NWS Form E-5 **U.S. DEPARTMENT OF COMMERCE** **(04-2006)** **NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION** **(PRES. BY NWS Instruction 10-924)** **NATIONAL WEATHER SERVICE**	HYDROLOGIC SERVICE AREA (HSA) Burlington VT
MONTHLY REPORT OF HYDROLOGIC CONDITIONS	REPORT FOR: MONTH: May YEAR: 2025
TO: Hydrologic Information Center, W/OS31 NOAA's National Weather Service 1325 East West Highway Silver Spring, MD 20910-3283	SIGNATURE Adrianna Kremer / Meteorologist DATE June 27, 2025

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

Overall, May 2025 was a fairly wet month across much of the NWS Burlington hydrologic service area (HSA). Total precipitation values varied greatly across the region, with the St. Lawrence Valley only seeing 2 inches throughout the entire month, while portions of southern Vermont saw amounts in excess of 8 inches (Fig. 1). This resulted in near to below normal precipitation across much of northern New York and portions of the Northeast Kingdom in Vermont, with the remainder of Vermont seeing anywhere from 2 to 6 inches above normal precipitation (Fig. 2), which was about 150% to 200% of normal for the month (Fig. 3).

Notable Hydrology

The most notable hydrologic event during the month occurred on May 17th when several rounds of strong to severe thunderstorms produced localized flash flooding across central Vermont. Rain totals for this event were not overly excessive when compared to previous flash flood events, however the wet antecedent conditions and higher streamflows (Fig.4) allowed for greater runoff and flash flooding to develop. Rainfall amounts across the Burlington HSA on May 17th ranged from a few tenths on an inch across St. Lawrence County to over 2 inches across central Vermont where the flash flooding occurred (Fig. 5). Areas impacted by the localized flash flooding included Cambridge, Waitsfield, Killington and Hartland where some culvert and dirt road washouts were observed. In a few areas water impacted homes and businesses including flood damage to the Killington Golf Course (Fig. 6). In addition to the flash flooding, isolated river flooding was observed with the Mad River at Moretown briefly reaching minor flood stage (Fig. 7).

In a less impactful event occurring earlier in the month on May 10th steady rainfall brought several inches of rainfall to southern Vermont, with the Otter Creek at Center Rutland reaching minor flood stage.

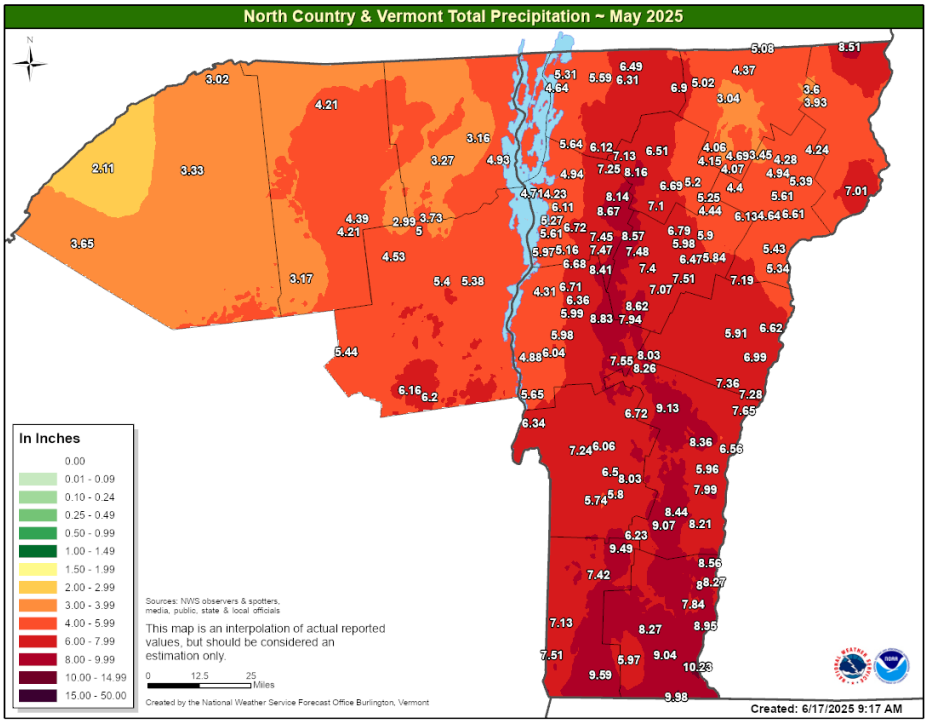

Figure 1: May 2025 monthly precipitation across the NWS Burlington, VT HSA. Rainfall amounts were quite variable, with St. Lawrence County receiving about 2 inches of precipitation, while southern Vermont saw amounts up to 9 inches.

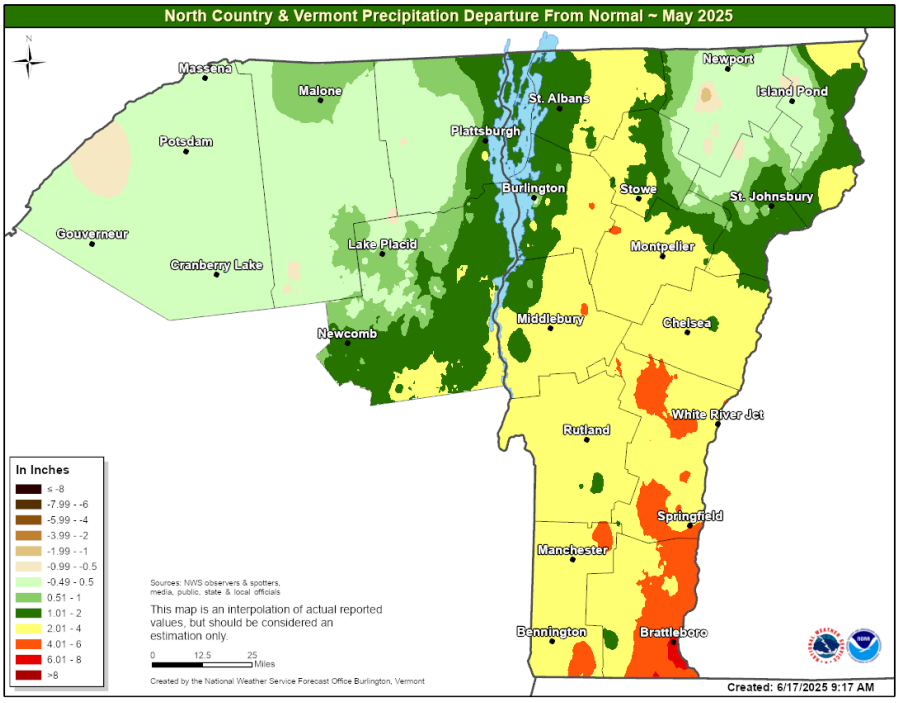

Figure 2: May 2025 monthly precipitation departures from normal across the NWS Burlington, VT HSA. On average, near normal amounts were observed across much of northern New York with positive departures of up to 4 inches occurring in portions of southern Vermont.

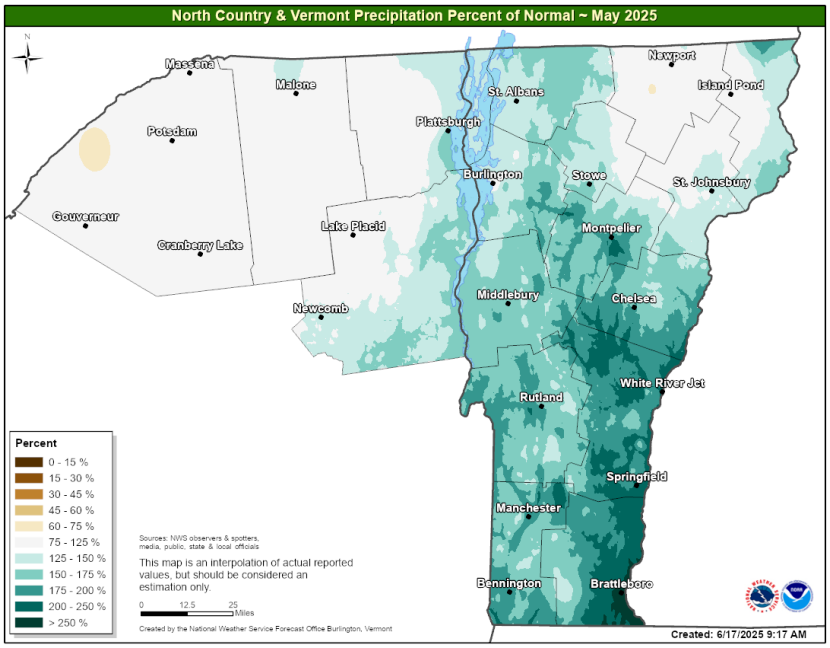

Figure 3: May 2025 monthly precipitation percent of normal across the NWS Burlington, VT HSA. Much of Vermont received over 100% of normal precipitation, with some locations nearing 200% of normal.

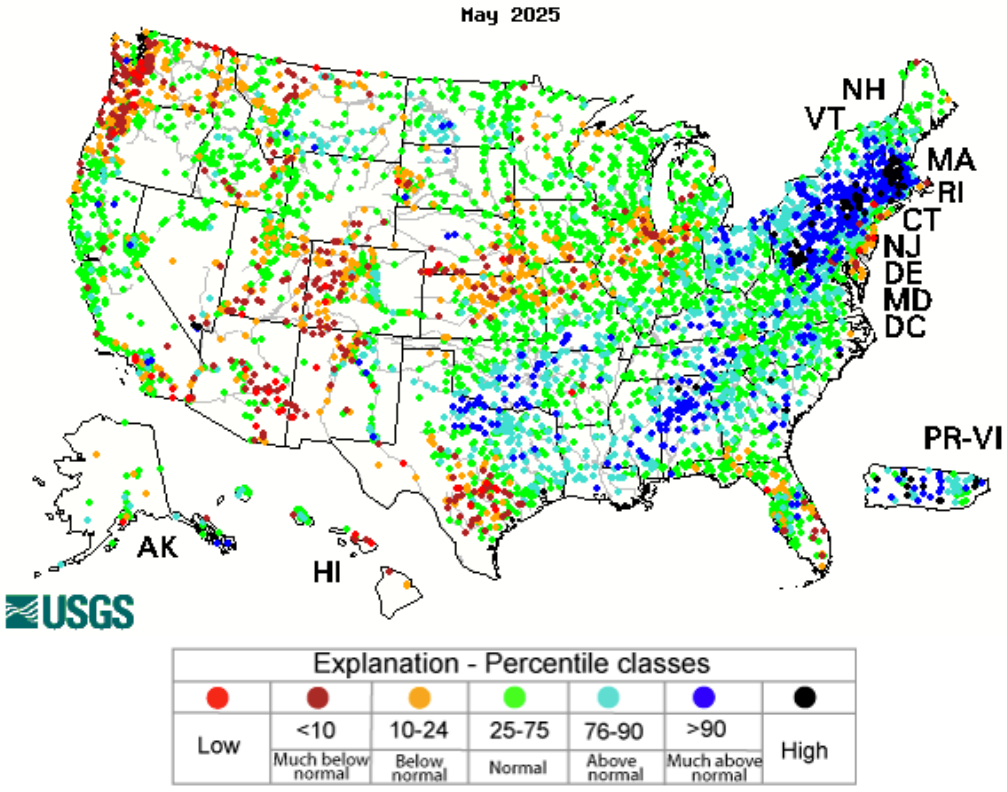

Figure 4: May 2025 monthly streamflow compared to historical streamflow for the month of May. The map above shows near normal streamflow across much of northern New York, but portions of Vermont were much above normal.

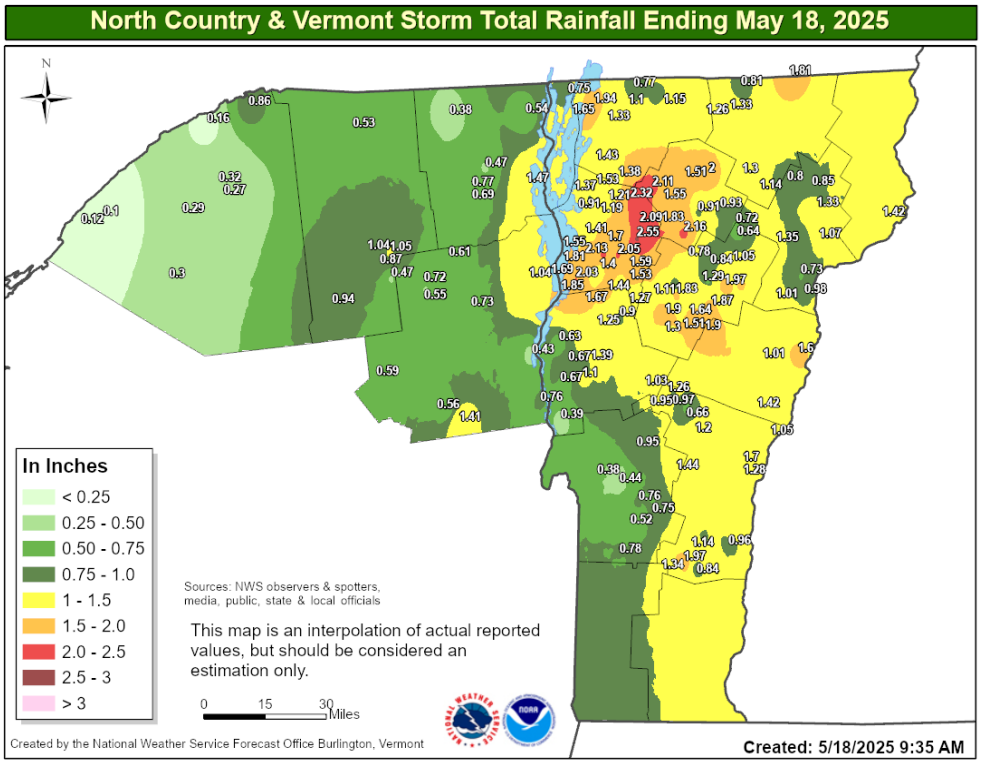

Figure 5: Storm total precipitation across the Burlington, VT HSA from May 17th, ending at 8 AM EDT on May 18th.

Figure 6: A 4-panel image showing flooding and flood damage in the Vermont communities of Waitsfield, Killington, Hartford, and Warren. Photos courtesy of local media outlets and Killington Mountain Resort.

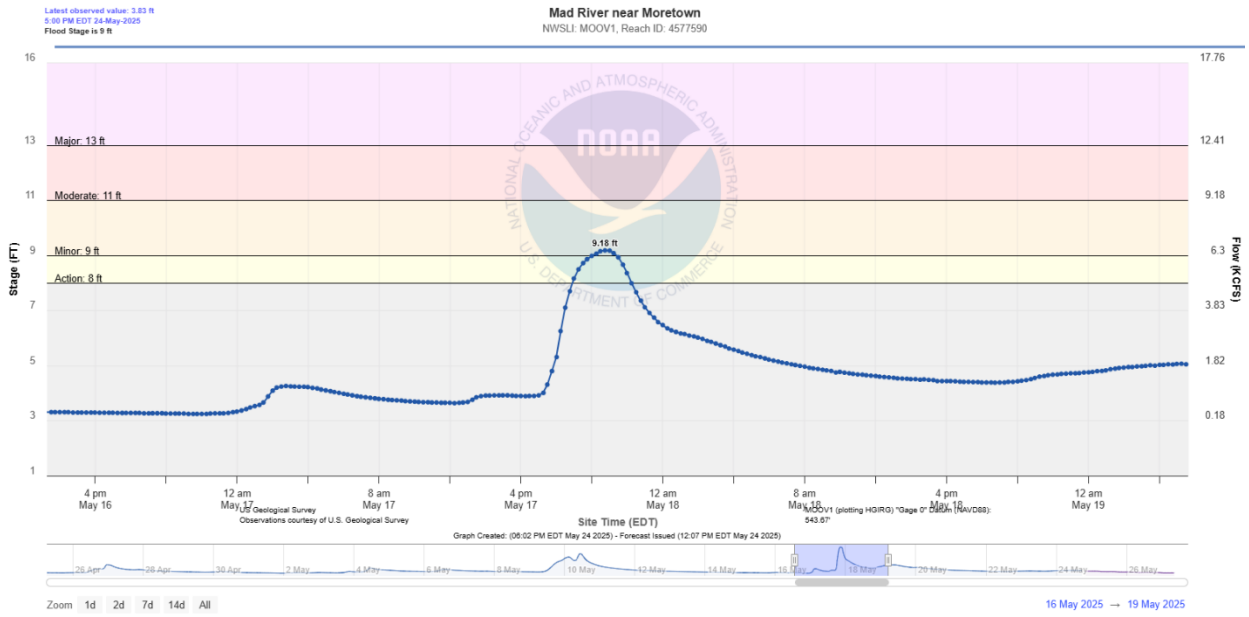

Figure 7: Hydrograph for the Mad River near Moretown, VT which briefly reached minor flood stage during the May 17th severe thunderstorm and flooding event.