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: October YEAR: 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: November 25, 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).

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

Overview

The drier pattern that was observed across much of the Northeastern United States, including the NWS Burlington, VT HSA, continued throughout the month of October. No heavy rainfall or high water/flooding was observed. Data from NWS reporting stations as well as available cooperative stations and CoCoRaHS data showed 31-day values generally averaged from one to three inches across the area with some natural variability. The St. Lawrence Valley of New York and portions of south central Vermont received the lowest amounts during this period (Fig. 1). This led to widespread negative departures of -1.5 to greater than 3 inches, which was only 30 to 45 percent of normal in some of the driest areas (Figs. 2 and 3). As a result, monthly average streamflows ran below normal in these drier areas (Fig. 4). In consideration of these observations, a gradual expansion of D0, or abnormally dry conditions occurred across much of Vermont and northern New York in the U.S. Drought Monitor maps by month's end (Fig. 5). While no hydrological-related impacts were noted, the conditions did lead to an elevated risk of fire weather concerns by month's end.

Notable Hydrology

There was no notable hydrology worthy of discussion during October, other than the dry conditions discussed above. No flooding or high water issues were observed.

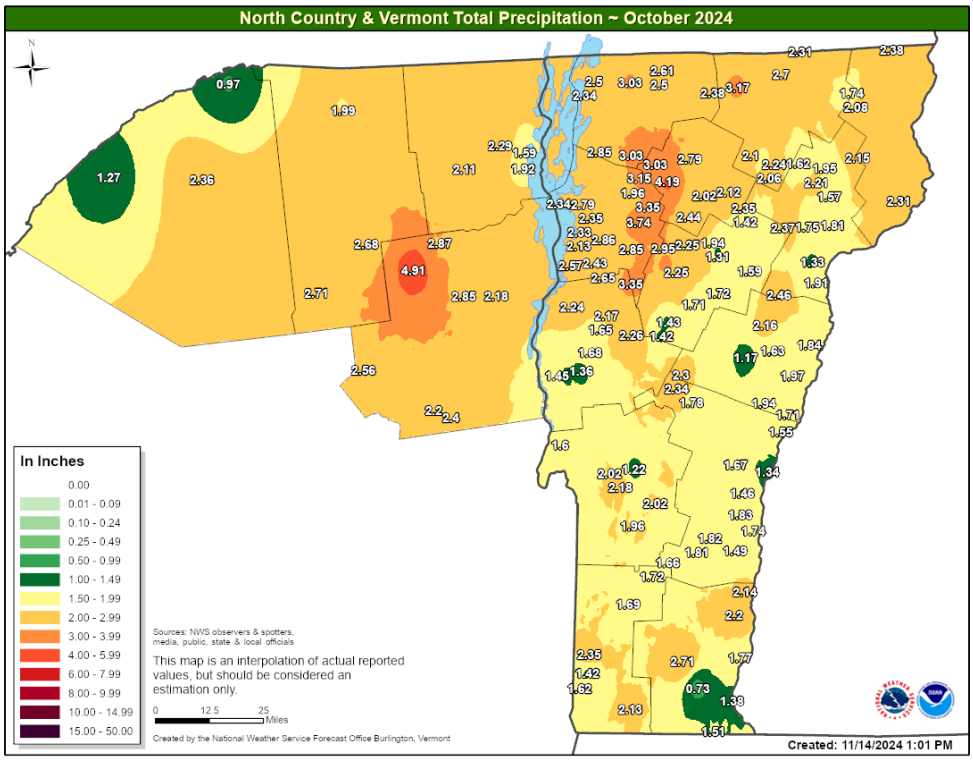

Figure 1: October 2024 precipitation across the NWS Burlington, HSA. Overall, values from one to three inches were commonplace, with areas of the St. Lawrence Valley and south central Vermont seeing the driest conditions.

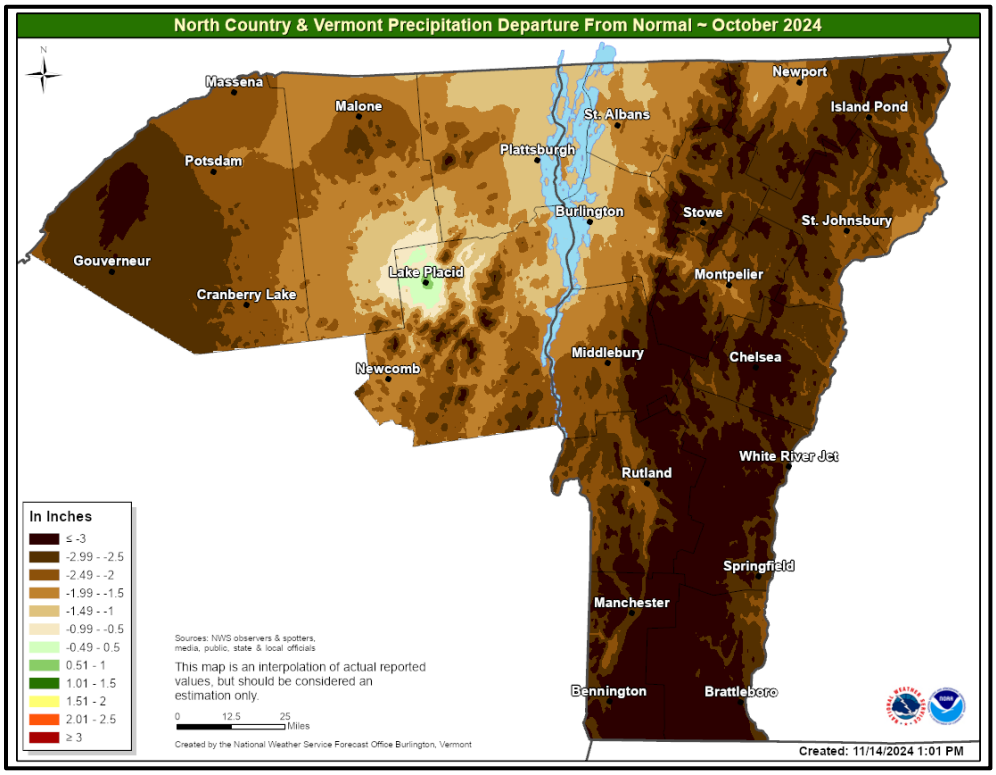

Figure 2: October 2024 precipitation departures (in inches) across the NWS Burlington HSA. Most areas observed negative departures from -1.5 to 3 inches.

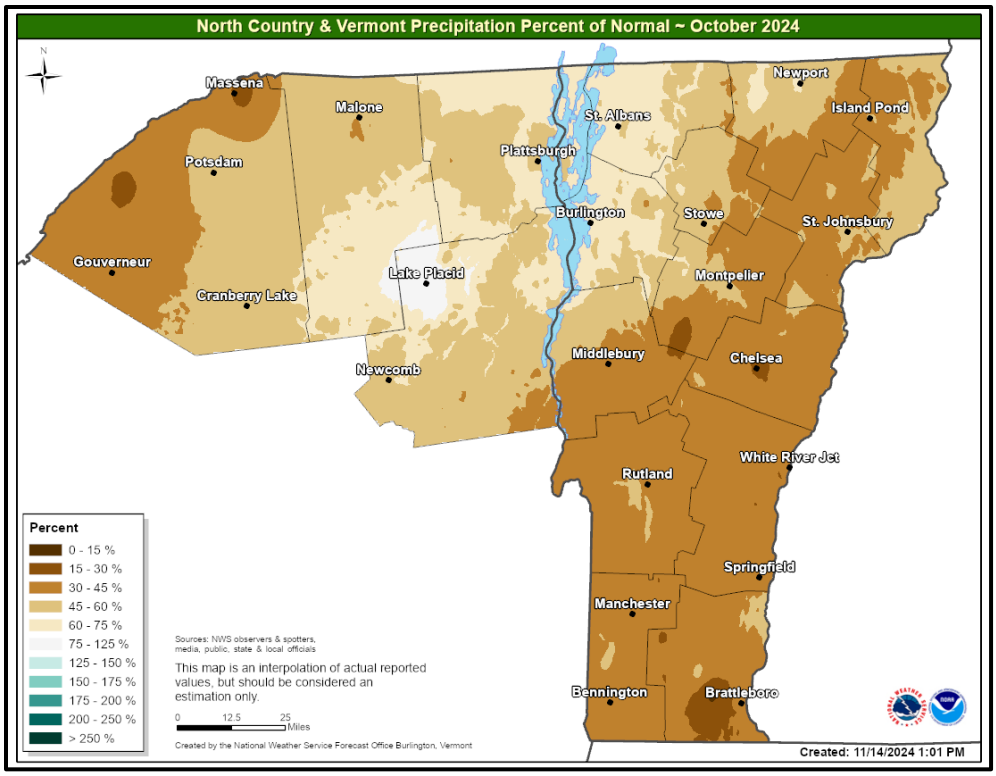

Figure 3: Percent of normal precipitation in October 2024 for the NWS Burlington HSA. The driest areas in the St. Lawrence Valley of New York and across south central Vermont saw values only in the 30-45 percent range.

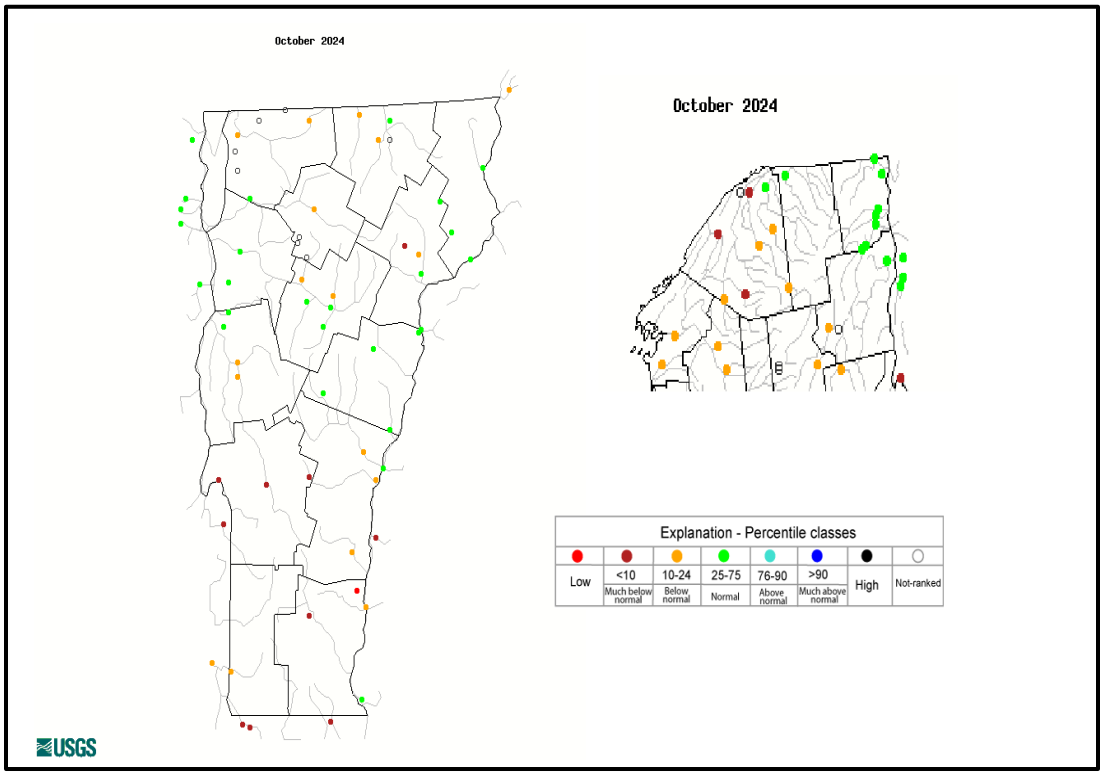

Figure 4: Monthly average streamflow for October 2024 showing below normal values for portions of the NWS Burlington HSA.

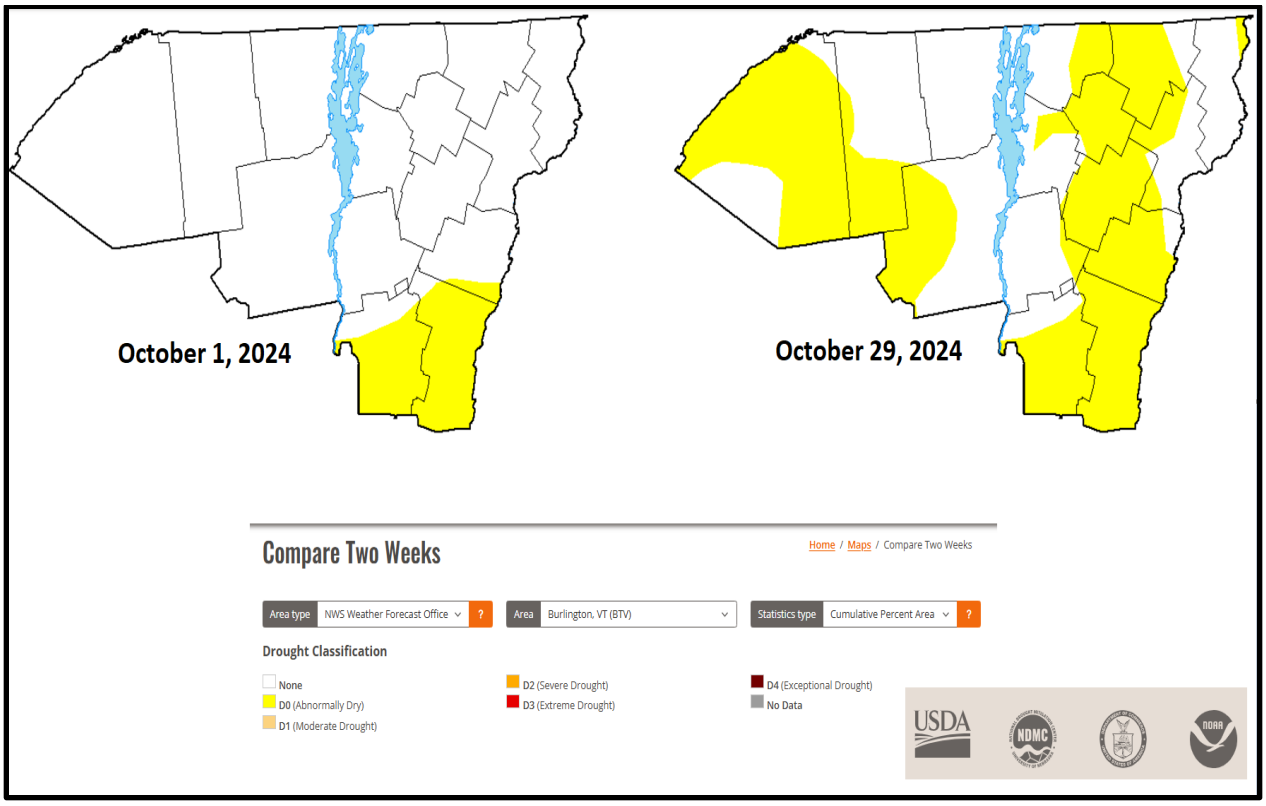

Figure 5: U.S. Drought Monitor comparison maps for October 1, 2024 and October 29, 2024 across the NWS Burlington HSA. The overall dry pattern observed during the month led to a gradual expansion of D0 conditions across the area.