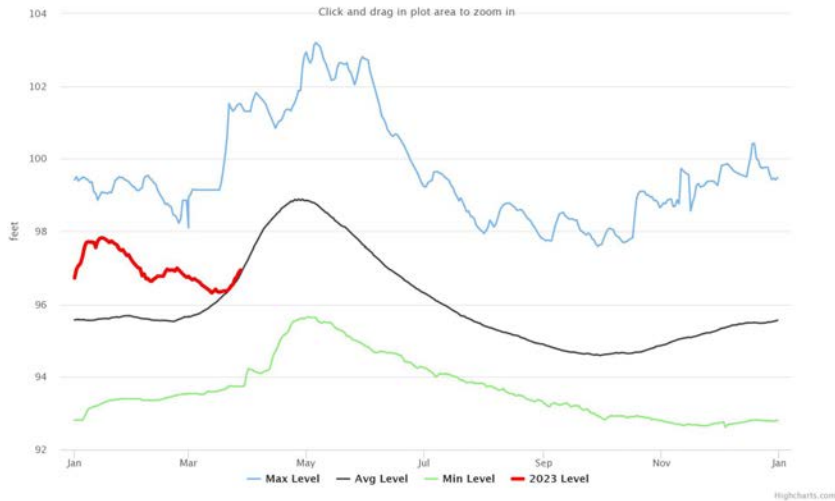


New England Lake Levels

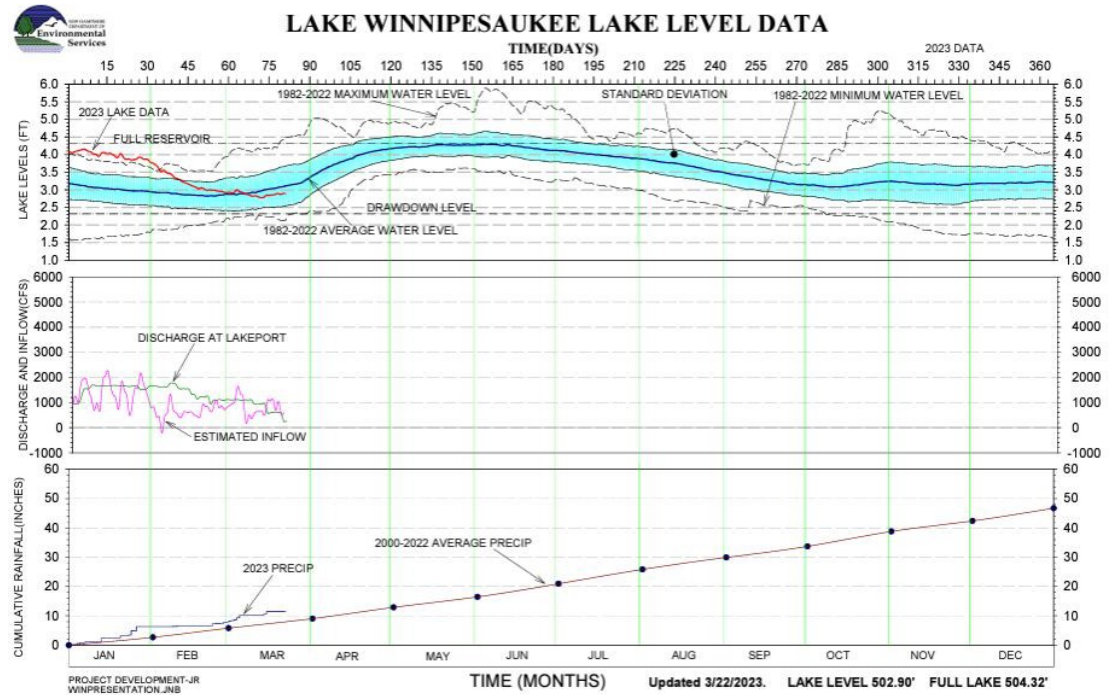


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Lake Champlain Extremes and 2023 Level



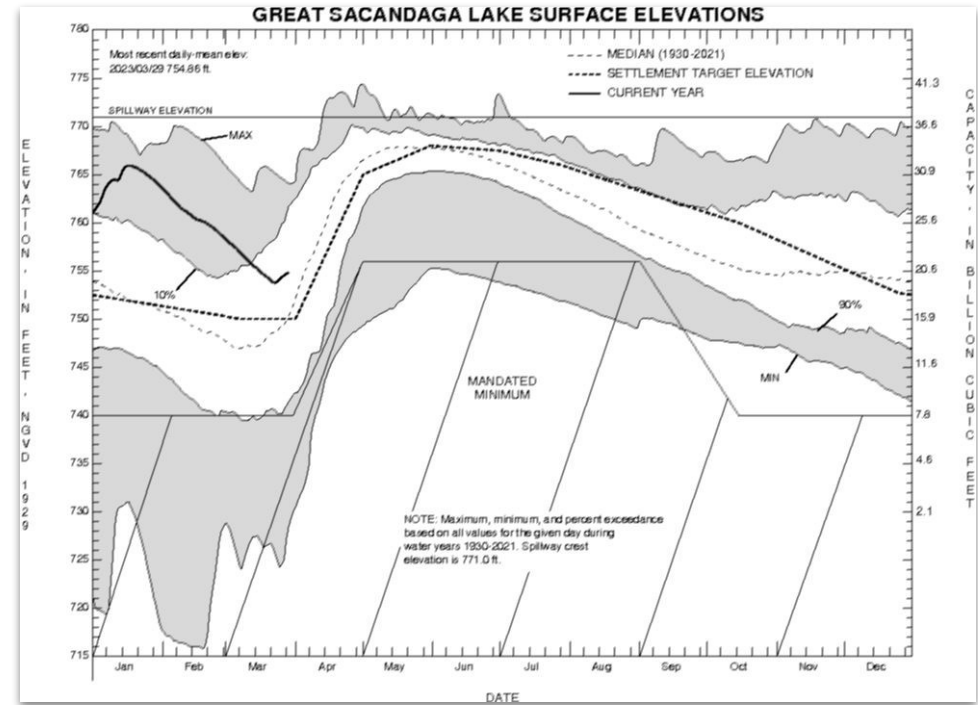
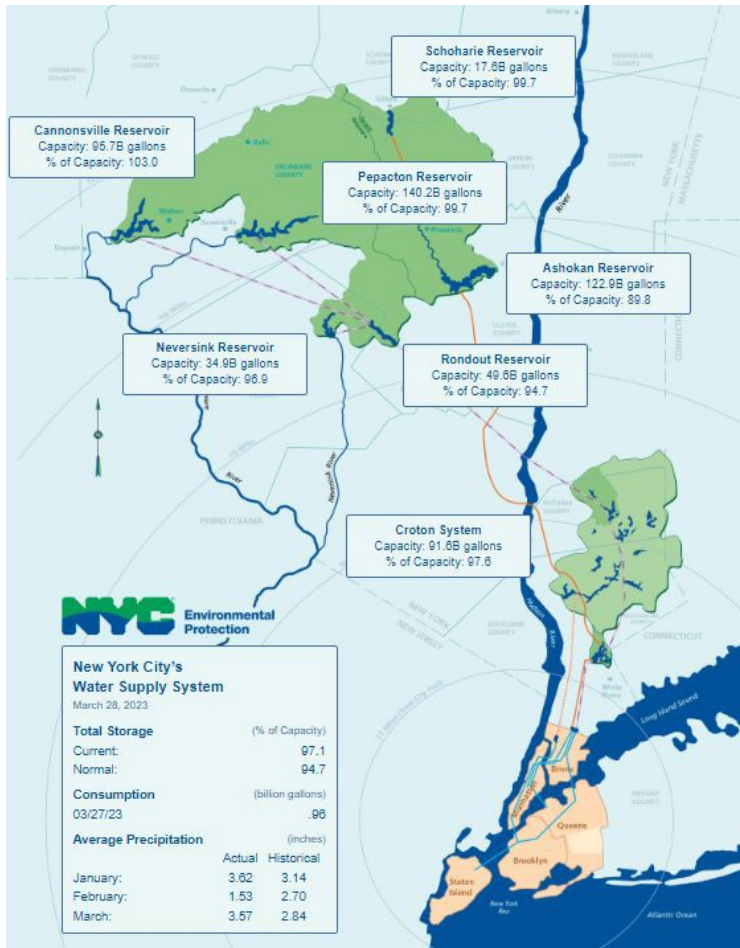
- Lakes were high in early winter but have now settled closer to normal
- Fill season is underway!



New York Lake Levels / Water Supply



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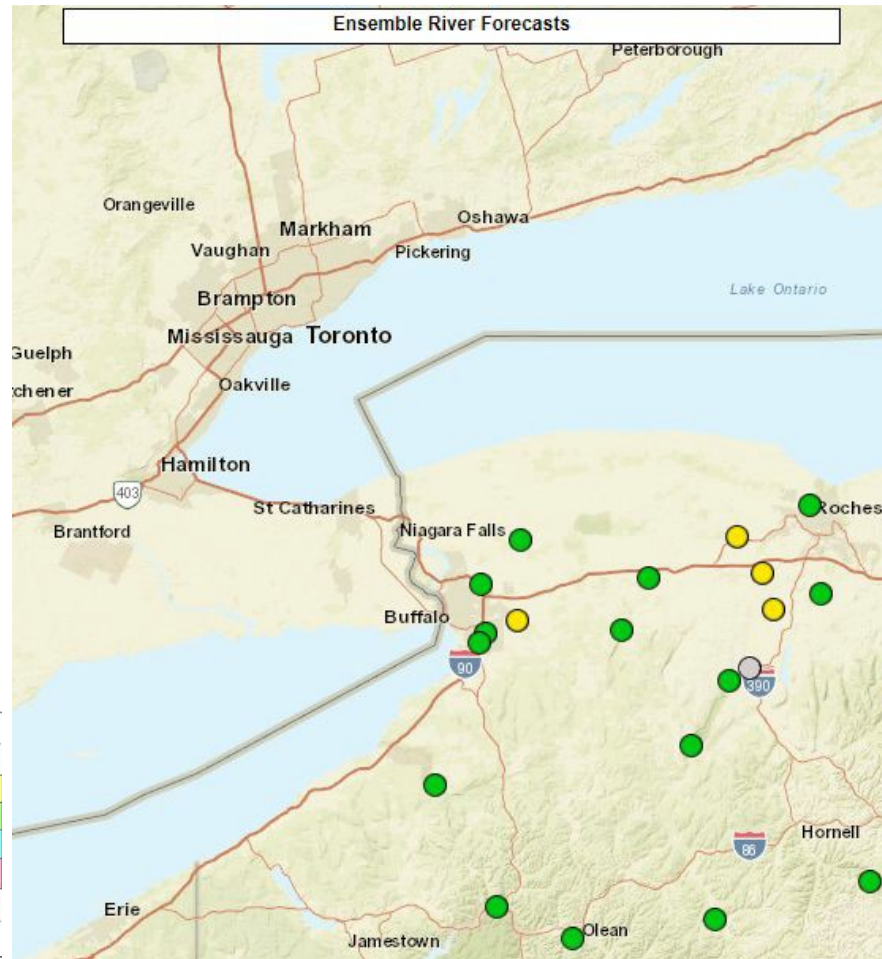


- NYC system above normal storage for the end of March (recent increase)
- Other NY lakes are a mixed bag (some above, some below)

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)

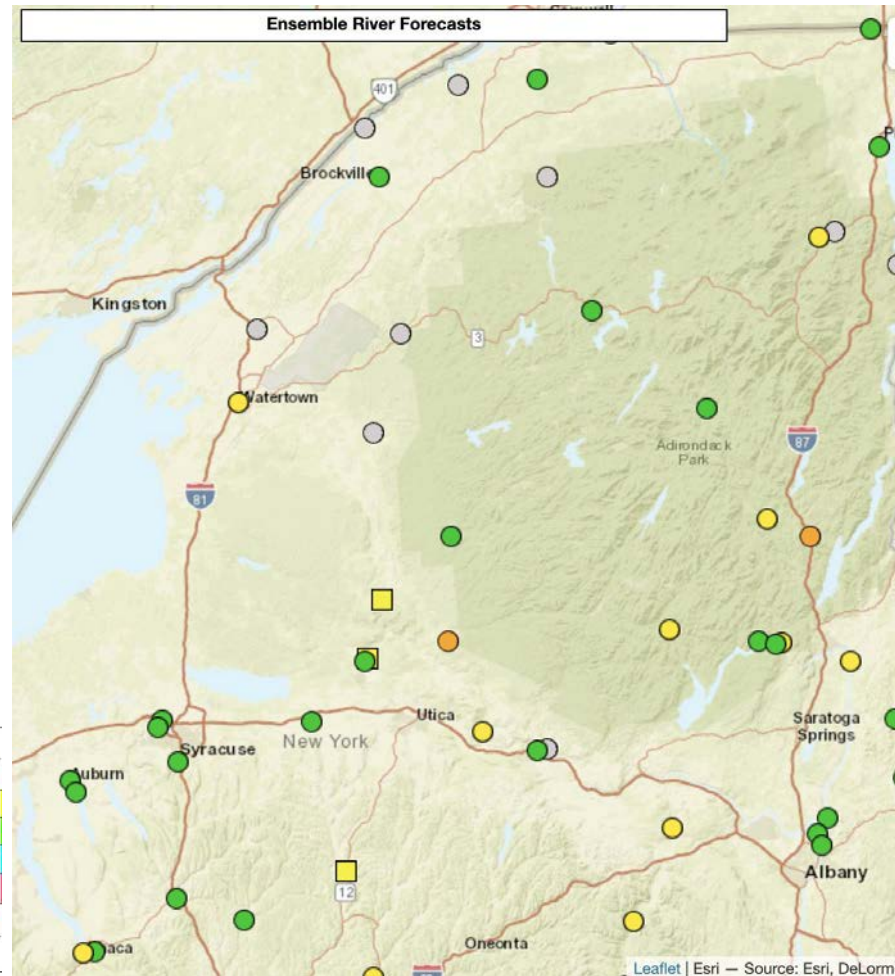
Potential for renewed rises the second half of next week (April 5 - 8)

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



For the rest of New York:
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)

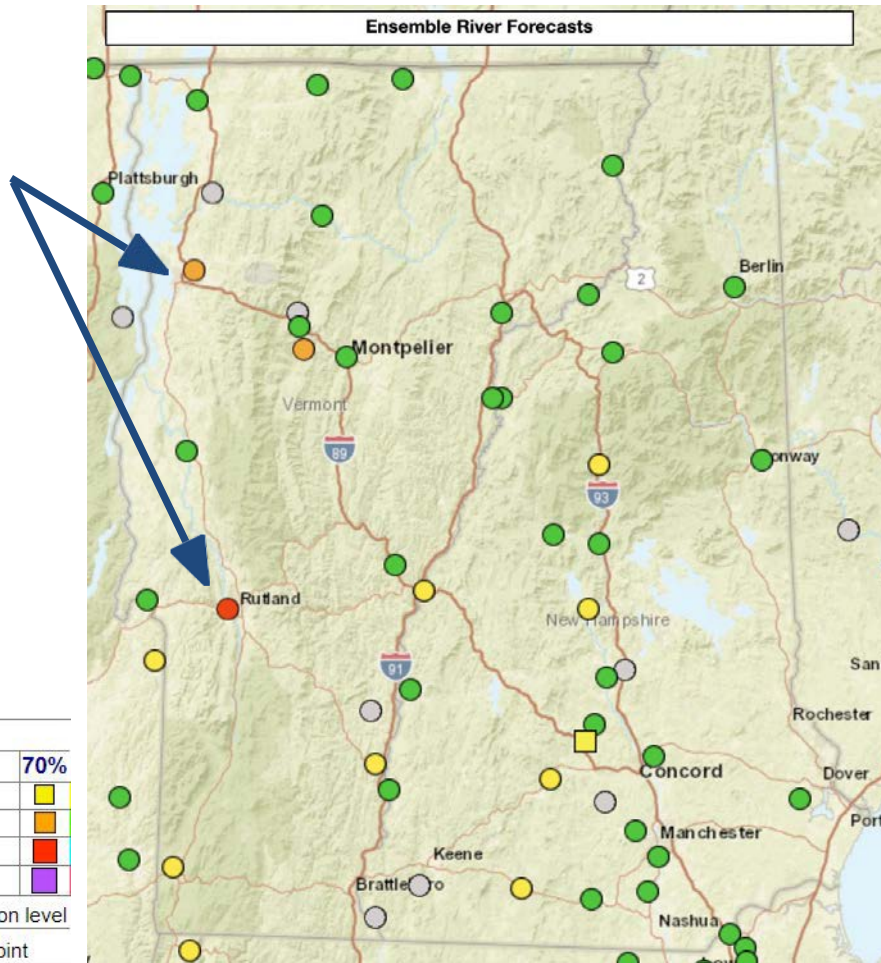
Chance of Exceedance		
30%	Level	70%
	Action	
	Minor Flood	
	Moderate Flood	
	Major Flood	
	= less than 30% chance of reaching Action level	
	= no critical levels defined for this point	

Ensemble Streamflow Predictions



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



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 Vermont & New Hampshire:
Minor flooding possible in portions of Vermont this weekend (April 1 - 2)

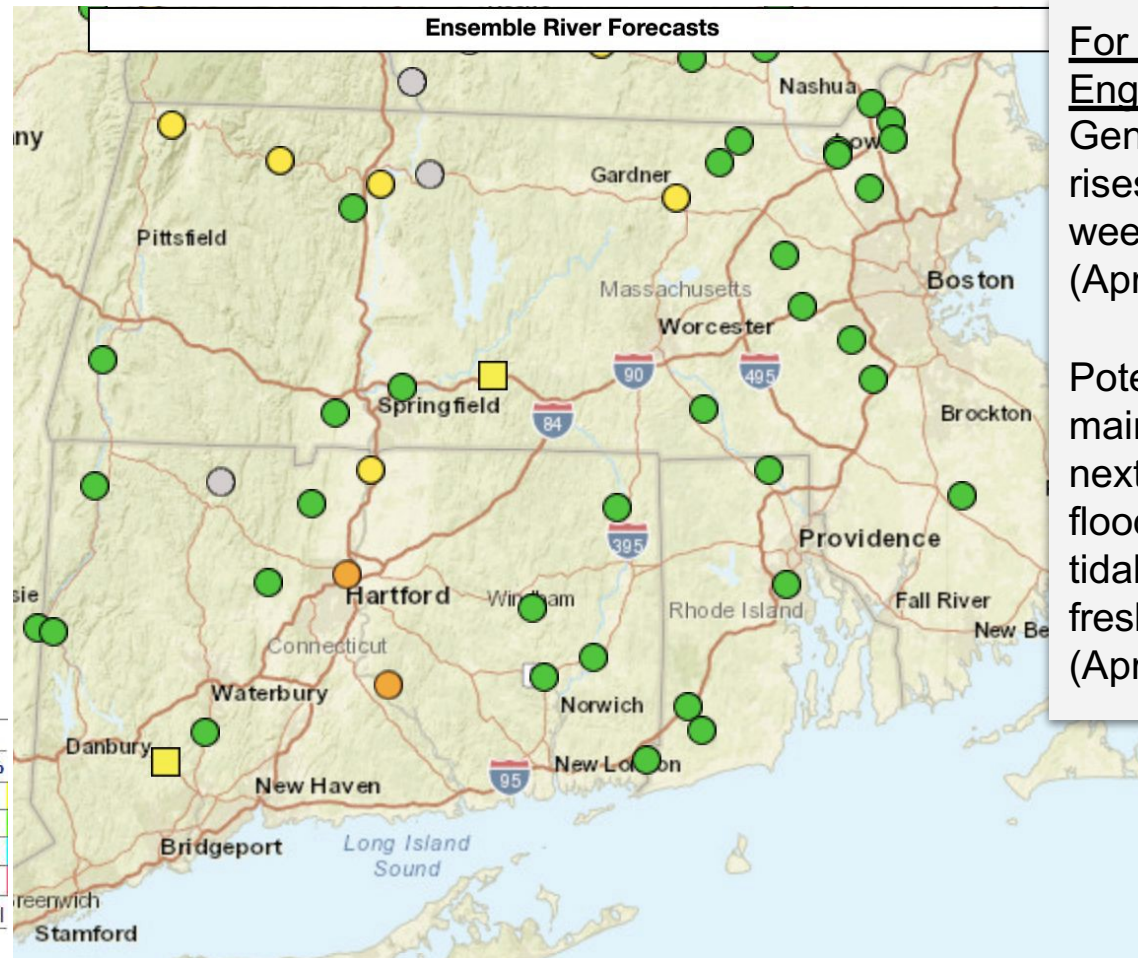
Generally within-bank rises expected this weekend elsewhere (April 1 - 2)

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

Ensemble Streamflow Predictions



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For Southern New England:

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

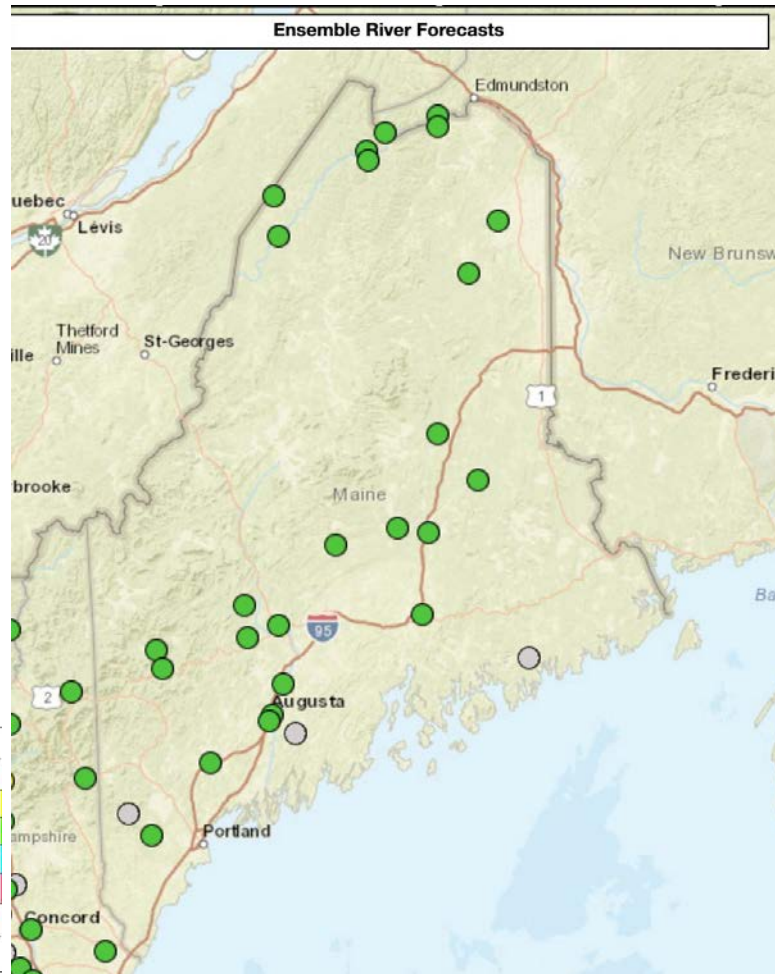
Potential for rises on the mainstem Connecticut next week with minor flooding possible in the tidal zone – from freshwater (April 4 - 9)

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	

Ensemble Streamflow Predictions



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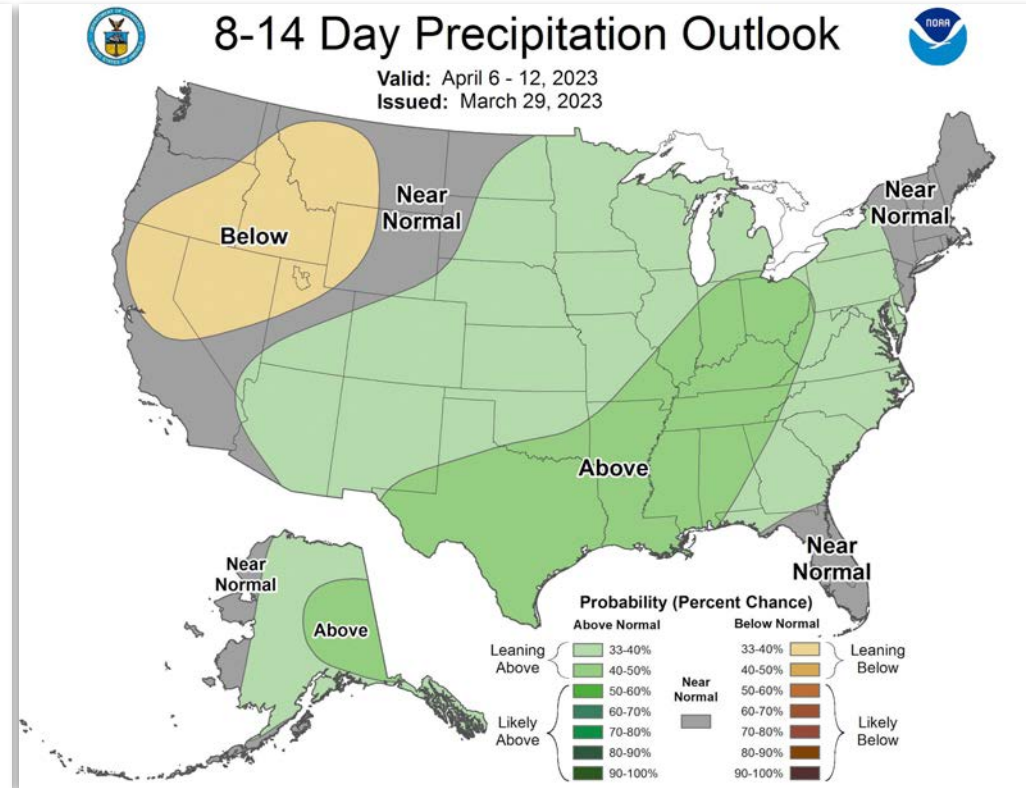
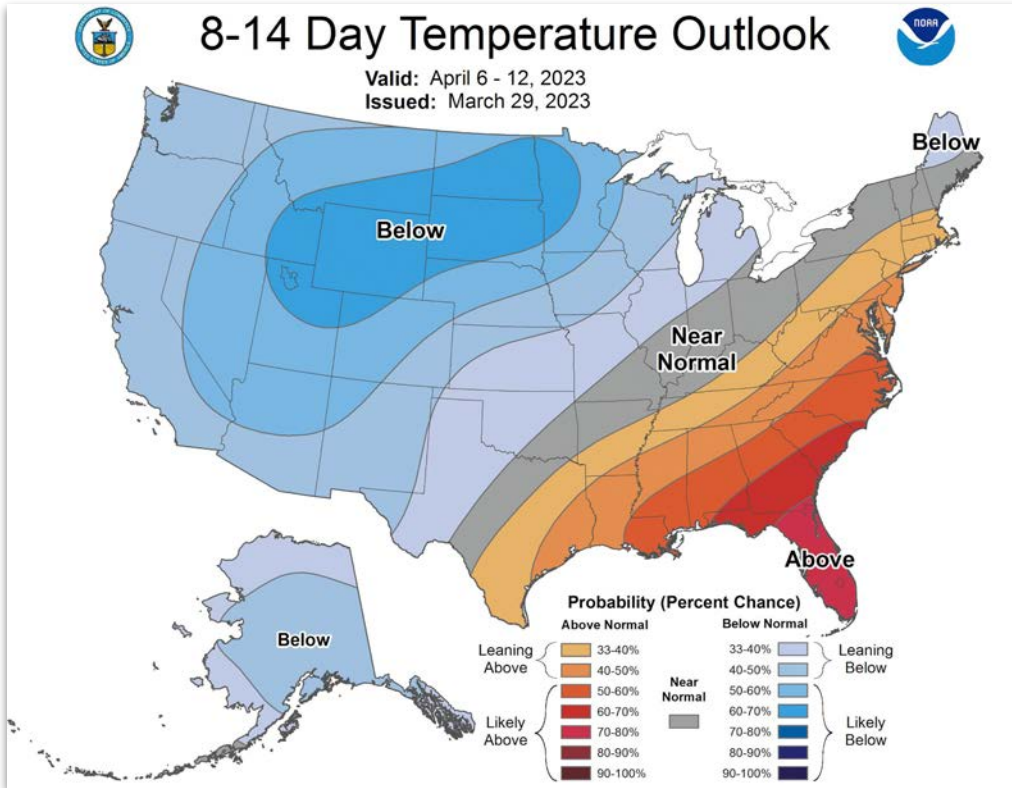
For Maine:
No short term concerns (through April 9th); snowpack stays mostly locked in and rises are expected to be minimal

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	

CPC 8-14 Day Outlook



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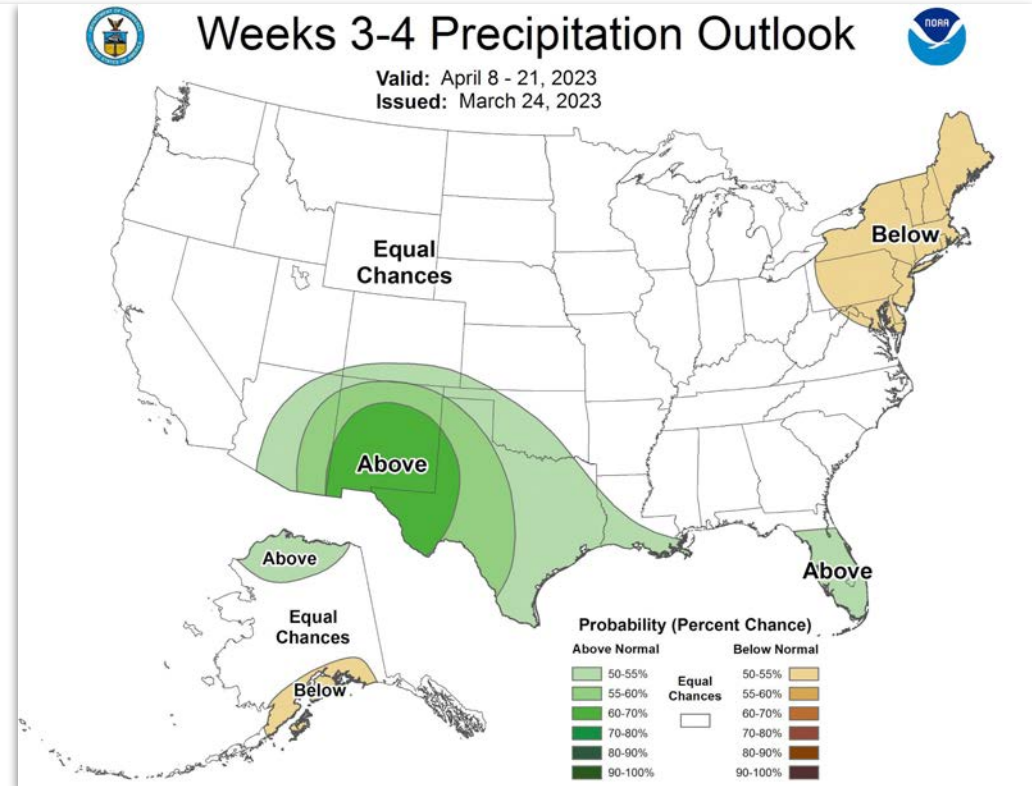
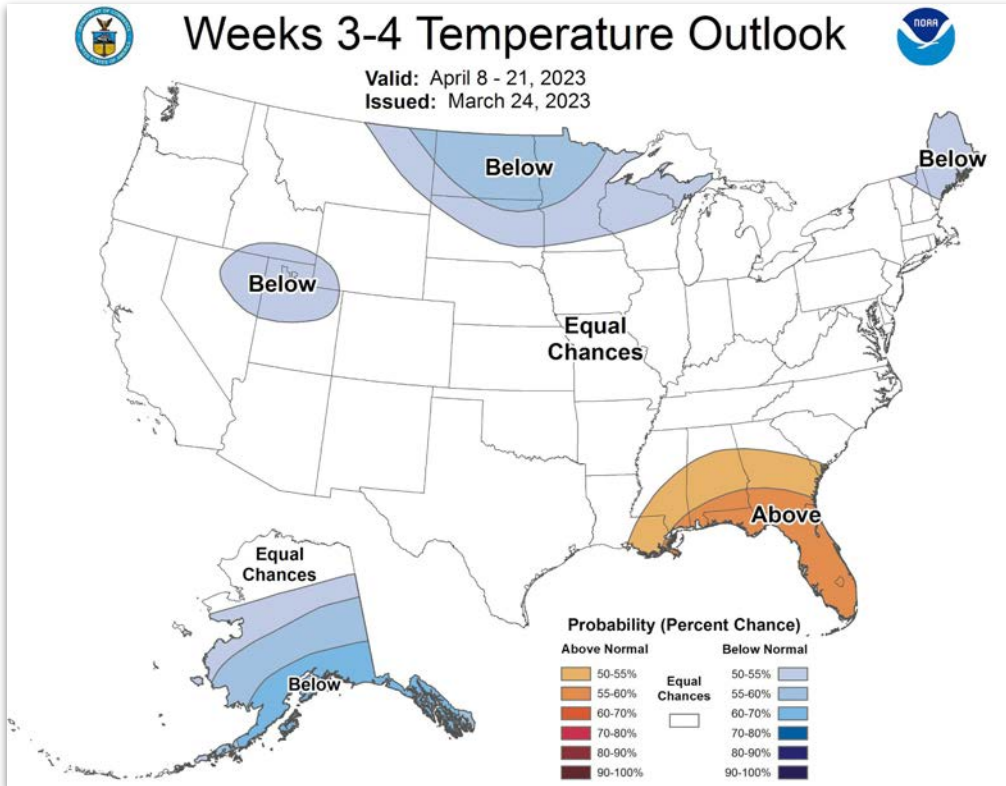


Transition period ahead

CPC Week 3-4 Outlook



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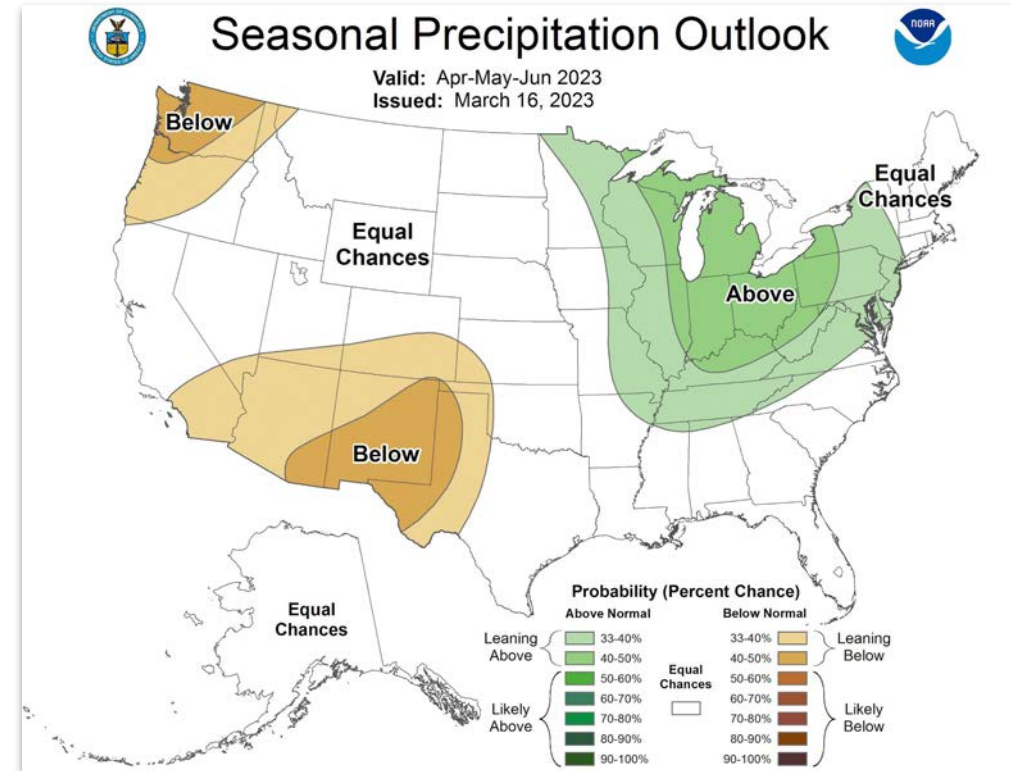
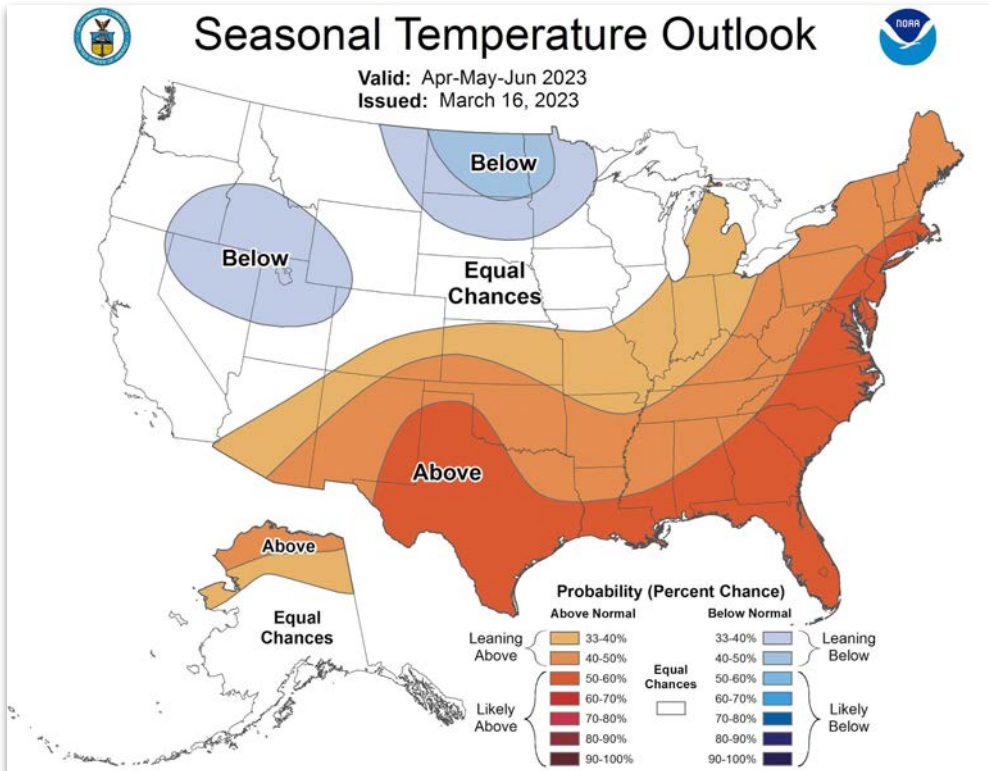


Maybe turning drier after a pattern shift for mid April?

CPC 90 Day Seasonal Outlook



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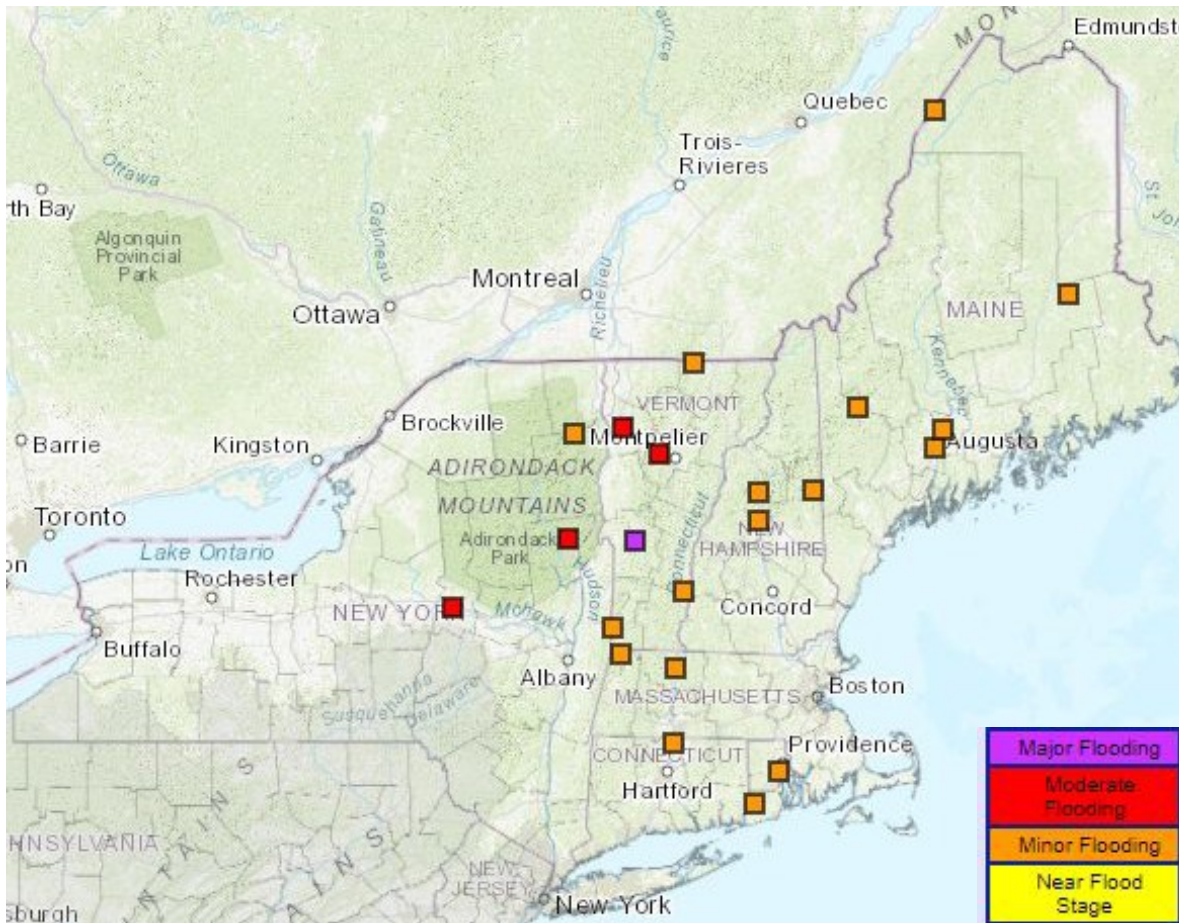


Seasonal outlook for April through June favors above normal temperatures, with a slight lean toward above normal precipitation in NY

Long Range Outlook



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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



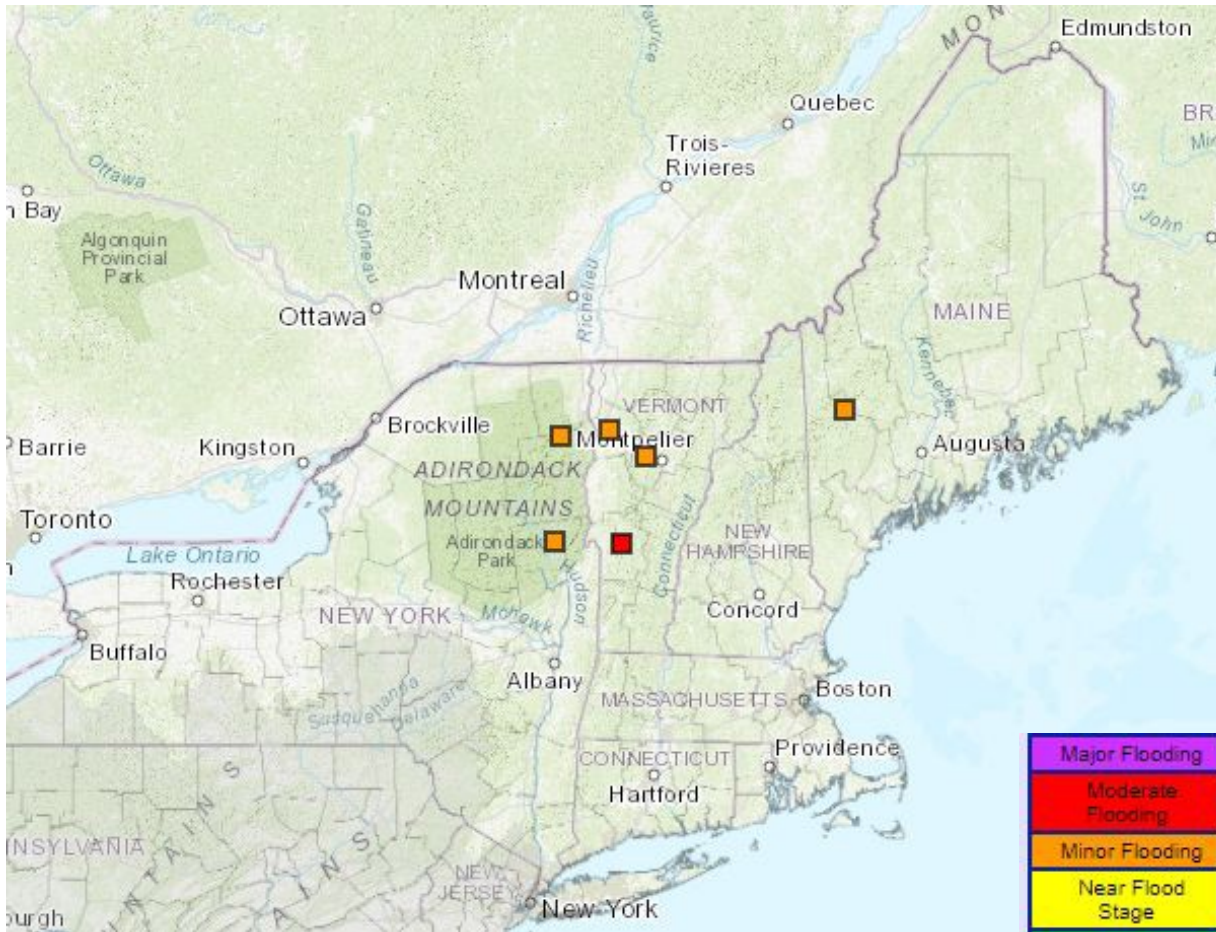
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Long Range Outlook



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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

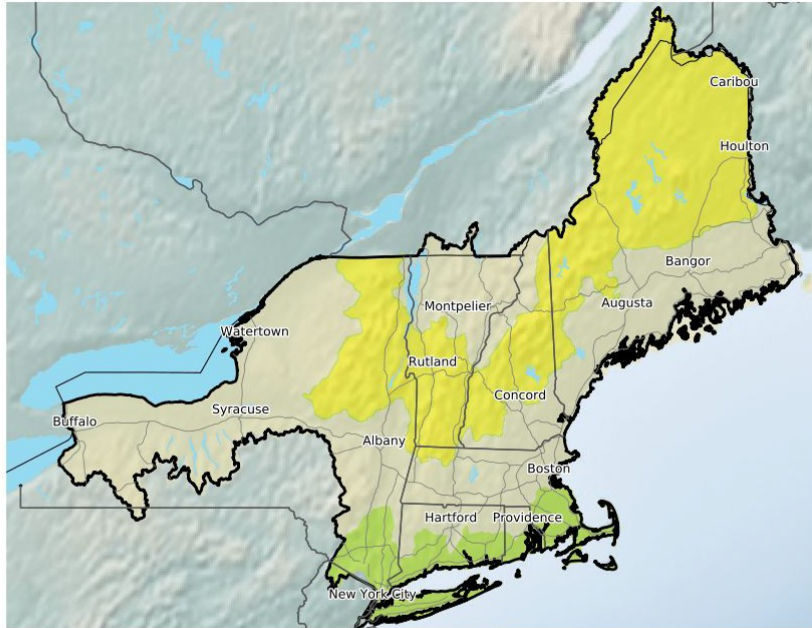
Northeast Spring Flood Outlook - 2023



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Winter/Spring Flood Potential Outlook

Valid: 03/30/2023 08:00 AM - 04/13/2023 08:00 AM EDT



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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

BRIEFING VALID: 3/30/2023

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