

NWS Form E-5 (04-2006) (PRES. BY NWS Instruction 10-924)	U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL WEATHER SERVICE	HYDROLOGIC SERVICE AREA (HSA) Burlington VT	
		REPORT FOR: MONTH YEAR December 2020	
MONTHLY REPORT OF HYDROLOGIC CONDITIONS		SIGNATURE Jessica Neiles, Lead Meteorologist /s/	
TO: Hydrologic Information Center, W/OS31 NOAA's National Weather Service 1325 East West Highway Silver Spring, MD 20910-3283		DATE 01/13/2021	

When no flooding occurs, include miscellaneous river conditions below the small box, such as significant rises, record low stages, ice conditions, snow cover, droughts, and hydrologic products issued (NWS Instruction 10-924).

An X inside this box indicates that no flooding occurred within this hydrologic service area.

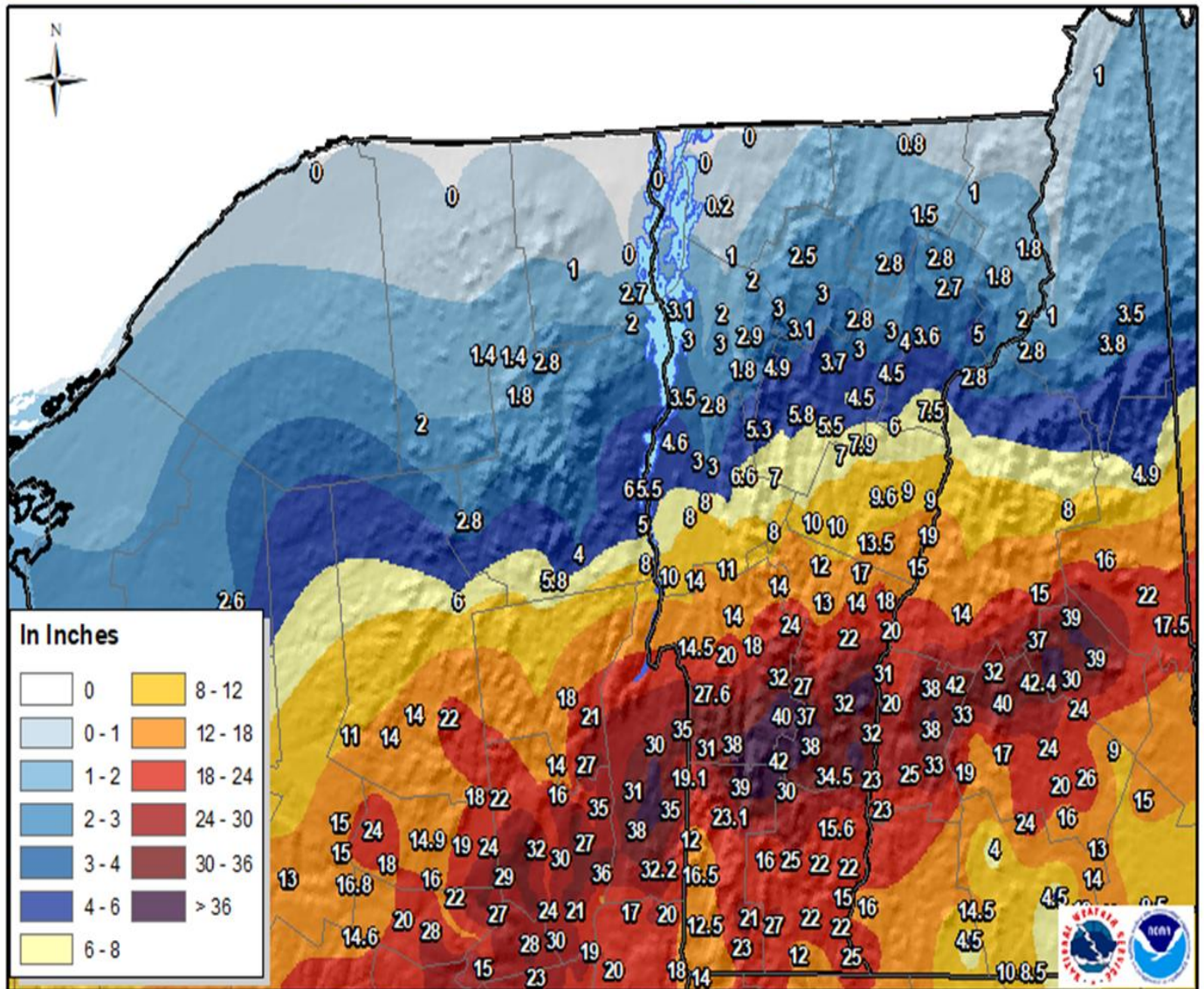
Overall December 2020 was a warm and dry month as compared to seasonal normals. One significant snowfall event occurred on December 17th, though the heaviest snow was confined to our Southern Vermont counties. Snowfall totals (Figure 1) ranged from a dusting along the international border to over 40" in Rutland and Windsor counties. A second significant storm system impacted the north country on Christmas day. Rainfall totals (Figure 2) with this system ranged from around a half an inch of rainfall to over 3". This rainfall in combination with melting of our deep snowpack from the previous storm led to two of our rivers surpassing flood stage. The Ausable River at Ausable Forks, NY and the Otter Creek at Center Rutland, VT both surpassed minor flood stage in the 36 hours that followed. (Table 1)

Precipitation totals for the month (Figure 3) ranged from under an inch to over 6" in the extreme southeast corner of our forecast area. The northern half of our CWA observed below normal precipitation, while above normal precipitation fell across southern Vermont. A similar picture is painted for monthly snowfall totals (Figure 5). Monthly snowfall totals ranged from just 2" in the Northern Adirondacks to over 50" in southern Vermont. Observed temperatures were well above seasonal normal for the month of December across our entire forecast area. (Figure 7). Due to the warmer than normal temperatures across the entire area, and below normal precipitation across much of our area, our region remains in D0 and D1 drought as of the end of December.

Gage ID	Flood Stage	Crest Height	Date	Time
ASFN6	7.0'	8.73'	12/25	19:45z
CENV1	6.0'	9.71'	12/26	13:45z

Table 1: Rivers that reached flood in December 2020 in BTV CWA.

North Country Storm Total Snowfall Ending December 18, 2020



Created by the National Weather Service Forecast Office Burlington, Vermont
 Sources: NWS observers & spotters, media, public, state & local officials

Created: 12/18/2020 1:51 PM

Figure 1: Snowfall totals from December 17, 2020 snowstorm.

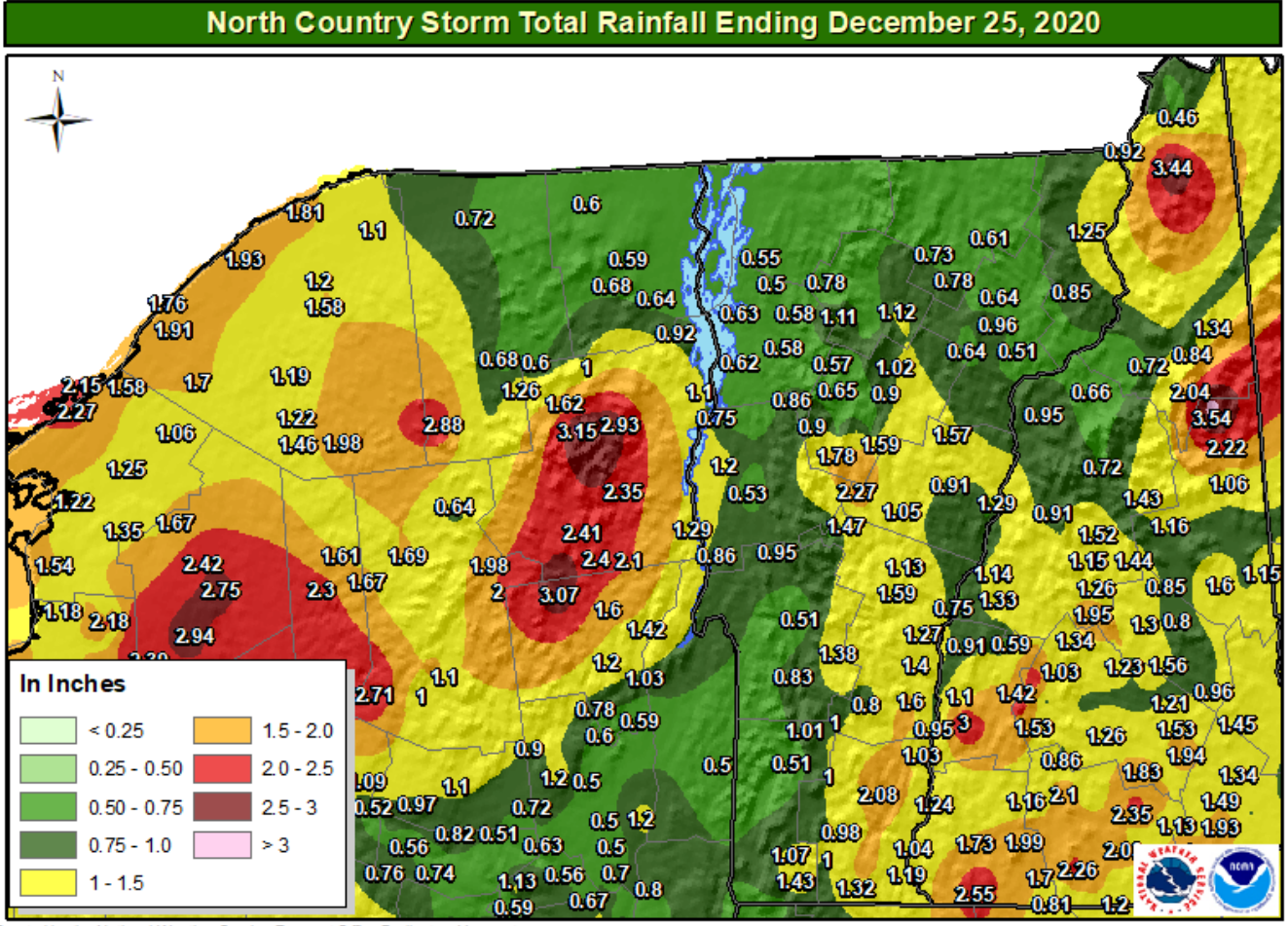


Figure 2: Rainfall totals from December 25, 2020 storm.

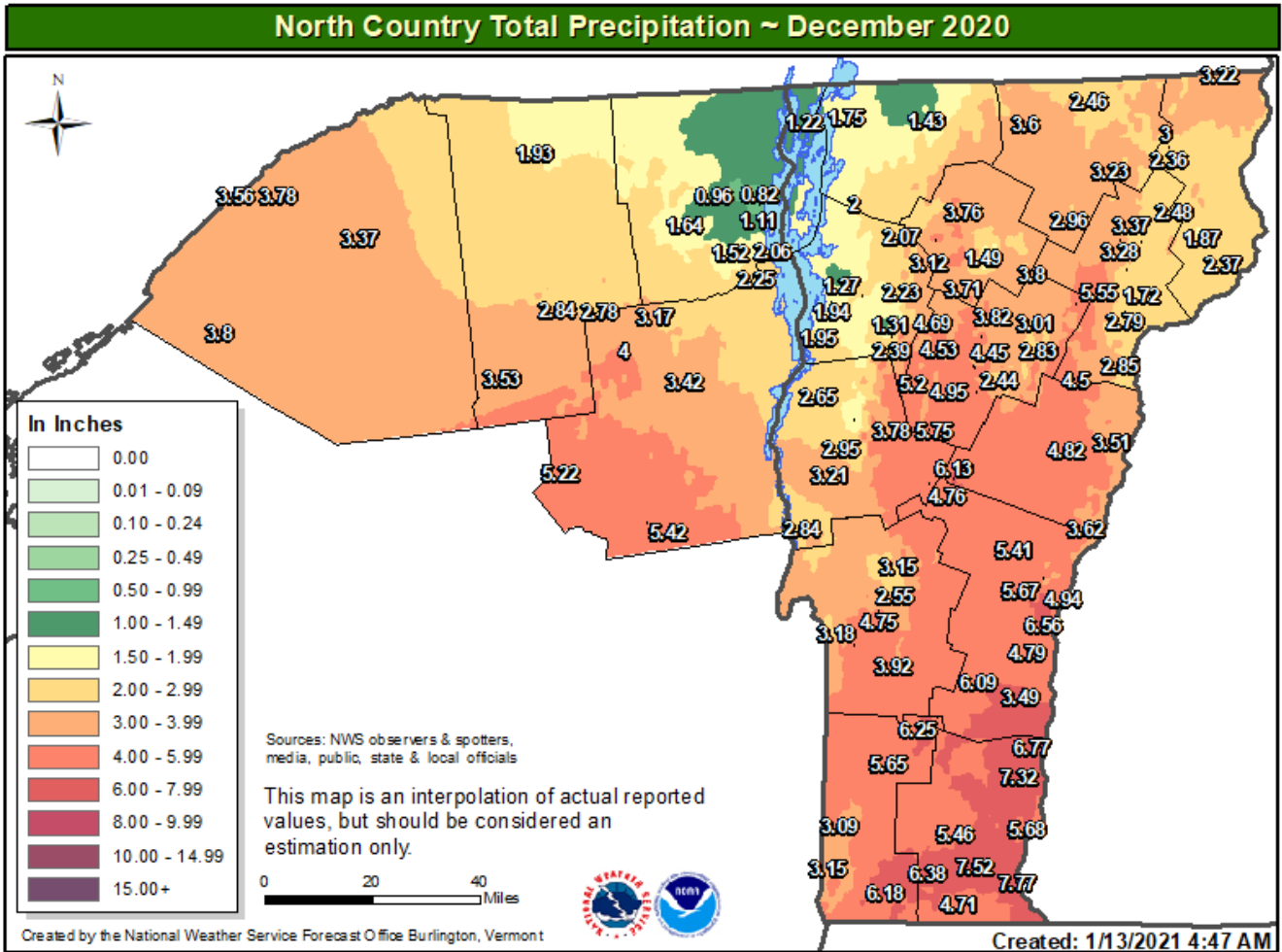


Figure 3: Total precipitation for the month of December 2020

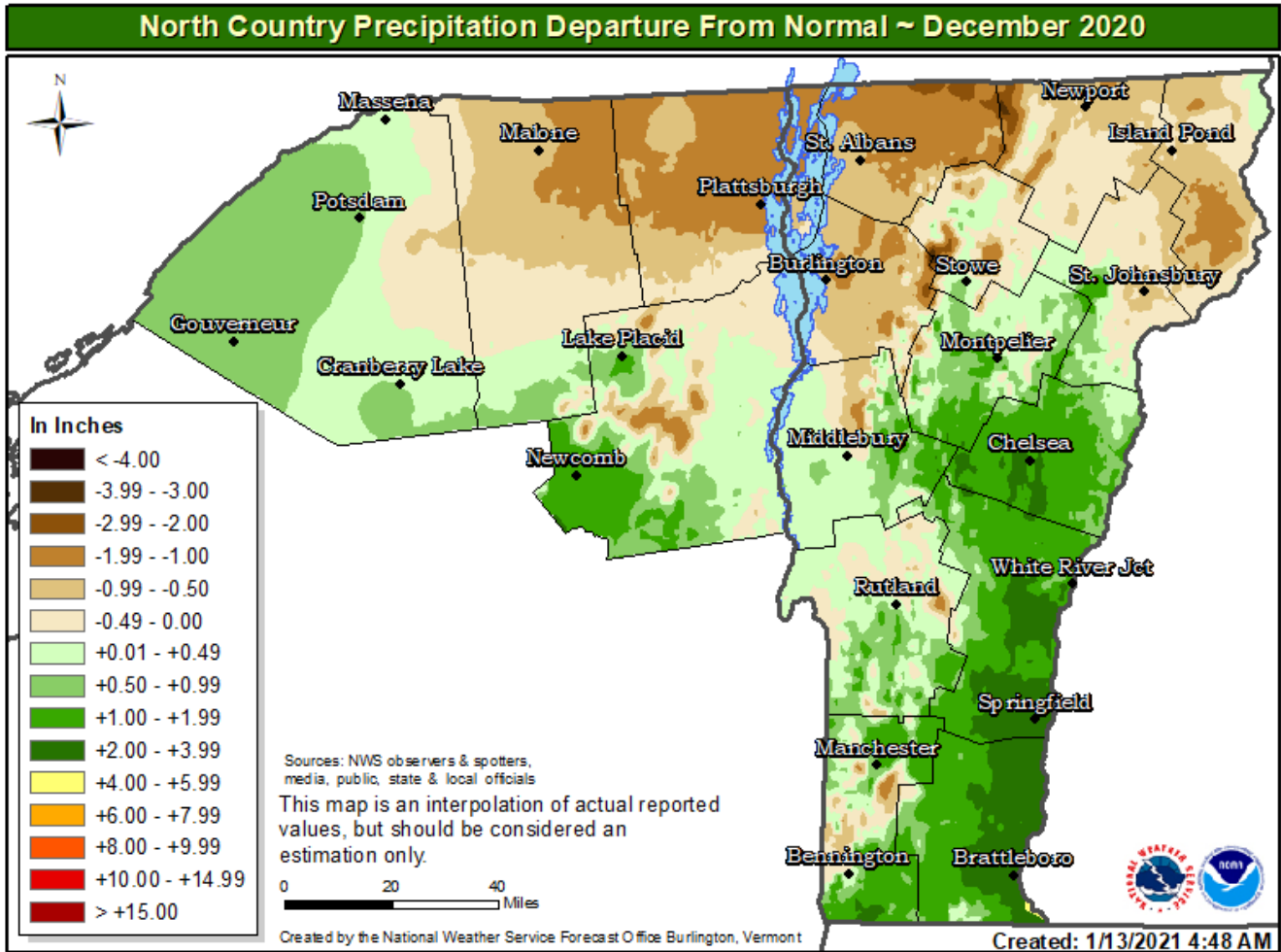


Figure 4: Monthly precipitation departure from normal for the month of December 2020.

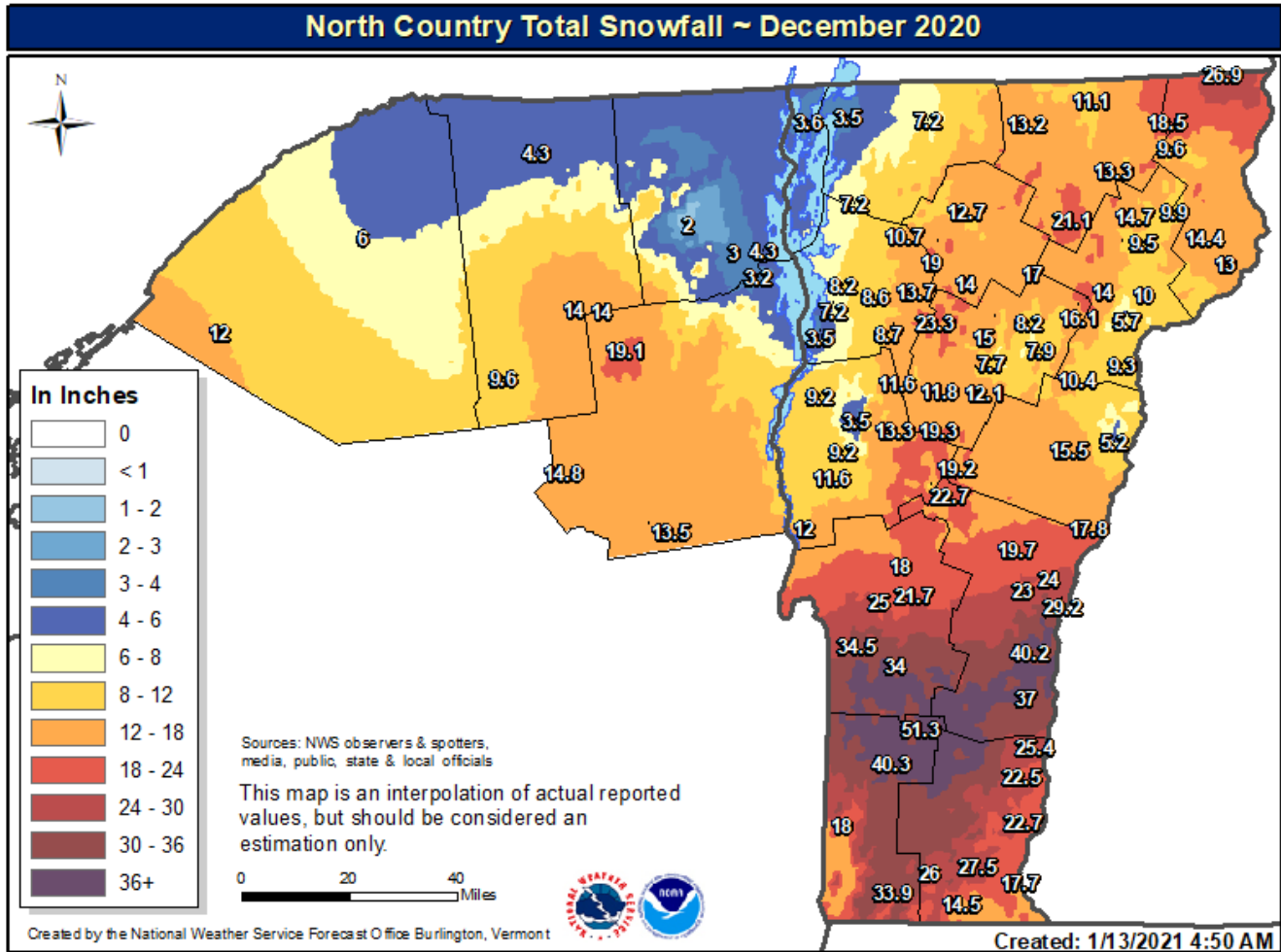


Figure 5: Monthly snowfall totals for the month of December 2020.

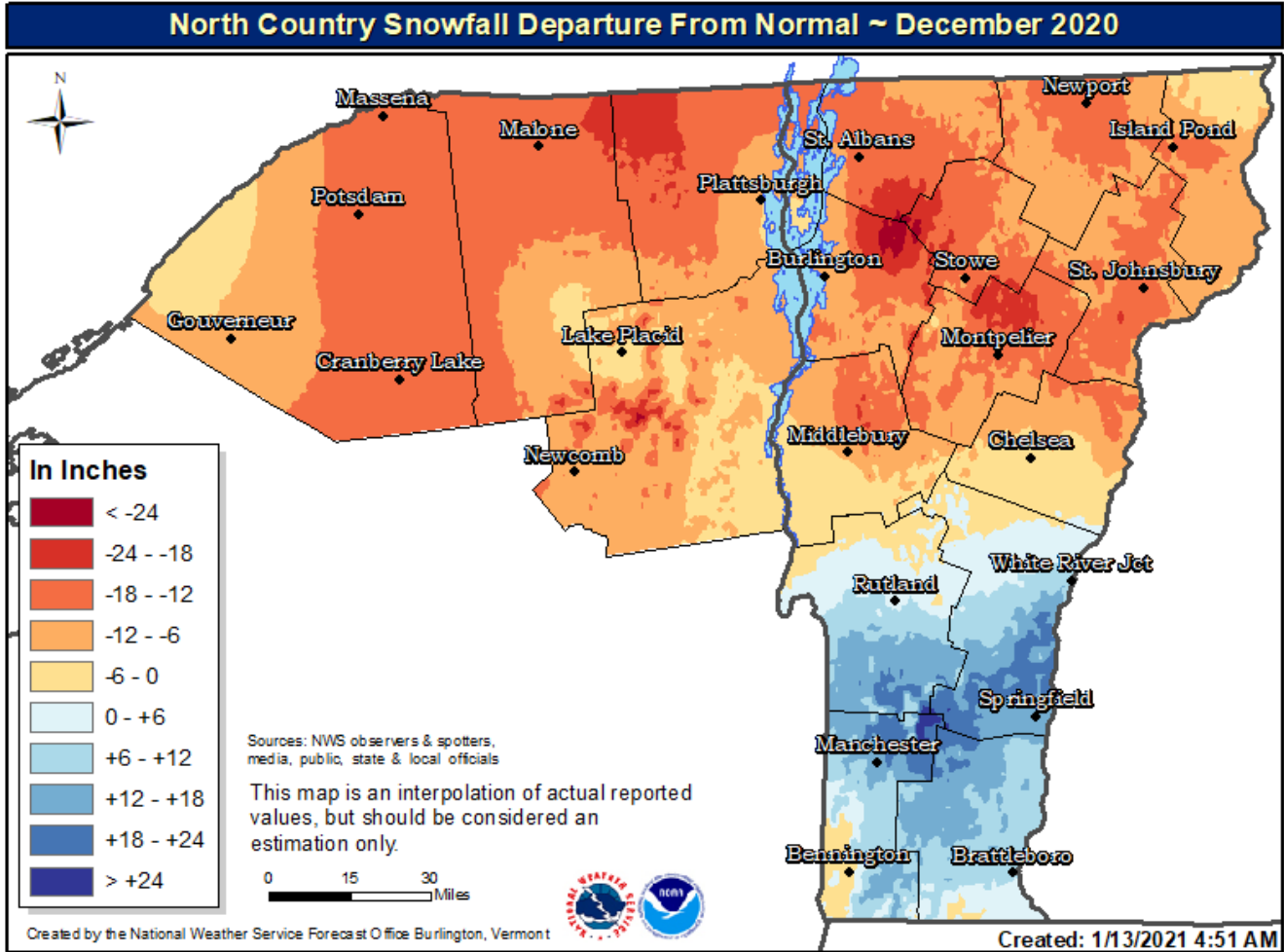


Figure 6: Monthly snowfall departure from normal for December 2020.

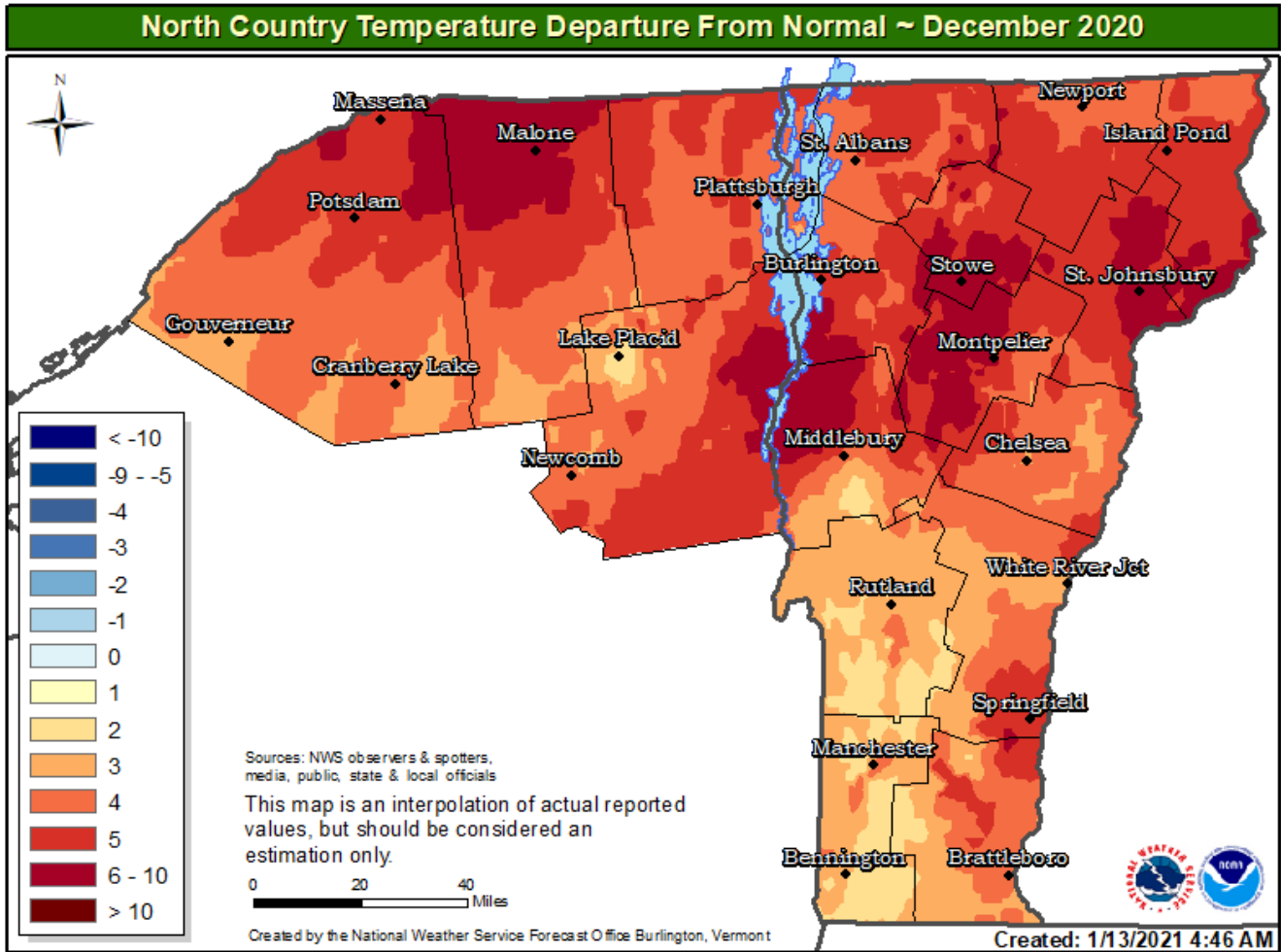
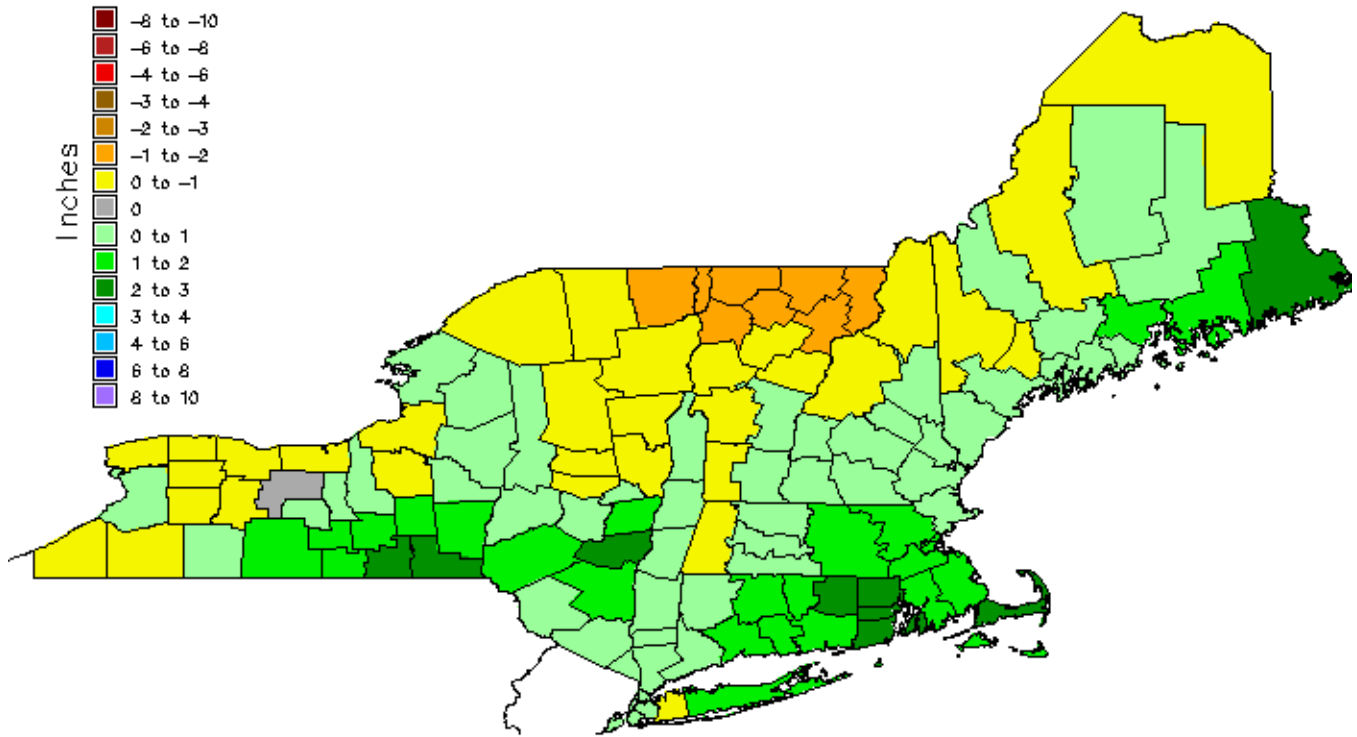


Figure 7: Monthly temperature departure from normal for December 2020.



Monthly Precipitation Departure from Normal December 2020

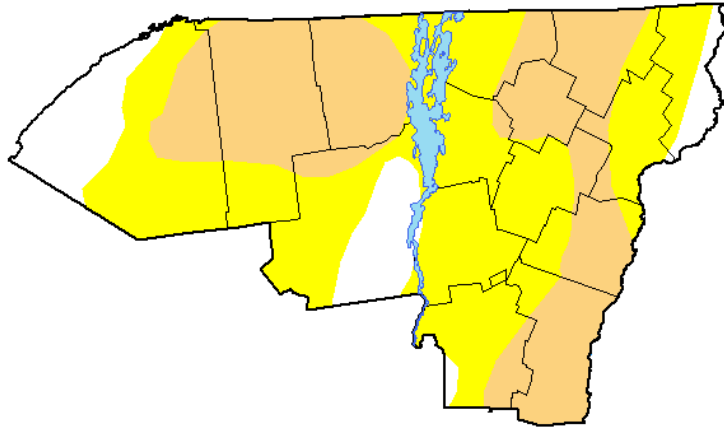


Source: NOAA Northeast River Forecast Center, Taunton, MA

Figure 8: Monthly precipitation departure from normal by county from NERFC for December 2020.

U.S. Drought Monitor Burlington, VT WFO

December 29, 2020
(Released Thursday, Dec. 31, 2020)
Valid 7 a.m. EST



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	12.83	87.17	38.15	0.00	0.00	0.00
Last Week 12-22-2020	2.13	97.87	51.93	0.00	0.00	0.00
3 Months Ago 09-29-2020	0.00	100.00	60.50	18.06	0.00	0.00
Start of Calendar Year 12-31-2019	100.00	0.00	0.00	0.00	0.00	0.00
Start of Water Year 09-29-2020	0.00	100.00	60.50	18.06	0.00	0.00
One Year Ago 12-31-2019	100.00	0.00	0.00	0.00	0.00	0.00

Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

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>

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droughtmonitor.unl.edu

Figure 9: Drought monitor on December 29, 2020 for BTV CWA.