

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 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 October 24, 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

The wet pattern observed across much of the NWS Burlington HSA during July, and to some extent August of 2024 trended substantially drier in September as atmospheric ridging and associated continental air masses played a more dominant role. This was evident in 30-day precipitation departures where values generally ran from one to three inches below normal, with some areas across the southern Vermont higher terrain seeing three to four inch deficits (Fig. 1). This was at or below 50 percent of normal for most of the area (Fig. 2). The month was also on the warm side, with nearly all longer-term climate sites showing positive temperature departures of two to five degrees. Table 1 highlights a few of these. Monthly average streamflows did remain near normal across most of the area as a result of residual runoff and interflow from wetness earlier in the summer, though levels across southern Vermont began to trend below normal over time (Fig. 3). Due to these trends, the U.S. Drought Monitor upgraded portions of the southern HSA into abnormally dry conditions, or D0 levels by months end (Fig. 4).

Notable Hydrology

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

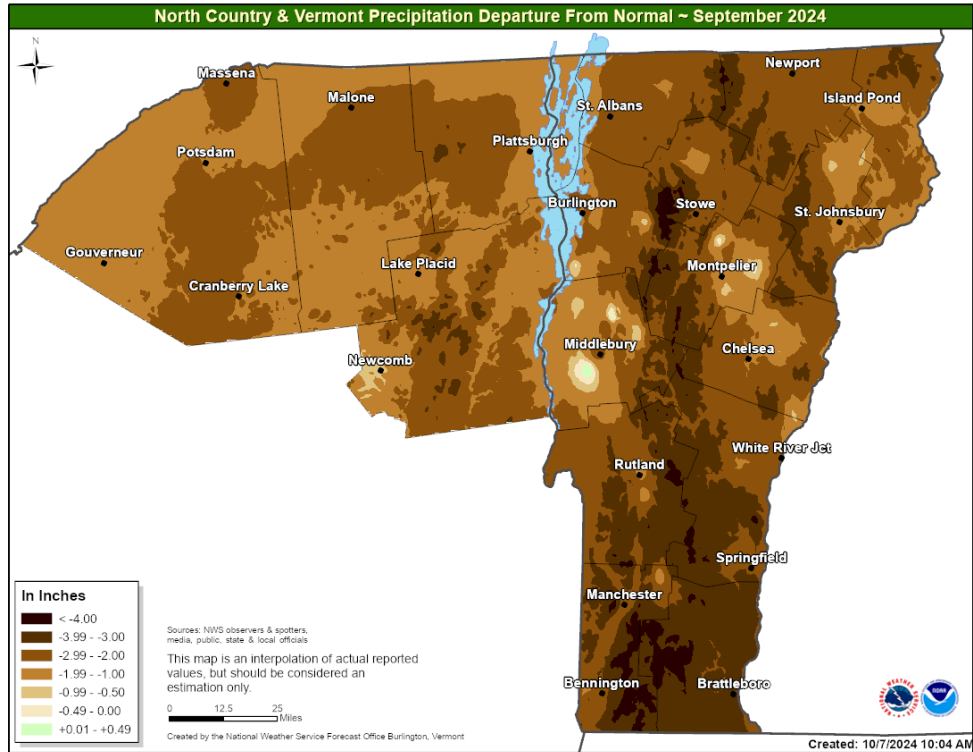


Figure 1: September 2024 precipitation departures from normal across the NWS Burlington, HSA. Negative departures of one to three inches were commonplace, with scattered areas across southern Vermont seeing slightly drier conditions.

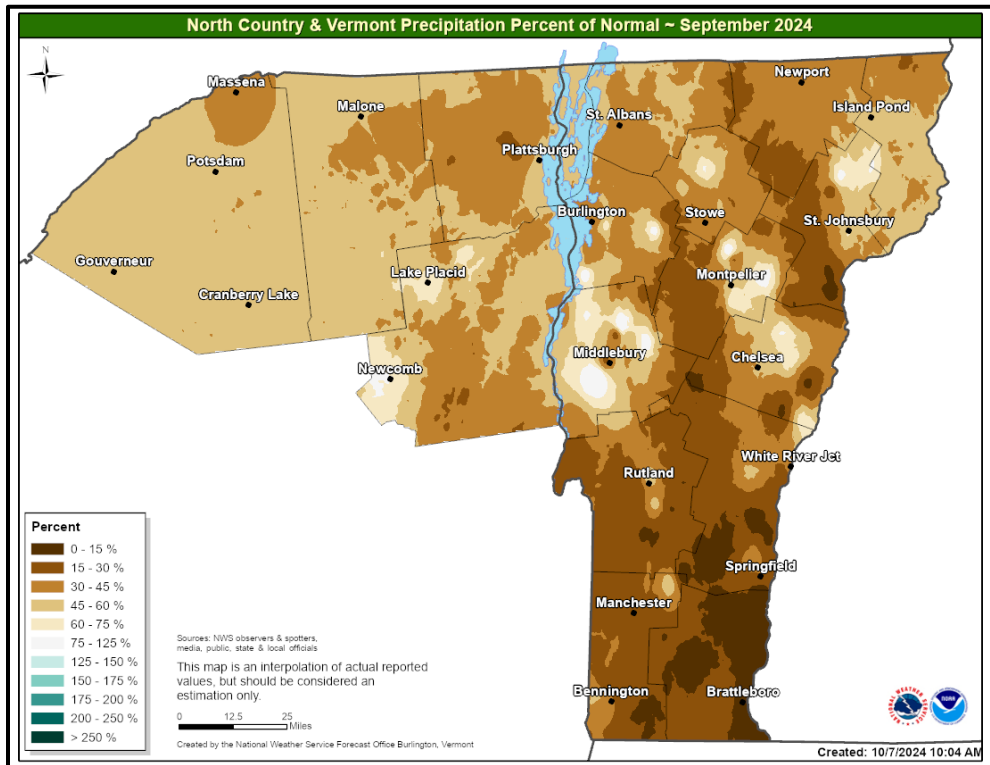


Figure 2: September 2024 precipitation percent of normal across the NWS Burlington HSA. Most areas observed amounts at or less than 50 percent for the 30 day period.

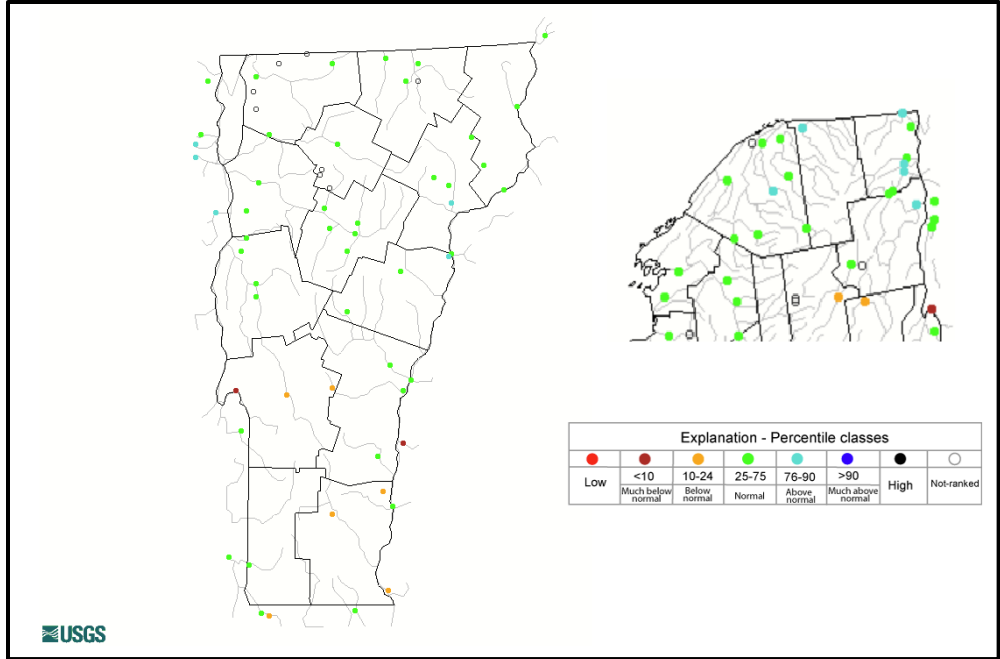


Figure 3: Monthly average streamflow for September 2024 for the NWS Burlington HSA. Near normal values were observed at most locations, except for southern Vermont where more consistent below normal values occurred.

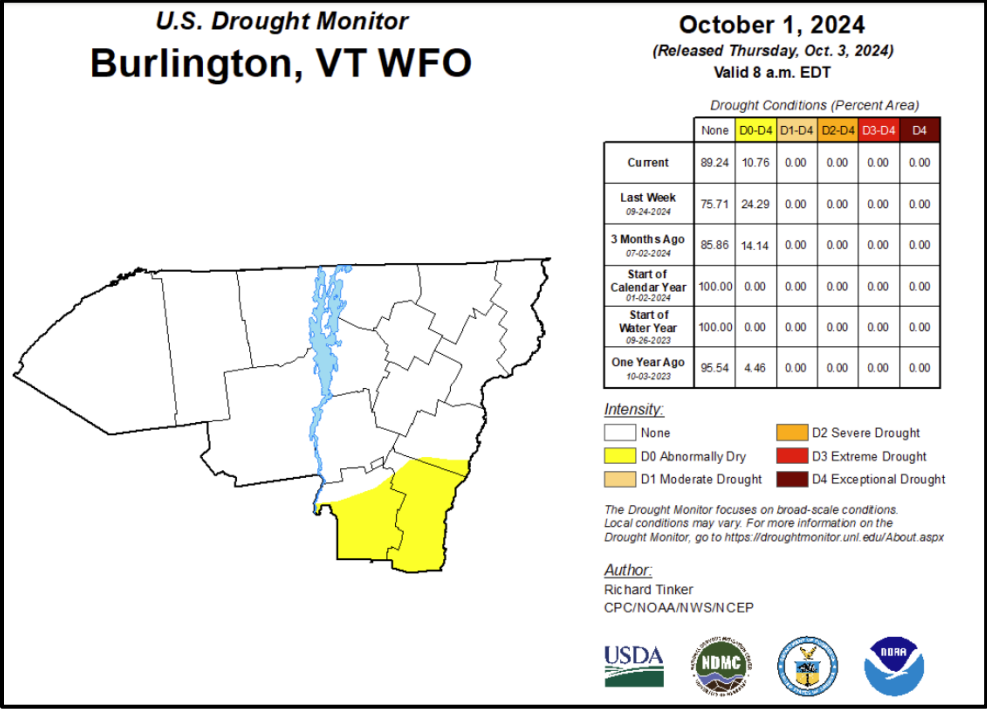


Figure 4: U.S. Drought Monitor map valid October 1, 2024, showing abnormally dry conditions (D0) across the southern Vermont portions of the NWS Burlington HSA.

SITE	TEMPERATURE DEPARTURE (°F)	PRECIPITATION DEPARTURE (IN.)
Burlington, VT	+2.9	-0.99
Montpelier, VT	+2.9	-0.87
Morrisville, VT	+4.1	-1.23
Springfield, VT	+2.8	-2.34
Plattsburgh, NY	+4.8	-1.41
Saranac Lake, NY	+2.6	-1.36
Massena, NY	+2.8	-2.15

Table 1: September 2024 temperature and precipitation departures for selected sites in the NWS Burlington, VT HSA.