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: November YEAR: 2024
TO: Hydrologic Information Center, W/OS31 NOAA's National Weather Service 1325 East West Highway Silver Spring, MD 20910-3283		SIGNATURE: Jessica Storm / Meteorologist DATE: December 7, 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

Drier conditions continued across the NWS Burlington, VT, HSA for the month of November, though not as extreme as was reported in October. No heavy rainfall or high water/flooding was observed. Temperatures, on average, were above normal with mean departures generally within 10 degrees of the long term climatological mean, resulting in both rain and snow precipitation events this past month (Fig. 1). Data from NWS reporting stations as well as available cooperative stations and CoCoRaHS data showed 31-day precipitation values generally averaged from 1.5 to four inches across the area with some natural variability. The Champlain Valley received the lowest amounts during this period (Fig. 2). This led to widespread negative departures of -2 to 0 inches, though some spots instead reported positive departures up to 0.5 inches (Fig. 3). The driest areas in the Champlain Valley as well as central and northern Vermont saw values only in the 45 to 60 percent of normal range of precipitation (Fig. 4). The area also received a series of snowstorms, mainly for high elevations, throughout the month of November, beginning to build the snowpack for the season (Fig. 5). As a result, monthly average streamflows ran both below and above normal across the Burlington HSA, depending on location (Fig. 6). In consideration of these observations, a gradual expansion of D0, or abnormally dry conditions, occurred across much of Vermont and northern New York and a gradual expansion of D1, or moderate drought, across eastern Vermont, in the U.S. Drought Monitor maps by month's end (Fig. 7).

Notable Hydrology

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

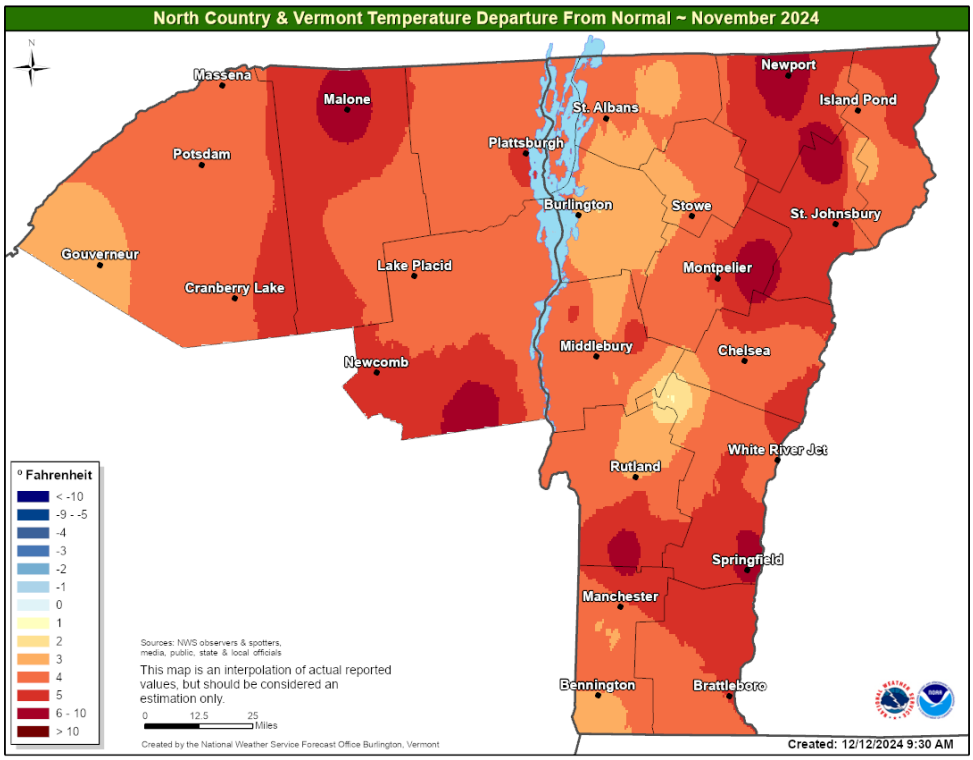

Figure 1: November 2024 monthly temperature departures from normal across the NWS Burlington, HSA. On average values ran from +3 to +10 degrees F compared to the long term 30-year mean.

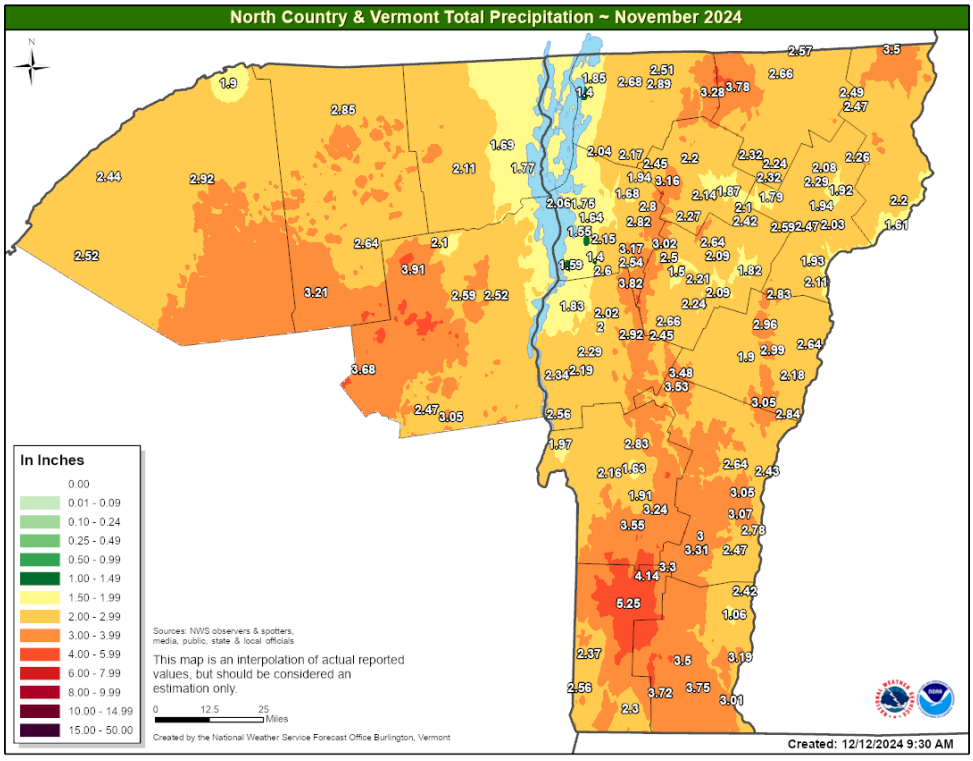

Figure 2: November 2024 precipitation across the NWS Burlington, HSA. Overall, values from 1.5 to four inches were commonplace, with areas of the Champlain Valley seeing the driest conditions.

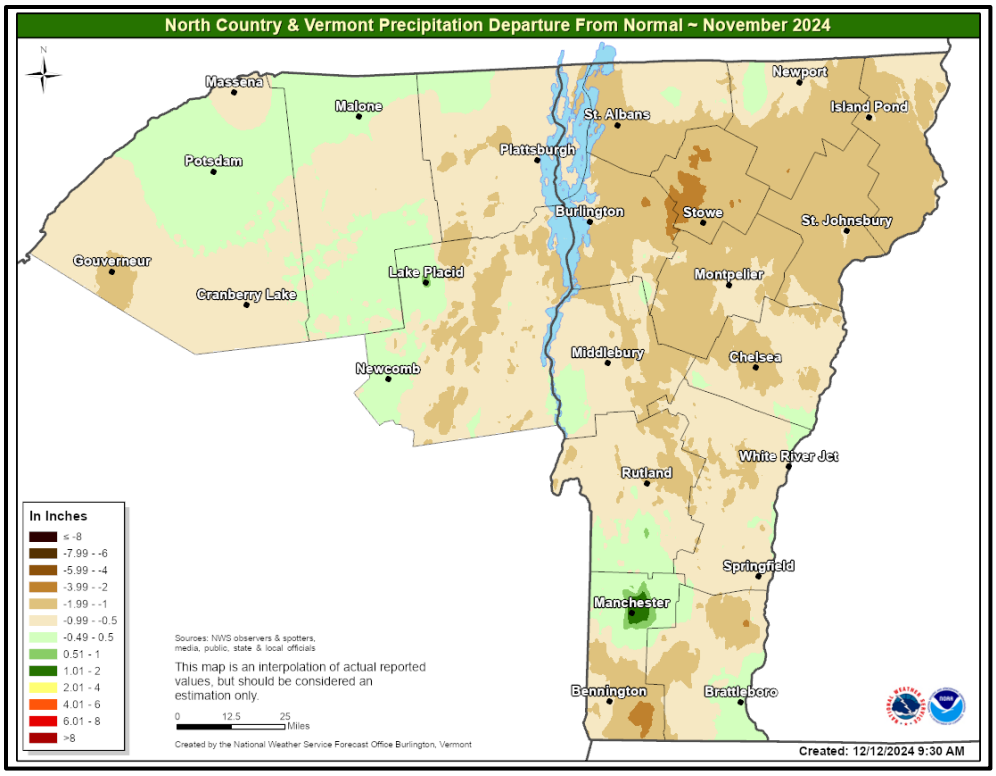

Figure 3: November 2024 precipitation departures (in inches) across the NWS Burlington HSA. Most areas observed negative departures from -2 to 0 inches, though some areas observed positive departures of 0.0 to 0.5 inches.

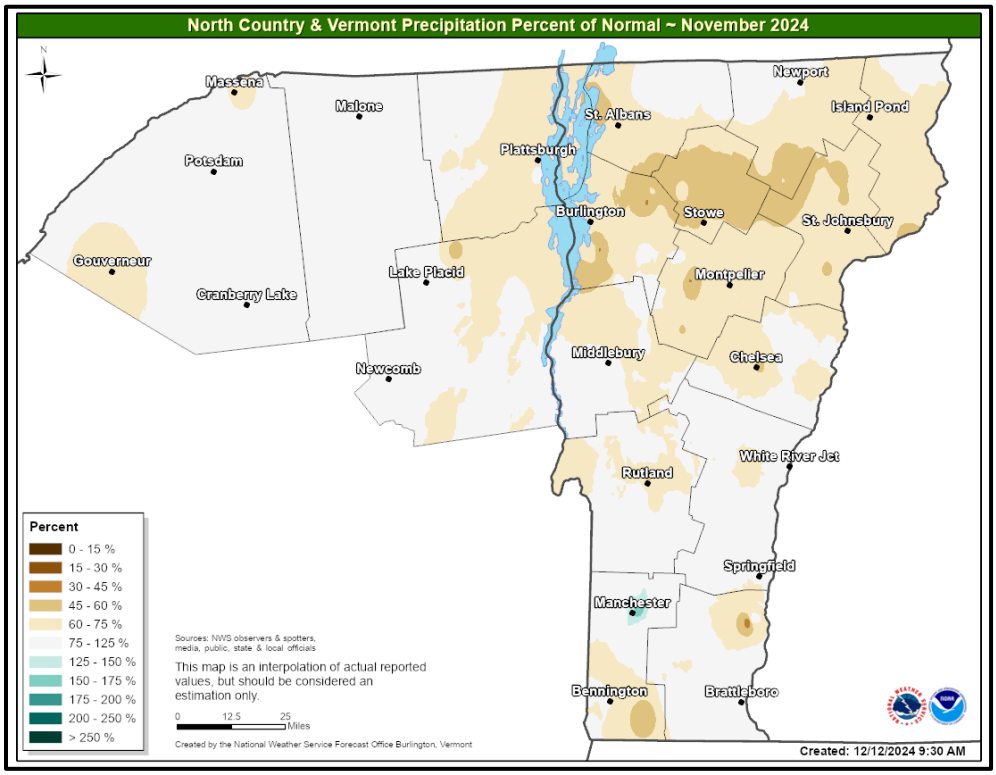

Figure 4: Percent of normal precipitation in November 2024 for the NWS Burlington HSA. The driest areas in the Champlain Valley as well as central and northern Vermont saw values only in the 45-60 percent range.

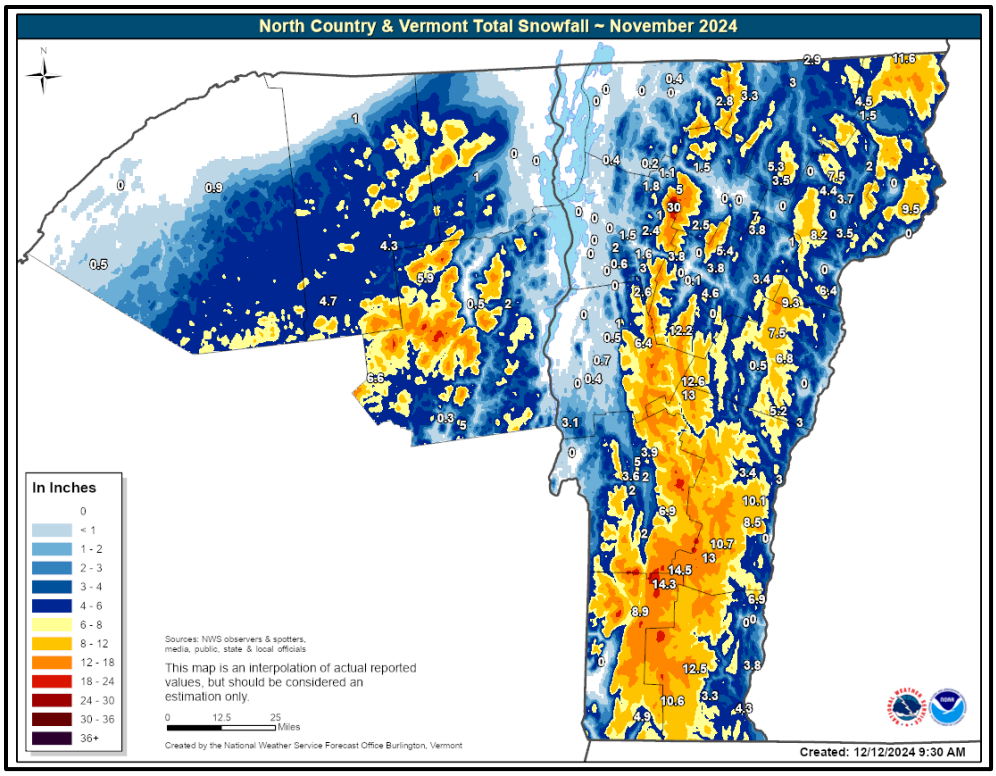

Figure 5: Total snowfall for November 2024 across the NWS Burlington HSA. Many areas in the Adirondacks and Green Mountains received 5 to 15 inches of snowfall.

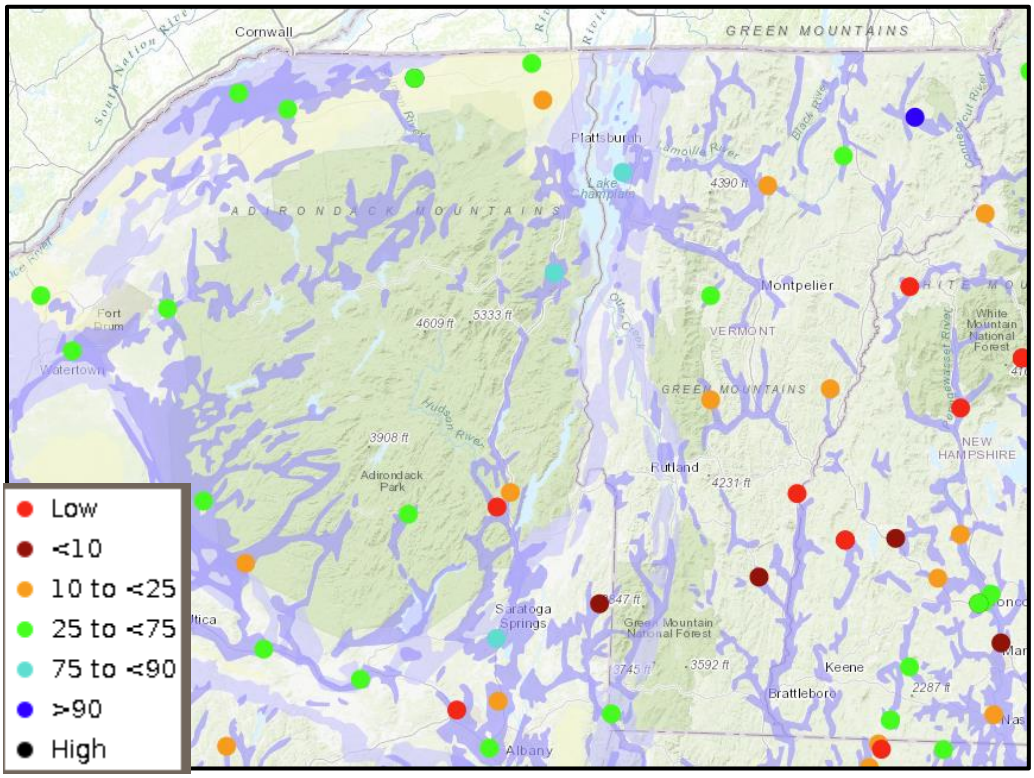

Figure 6: Monthly average streamflow for November 2024 showing below normal values for the Connecticut River Valley and normal to above normal values for northern New York and northern Vermont.

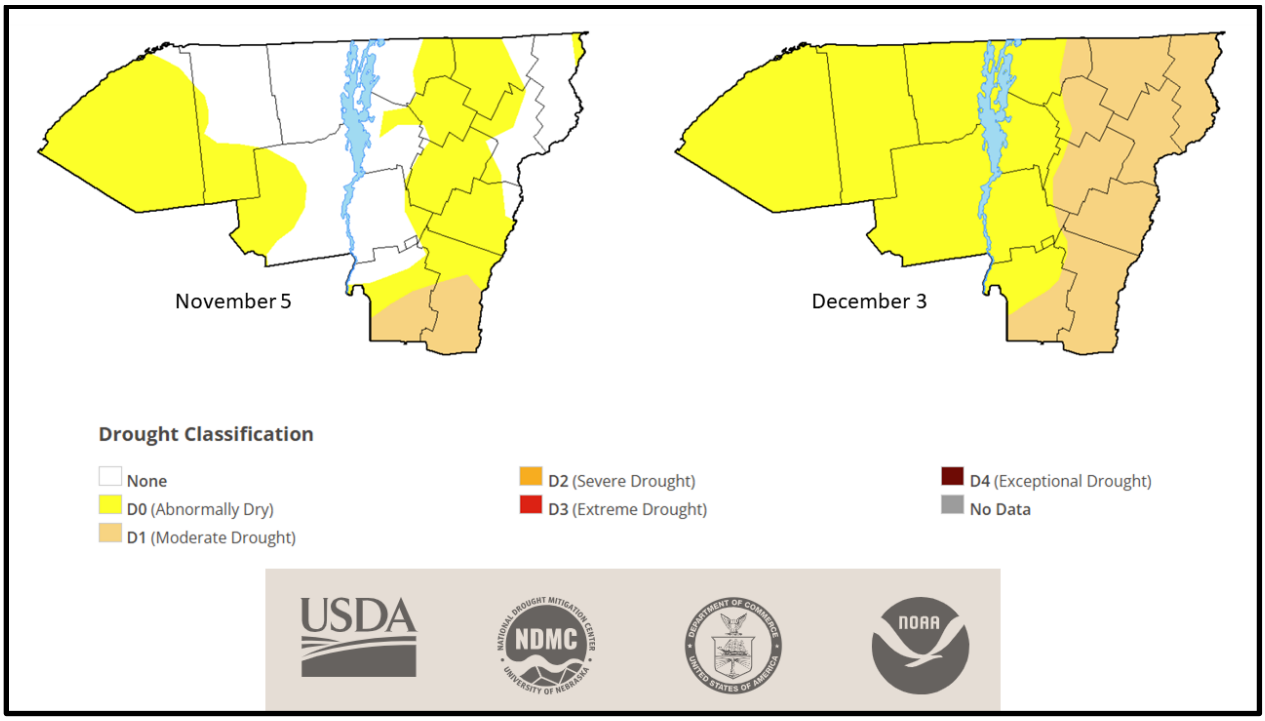

Figure 7: U.S. Drought Monitor comparison maps for November 5, 2024 and December 3, 2024 across the NWS Burlington HSA. The overall slightly dry pattern observed during the month led to a gradual expansion of D0 and D1 conditions across the area.