

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	
MONTHLY REPORT OF HYDROLOGIC CONDITIONS		REPORT FOR: MONTH	YEAR 2023
		April	2023
TO: Hydrologic Information Center, W/OS31 NOAA's National Weather Service 1325 East West Highway Silver Spring, MD 20910-3283		SIGNATURE /s/ John Goff, Senior Service Hydrologist	
		DATE May 22, 2023	

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.

Overview

April 2023 was a rather quiet from a hydrological perspective across NWS Burlington's HSA. The month as a whole was extremely mild, with 30-day positive mean temperature departures averaging from 2 to 6 degrees above normal. In fact, the Burlington, VT area experienced their warmest April on record, smashing the prior record holder by a whole 1 degree (Fig. 1). Precipitation was more evenly distributed across the month, with low pressure systems and their associated frontal passages affecting the region every 4 to 7 days. By month's end, departures averaged, in general within an inch of normal except for a few areas in far northeastern Vermont and along the Connecticut River in the vicinity of Springfield, VT (Figs. 2 and 3). Given the mild weather, snowfall was scant and what remained of the old extant snowpack from the past winter largely melting by mid-month (Fig. 4).

Notable Hydrology

The most notable hydrological feature during the month was a brief bout of heavier rainfall that affected the far northern tier of counties in New York and Vermont on the 5th and 6th. During this period, 24-hour amounts averaged between 1 and 1.5 inches across this area. The rainfall, combined with some residual snowmelt led to modest, to in some cases significant rises on area streams and rivers in the area (Fig. 5). The Barton River in Coventry, for example, briefly exceeded its minor flood level on the 7th before ebbing lower later that day.

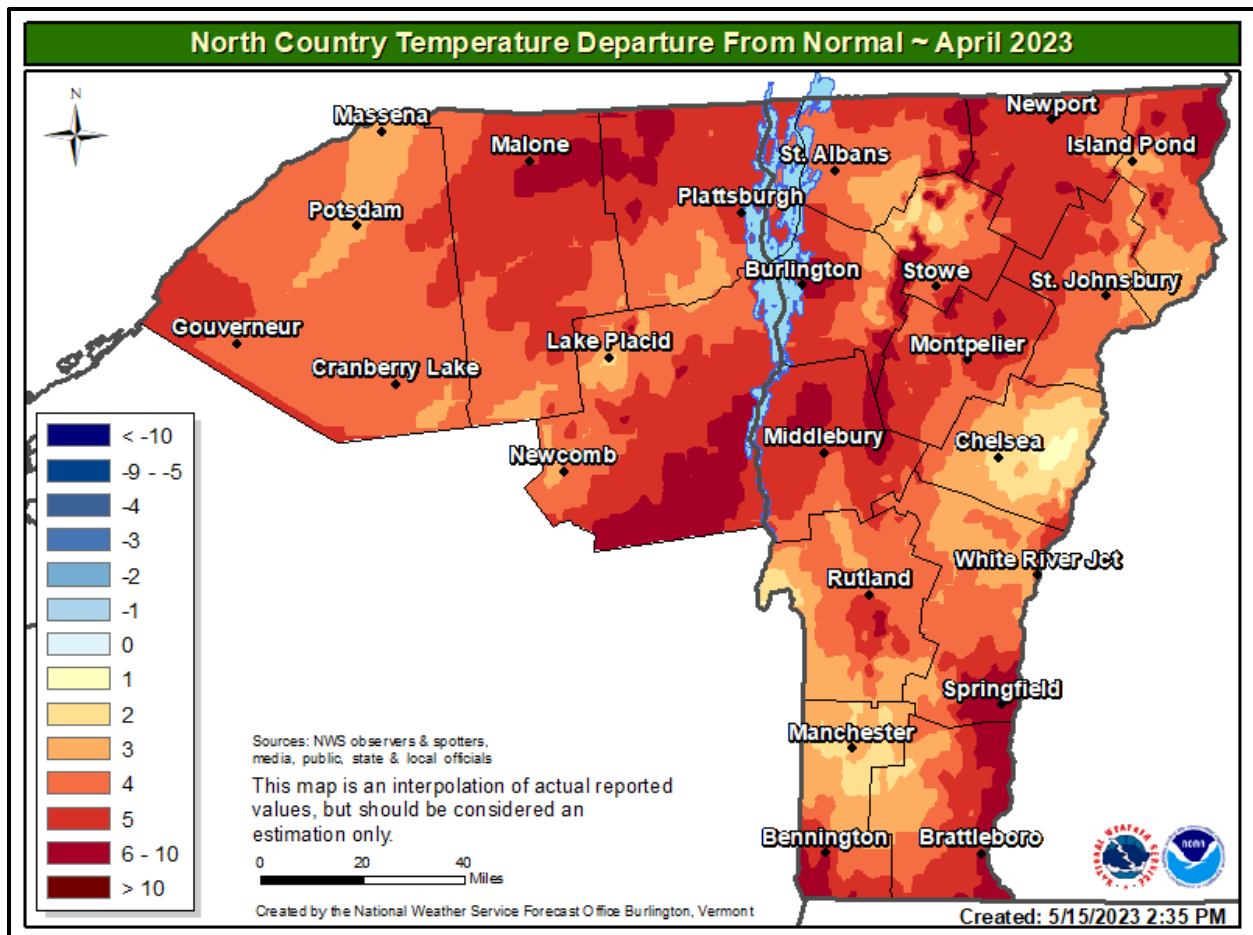


Figure 1: Mean temperature departure from normal for the month of April 2023 in the NWS Burlington, VT HSA. Values generally averaged from 2 to 6 degrees above the 30 year climatological mean.

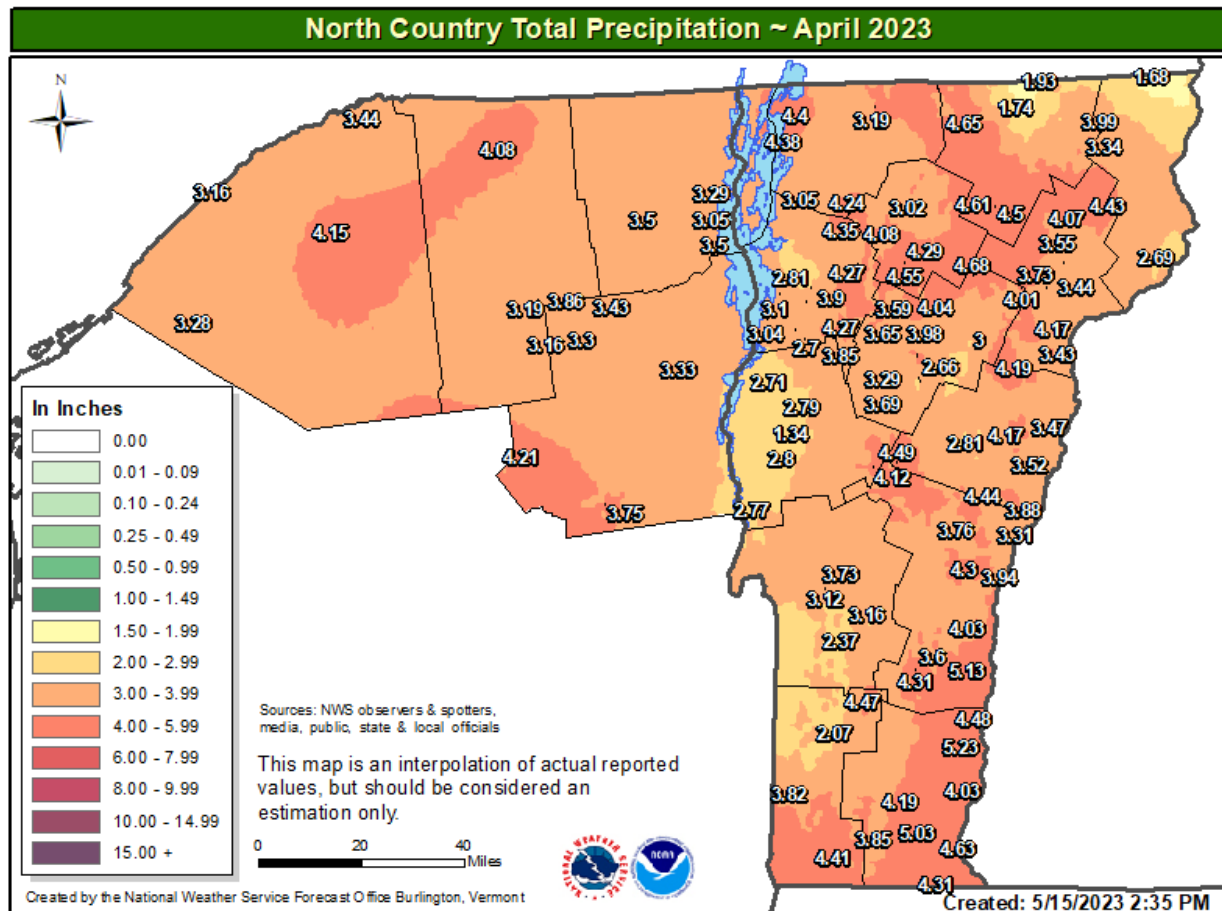


Figure 2: Monthly precipitation totals for April 2023 for the NWS Burlington, VT HSA. Values in general averaged from 2 to 5 inches across the HSA with some local variability.

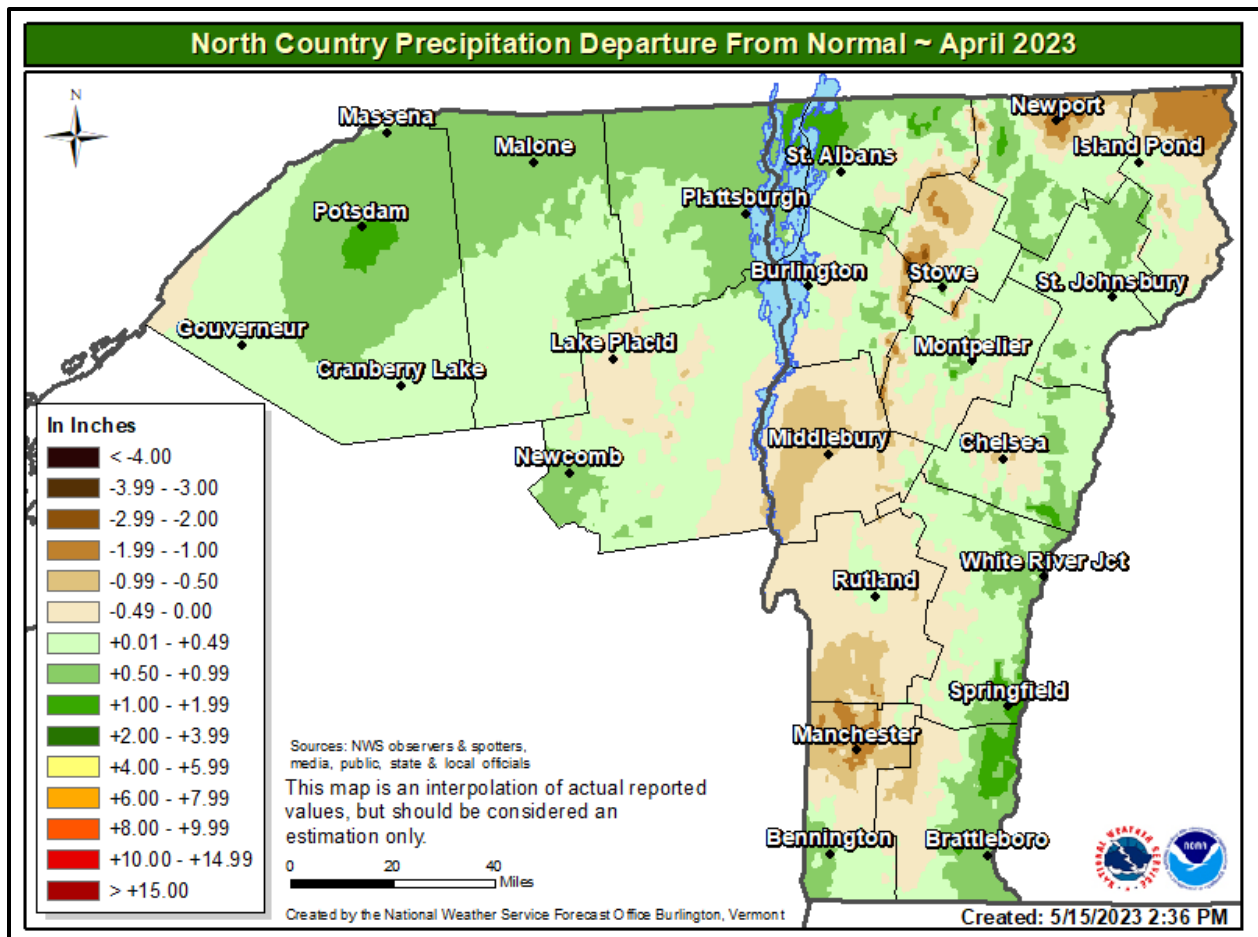


Figure 3: Monthly precipitation departures from normal for March 2023 for the NWS Burlington, VT HSA. 30-day departures generally ran within one inch of the long term climatological mean, though with some variability, most notably in far northeastern Vermont, and along the Connecticut River near Springfield, VT

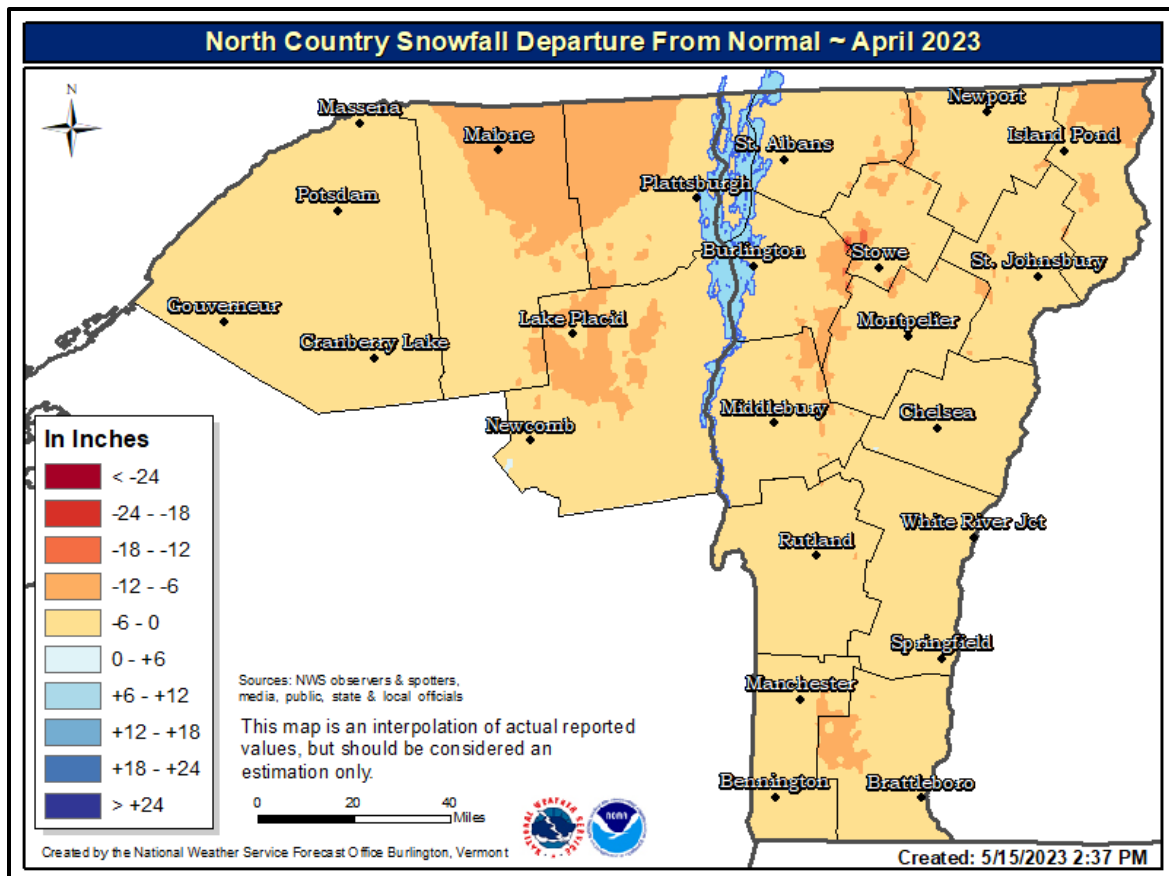


Figure 4: Snowfall departure from normal for the month of April 2023 for the NWS Burlington, VT HSA. Given the exceptionally mild weather, all areas observed negative departures in the 30 day period, with values generally ranging from -2.0 to -7.0 inches.

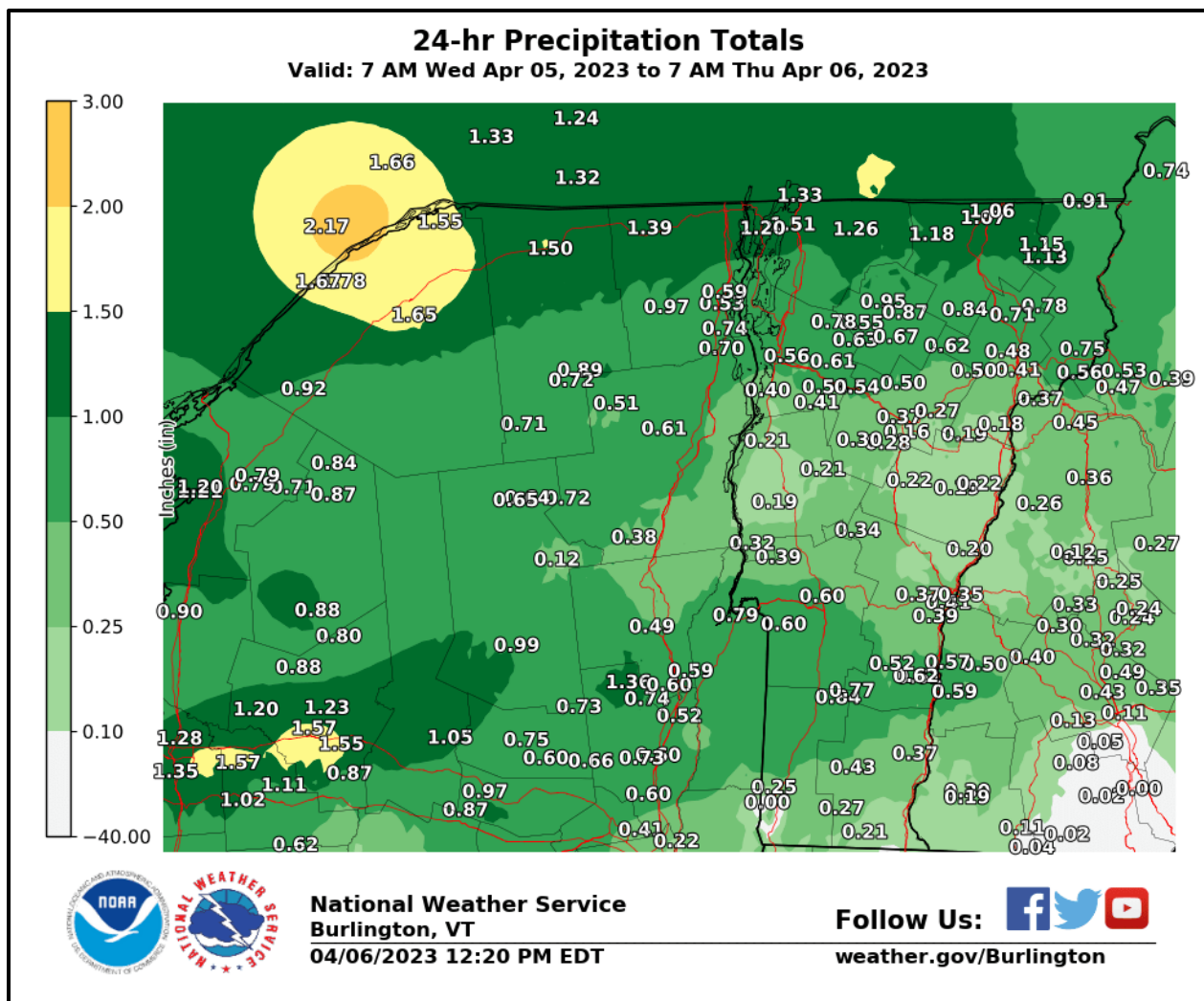


Figure 5: On April 5-6, 2023, a swath of heavier rainfall on the order of 1 to 1.5 inches affected far northern New York and Vermont. The rainfall, combined with residual snowmelt led to modest to sharp, mainly within bank rises on area streams and rivers during the period and into April 7.