

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
April	2024

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
 June 3, 2024

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 2024 was relatively unremarkable across the NWS Burlington, VT HSA from a hydrological perspective. Several frontal passages with light to occasionally moderate precipitation affected the region, two of which were more impactful with heavier totals. On average 30-day precipitation departures ranged within one inch of normal with some variability. Of note were slightly wetter conditions across the northeastern Adirondack Mountains where positive departures averaged from one to two inches (Fig. 1). This kept monthly average streamflows within the normal to slightly below normal thresholds (Fig. 2). Temperatures ran above normal for the period, with average positive departures ranging from one to three degrees. The warmest conditions were noted in the St. Lawrence Valley where departures of three to five degrees were more common (Fig. 3). That said, an early spring snowstorm did affect the area on April 3-5 when amounts of 10 to 20 inches were observed from the Adirondack Mountains east into Vermont (Fig. 4). Some nominal power outages and travel disruptions were noted during the event, though given the early April time frame impacts were relatively modest by regional standards.

Notable Hydrology

The most notable hydrological event of the month occurred during April 12-13 when low pressure brought steady moderate to locally heavy rainfall to the region. Two-day rainfall from the event averaged from 1 to 2.5 inches in many areas, especially across the Adirondack Mountains and across central/south central Vermont (Fig. 5). These amounts, when combined with residual high elevation snowmelt led to significant rises on area streams and rivers in these areas and prompted several flood warnings. This included the Ausable River at Au Sable Forks, NY, Otter Creek at Center Rutland, VT, and the Ottauquechee River at West Bridgewater, VT, all of which exceeded minor flood stage (Fig. 6).

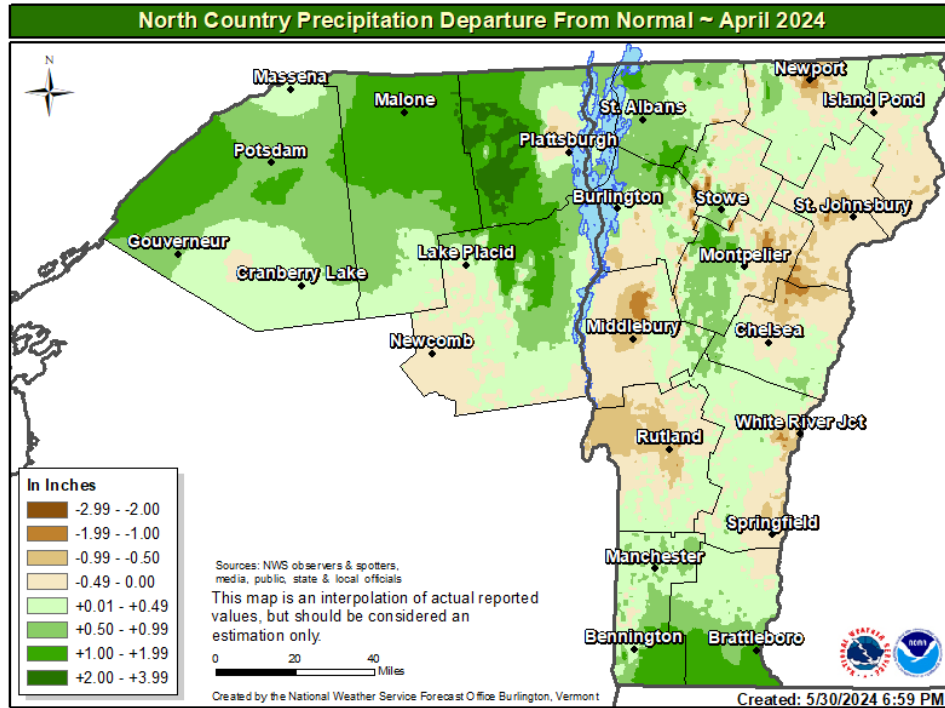


Figure 1: April 2024 precipitation departures from normal across the NWS Burlington, HSA. Mean 30-day values generally averaged within one inch of normal, with some customary variability.

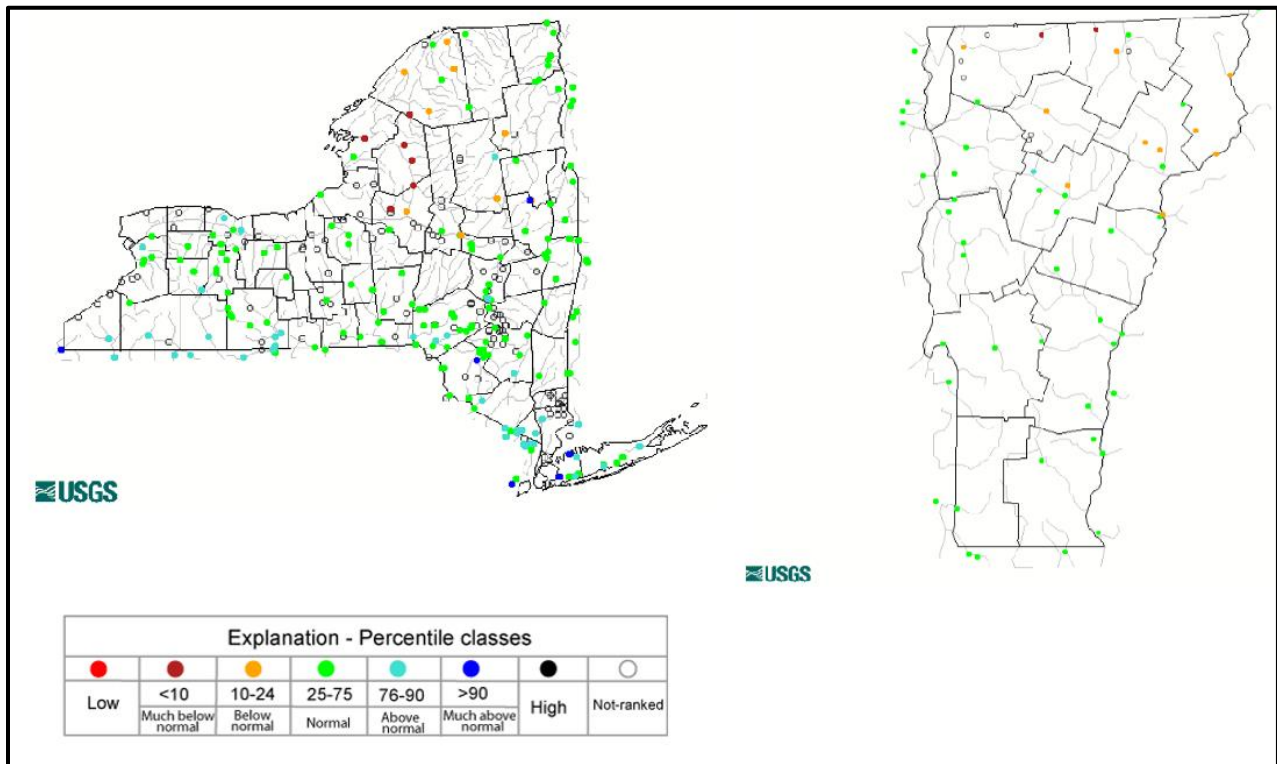


Figure 2: Monthly average streamflow for April 2024, courtesy USGS. Values generally averaged in the normal to slightly below normal range.

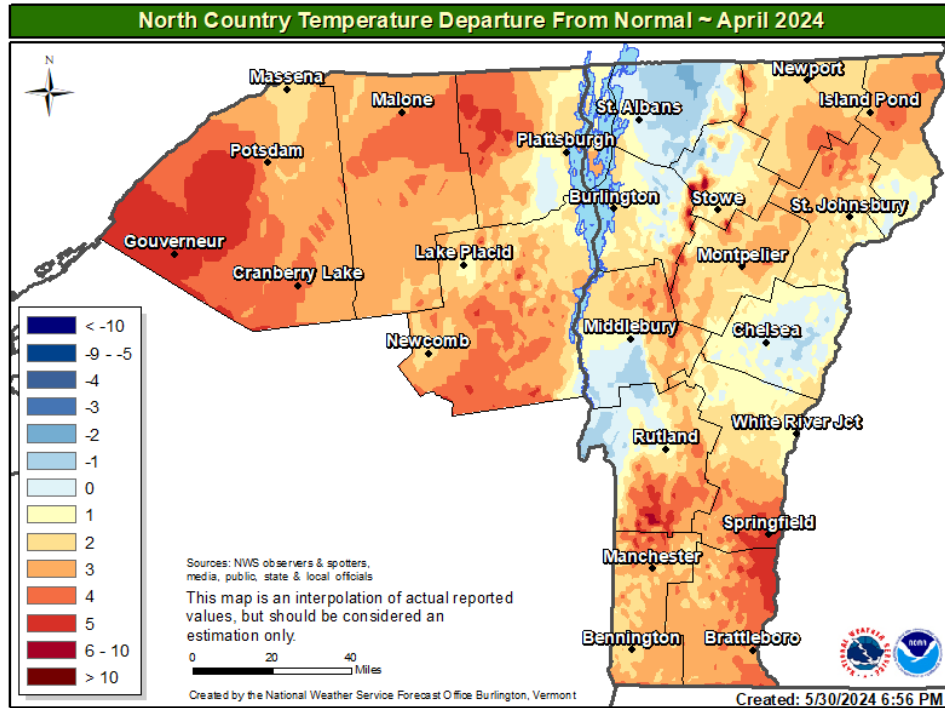


Figure 3: Monthly temperature departures from normal across the NWS Burlington HSA for April 2024. Values generally ran above normal for the month, with the largest departures of +4 to 5 degrees noted in the St. Lawrence Valley.

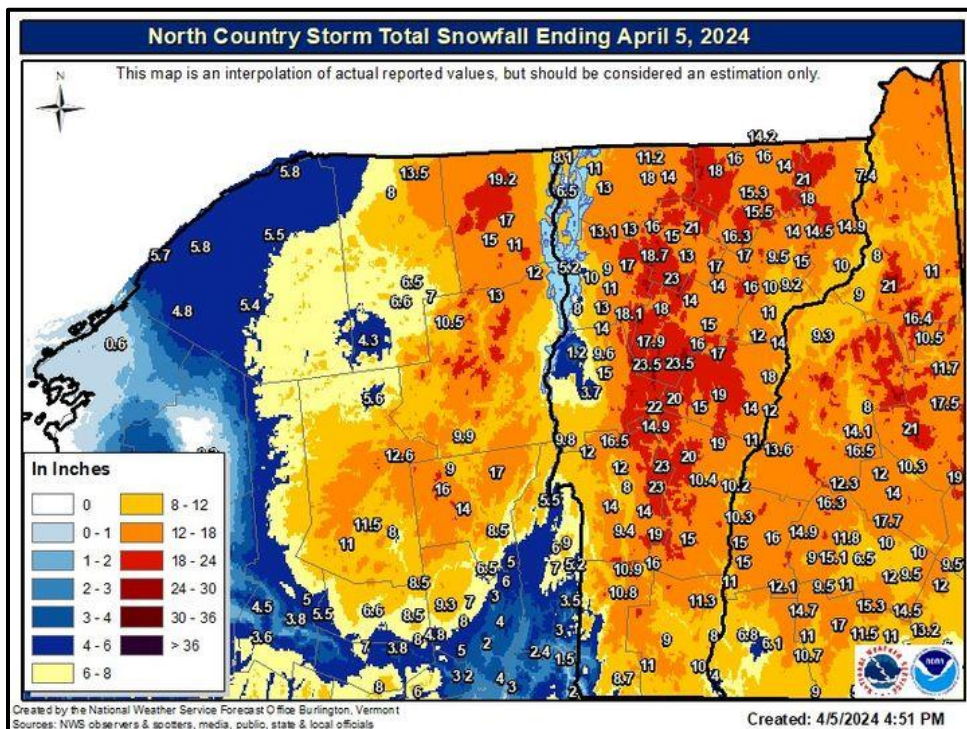


Figure 4: Snowfall totals observed during the April 3-5 late season snowstorm which affected Vermont and northeastern New York. Totals of 10 to 20 inches were common across the area, with heaviest totals in the higher terrain.

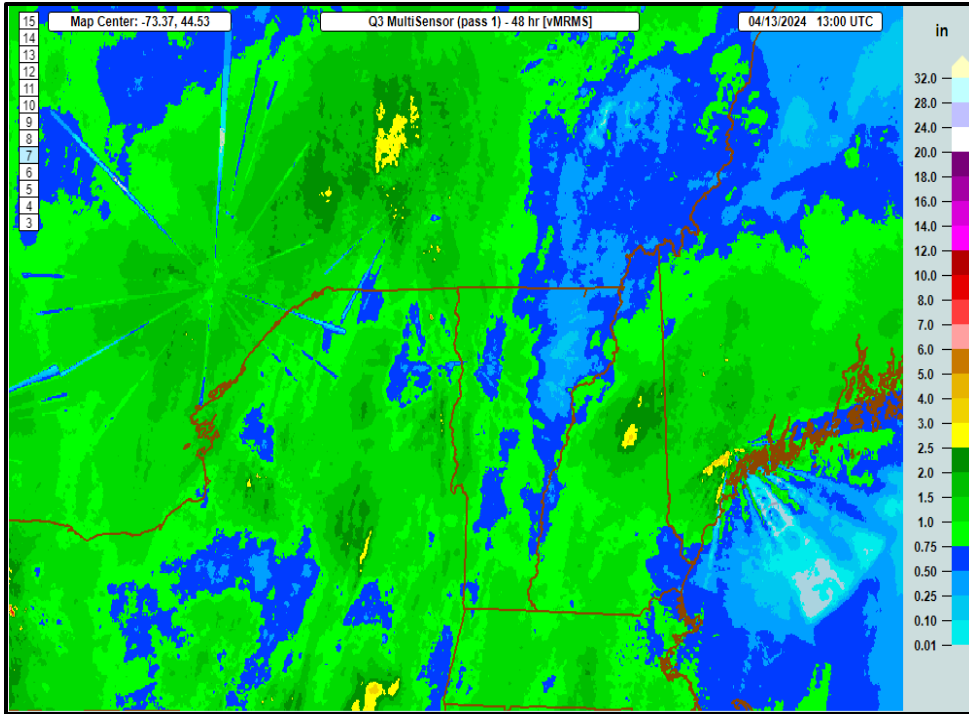


Figure 5: MRMS 48-hour multi-sensor rainfall estimates across the NWS Burlington HSA under 13 UTC on April 13, 2024. Widespread totals of 1 to 2.5 inches were observed.

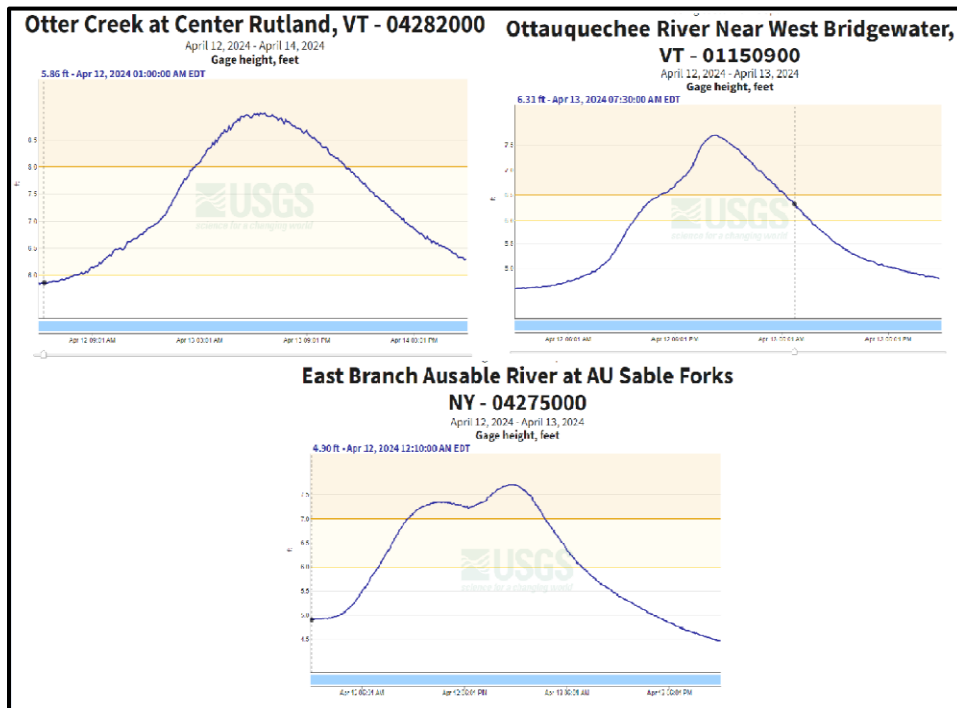


Figure 6: A sampling of river hydrographs from the April 12-13, 2024 flood event. Several river gauges saw impactful rises above minor flood stage during the event.