

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 October 2022
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 November 9 , 2022

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, October 2022 was a warm and dry month across the NWS Burlington HSA. In general, expansive high pressure dominated regional weather conditions, with partly sunny days and above average temperatures the rule (Figure 1). By month’s end, precipitation totals generally ranged from 1 to 4 inches leading to negative overall departures (Table 1; Figures 2 & 3). The one notable weather event occurred during the period of the 13th and 14th when copious amounts of moisture streamed northward into the area ahead of a slow moving frontal boundary. This led to widespread rainfall totals of 1.0 to 2.5 inches from the Adirondack Mountains in New York east across much of Vermont (Figure 4). In advance of this system, Flood Watches were issued on the afternoon of the 13th, with an Areal Flood Warning issued on the 14th for portions of central and northern Vermont during time of heaviest rainfall. Given antecedent soil moisture was relatively dry, only a few reports of minor flooding/high water were received.

With the lower than average rainfall observed in the HSA during the month areas of abnormally dry conditions (D0) persisted on the U.S Drought Monitor (USDM) maps through the period. These were focused mainly across the St. Lawrence Valley of New York where conditions deteriorated slightly, and in portions of east central Vermont where conditions improved slightly (Figure 5).

Observation site	October precip. total (in.)	October precip. departure (in.)
Burlington, VT (KBTV)	2.62	-1.21
Montpelier, VT (KMPV)	2.28	-1.59
Morrisville, VT (KMVL)	3.21	-0.41
Springfield, VT (KVSF)	2.80	-1.36
Plattsburgh, NY (KPBG)	1.97	-1.07
Saranac Lake, NY (KSLK)	2.15	-1.70
Massena, NY (KMSS)	1.03	-2.40

Table 1: October 2022 precipitation totals and departures (in inches) for selected NWS ASOS platforms in the NWS Burlington HSA. Amounts ran consistently below normal at all locations.

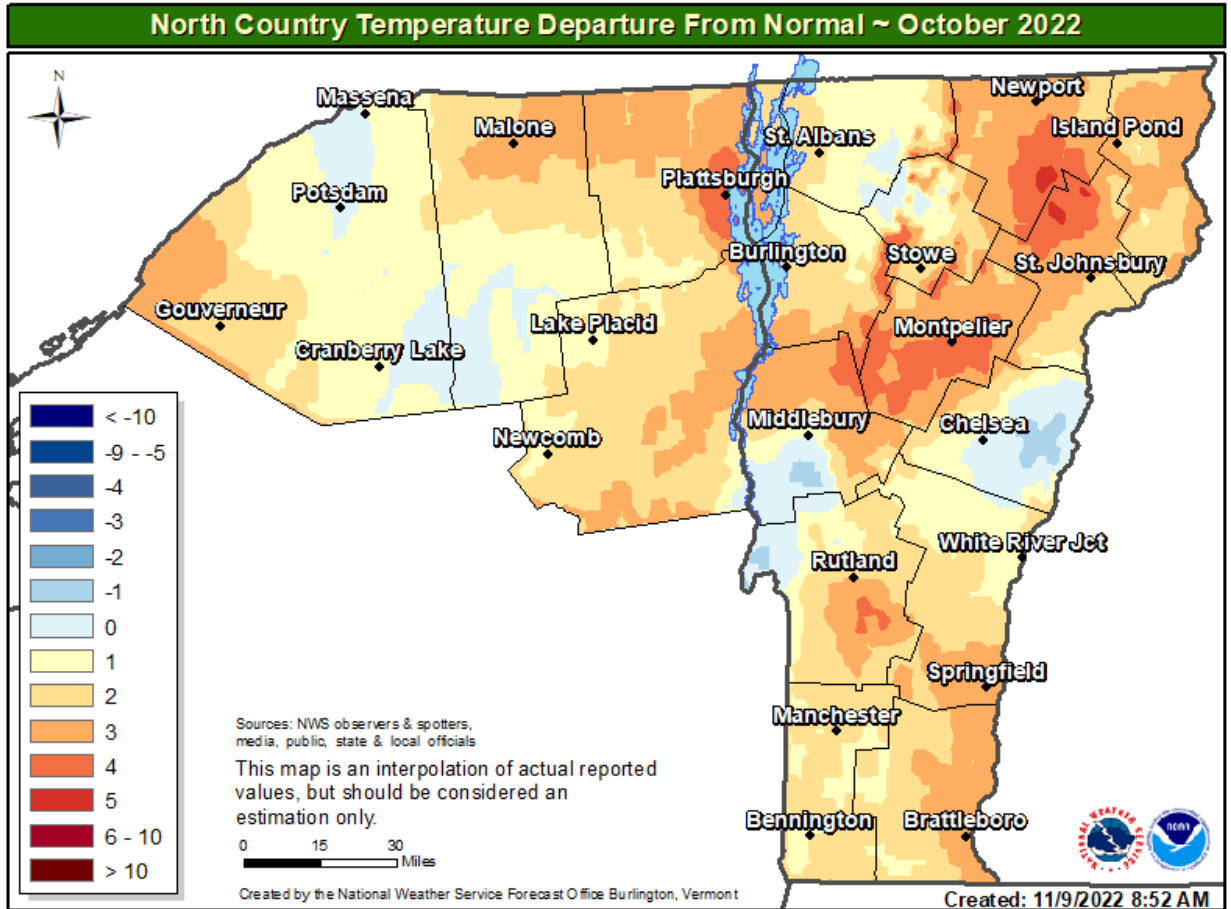


Figure 1: Temperature departures from normal for October 2022 for the NWS Burlington area. Positive departures, generally from +1 to +4 °F were observed across the area with some natural variability.

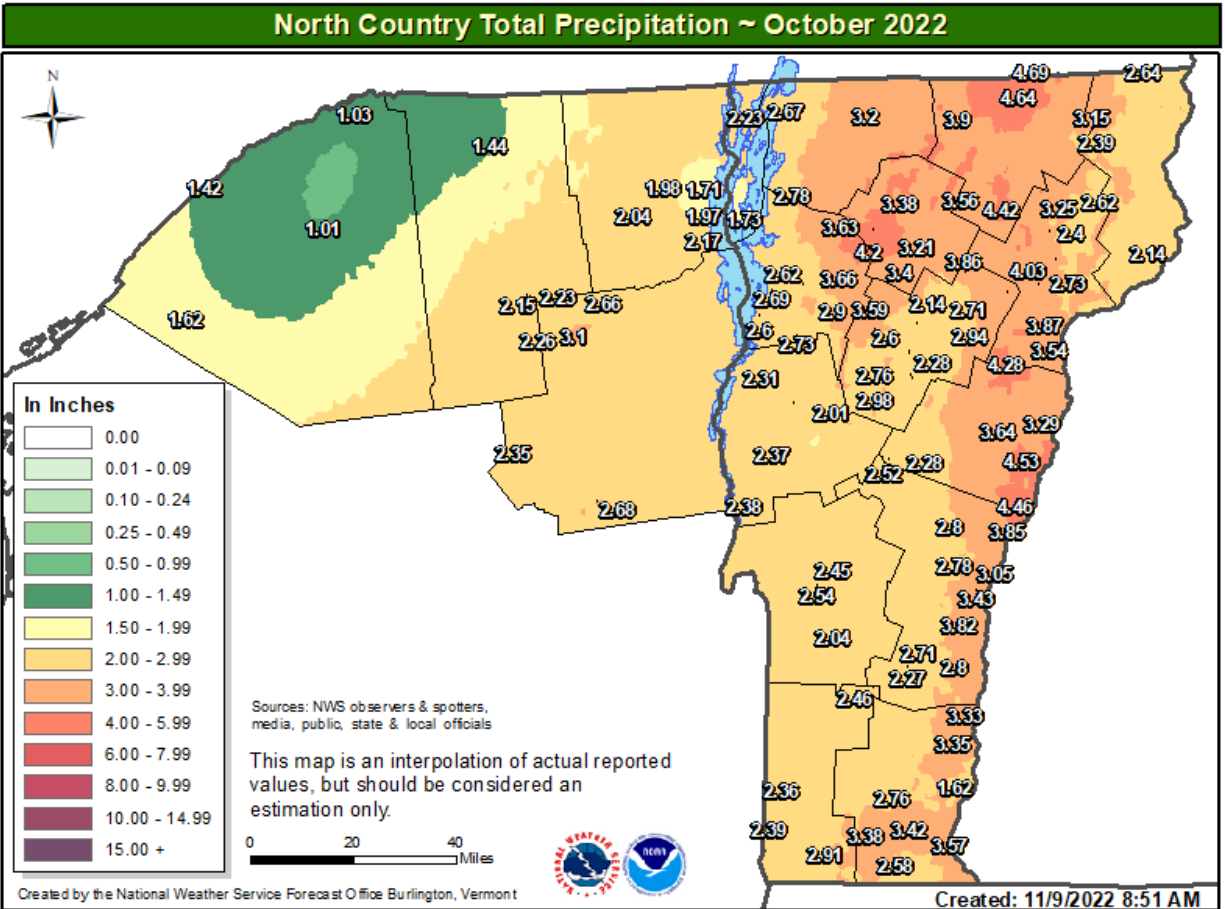


Figure 2: Monthly precipitation totals for October 2022 across the NWS Burlington, VT area. Amounts averaged only 1 to 2.5 inches across most of northern New York, with slightly higher amounts from 2.5 to 4.5 inches observed in Vermont.

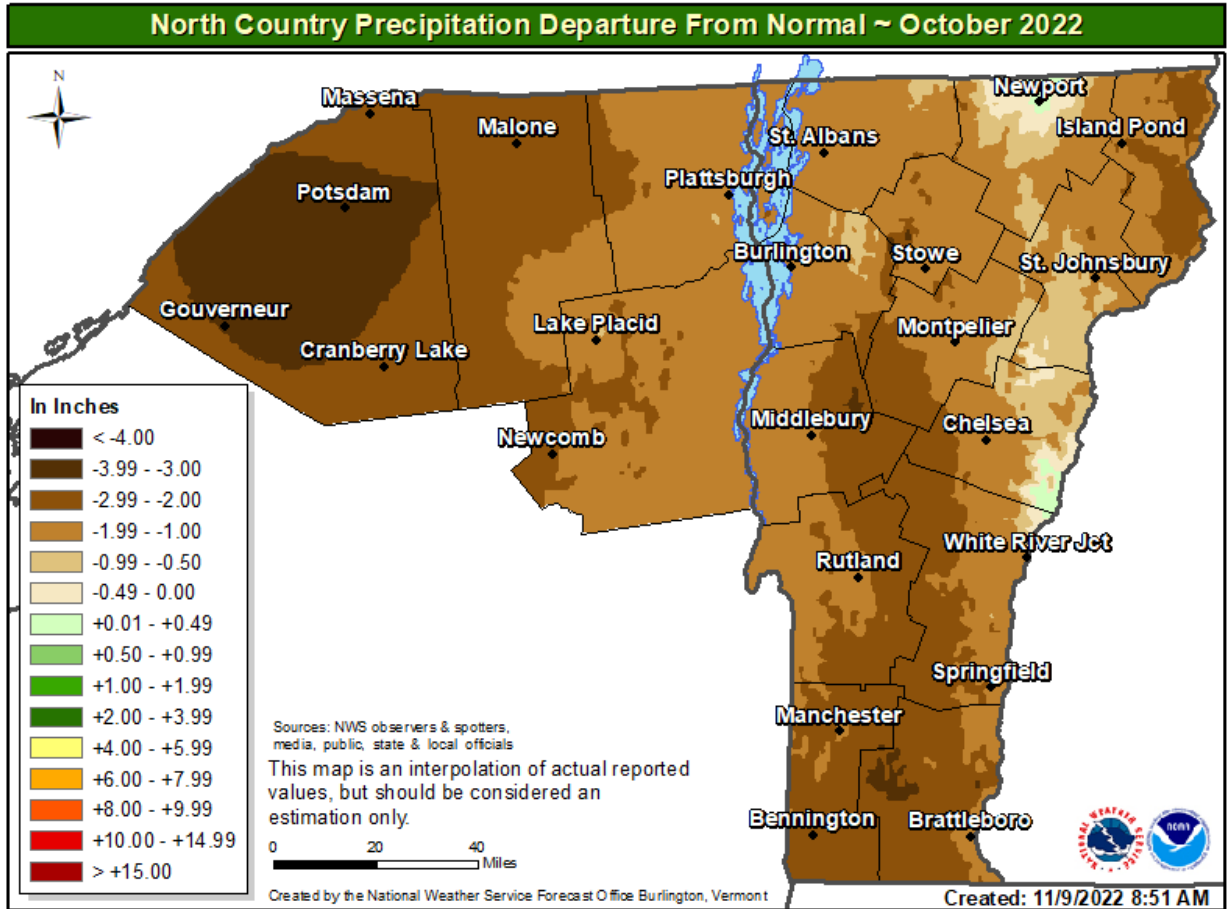


Figure 3: Monthly precipitation departures for October 2022 for the NWS Burlington, VT area. Departures, on average ran from 1 to 3 inches below normal for the month.

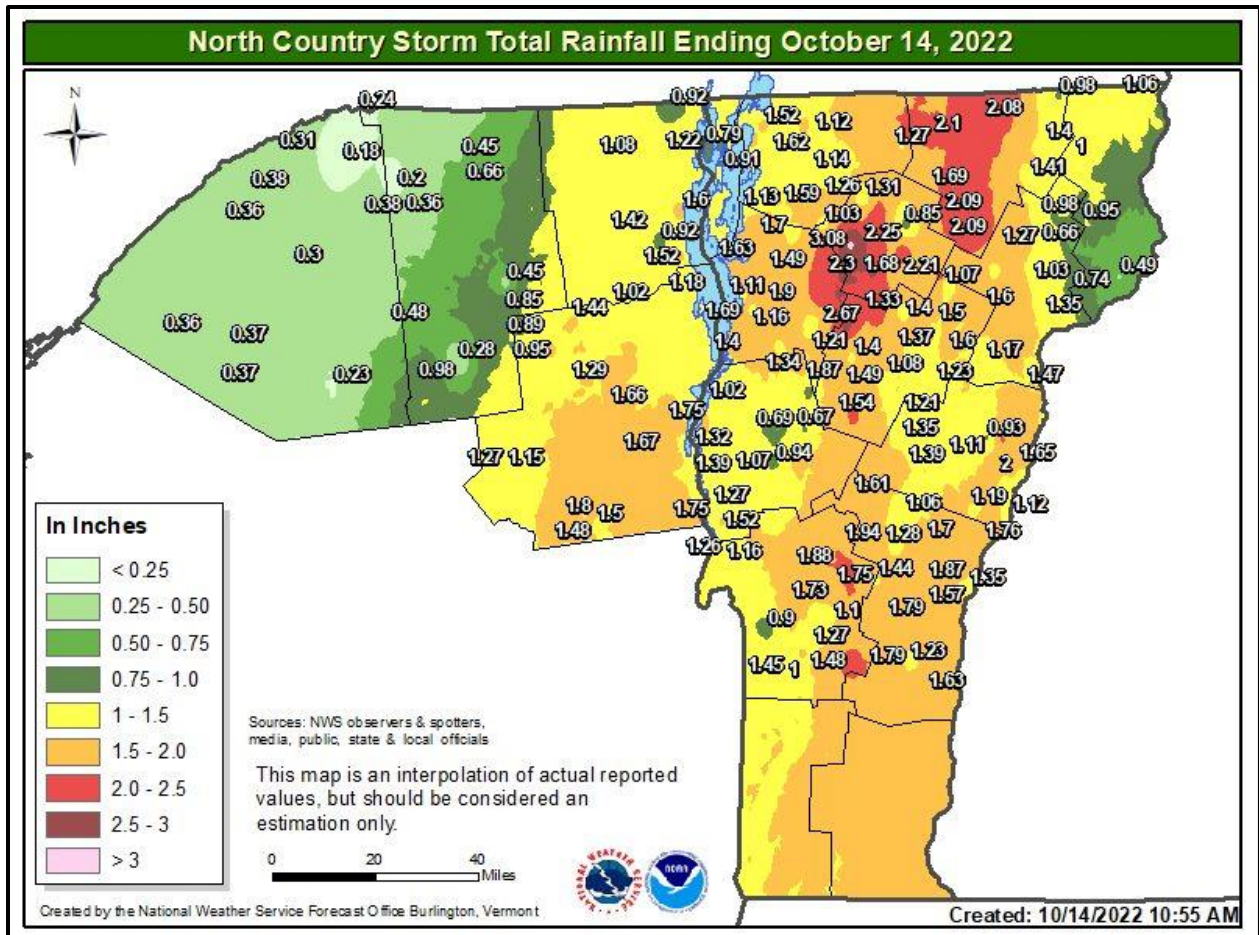


Figure 4: Storm total rainfall ending at 7:00 AM local time on October 14, 2022. Copious moisture streaming northward along a slowly advancing cold front produced widespread amounts between 1 and 2.5 inches from the Adirondack Mountains of New York east into Vermont, leading to a few reports of minor flooding.

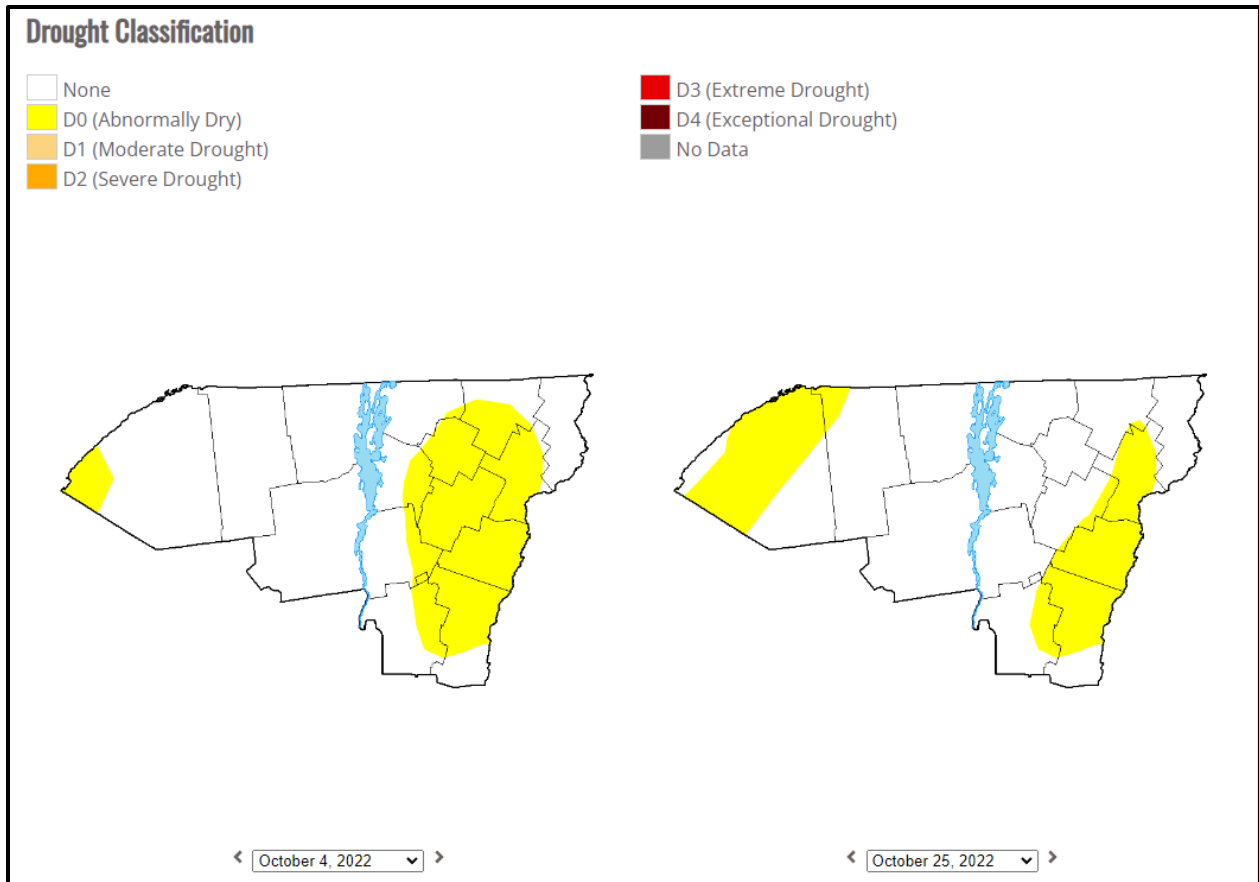


Figure 5: U.S. Drought Monitor maps from October 4, 2022, and October 25, 2022, showing changes in longer-term dryness across the NWS Burlington, VT HSA. Portions of eastern Vermont saw a slight reduction in areal coverage of abnormally dry conditions (D0), while portions of the St. Lawrence Valley in New York saw a slight expansion.