NWS Form E		HYDROLOGIC SERVICE AREA (HSA)		
(04-2006) NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (PRES. BY NWS Instruction 10-924) NATIONAL WEATHER SERVICE		Burlington VT		
MONTHL	Y REPORT OF HYDROLOGIC CONDITIONS	REPORT FOR: MONTH	YEAR	_
		May	2023	
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 June 22, 2023		_
	oding occurs, include miscellaneous river conditions below the small conditions, snow cover, droughts, and hydrologic products issued (NV			
An X i	nside this box indicates that no flooding occurred within this hydro	ologic service area.		

Overview

May 2023 was a dry and relatively cool month across the NWS Burlington HSA. In general, high pressure was the dominant weather feature, with long stretches of stable, dry air settling atop the region. 31-day precipitation totals averaged between 1.5 to 2.5 inches across the area, with only portions of southeastern Vermont seeing greater totals in the 2.5 to 4.5 inch range (Fig. 1). This led to monthly departures of 0.5 to 2.5 inches except in the aforementioned areas of southeastern Vermont (Fig. 2).

Given the extended dryness, D0 (abnormally dry) conditions were introduced by the U.S. Drought Monitor across much of Vermont by month's end (Figure 3).

Notable Hydrology

The most notable hydrological feature during the month was a brief bout of heavier rainfall that affected portions of the region on April 30 and May 1. Many areas received between 0.5 and 1.5 inches of rainfall, with a few areas in the Adirondack Mountains and across portions of southeastern Vermont seeing over two inches (Fig. 4). This prompted an Areal Flood Warning to be issued for portions of Windsor County, VT, and a River Flood Warning for the East Branch of the Ausable River on the morning of the 1st. The Ausable River crested just below moderate flood stage at 8.36 feet. Fortunately, only minor, nuisance flooding was noted (Figure 5).

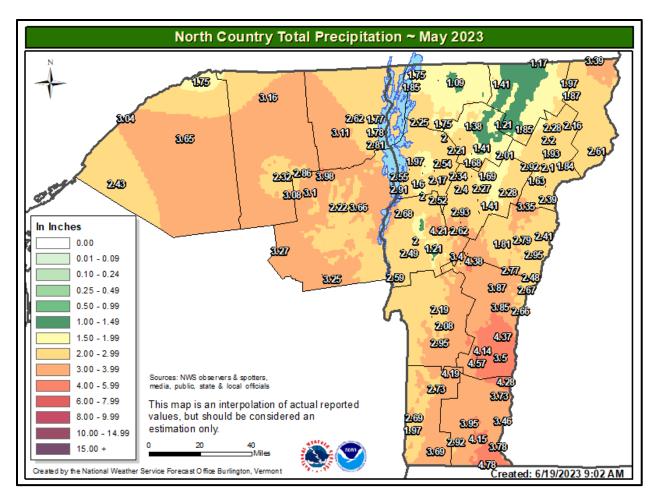


Figure 1: Total precipitation for the month of May 2023 across the NWS Burlington HSA. Totals averaged between 1.5 to 2.5 inches with locally higher totals from 2.5 to 4.5 inches observed in southeastern Vermont.

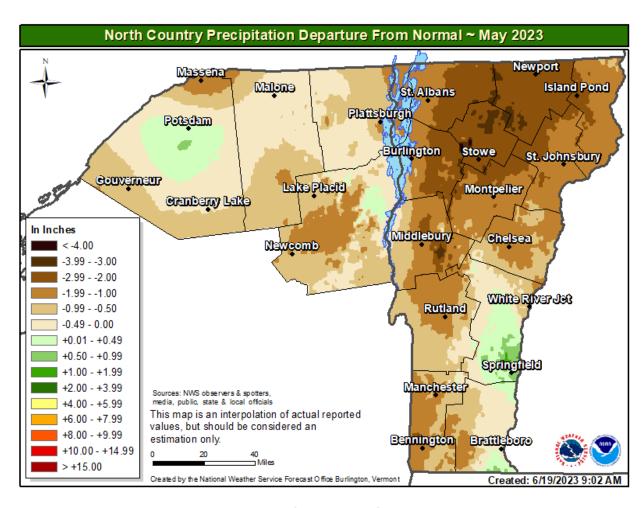


Figure 2: May 2023 precipitation departures from normal for the NWS Burlington, VT HSA. Negative departures averaged from -0.5 to -1.5 inches across the HSA with some local variability.

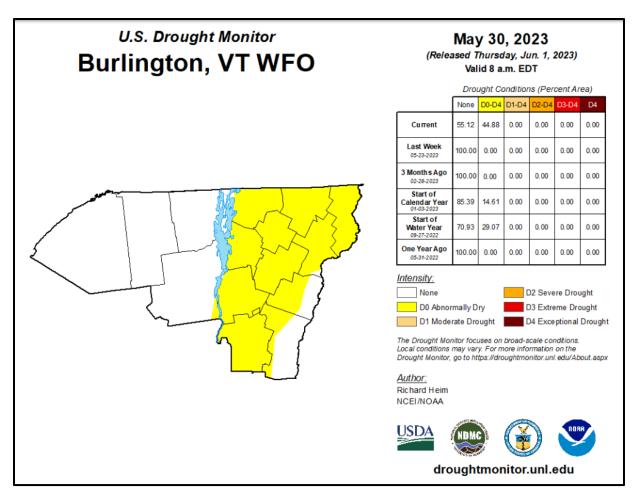


Figure 3: U.S. Drought Monitor map, valid June 1, 2023 showing areas of abnormally dry, or D0 conditions in much of Vermont after an unseasonably dry start to spring.

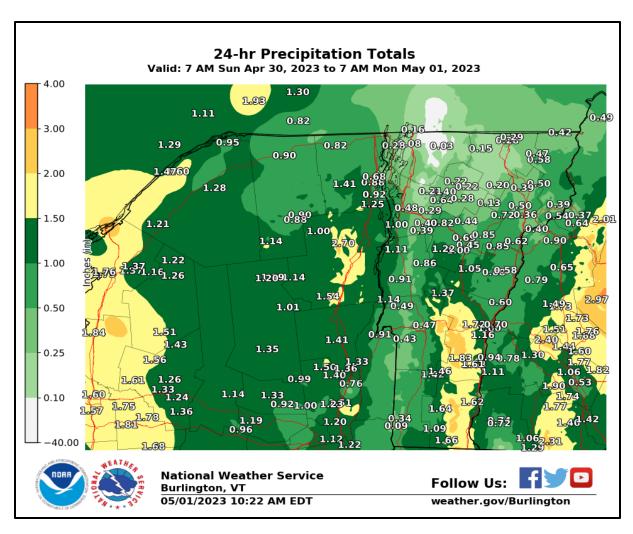


Figure 4: 24-hour total precipitation ending at 700 am local time May 1, 2023. This was the heaviest precipitation event for the month, with a few areas of heavier rainfall noted in the Northern Adirondack region of Essex County, NY and in portions of southeastern Vermont.

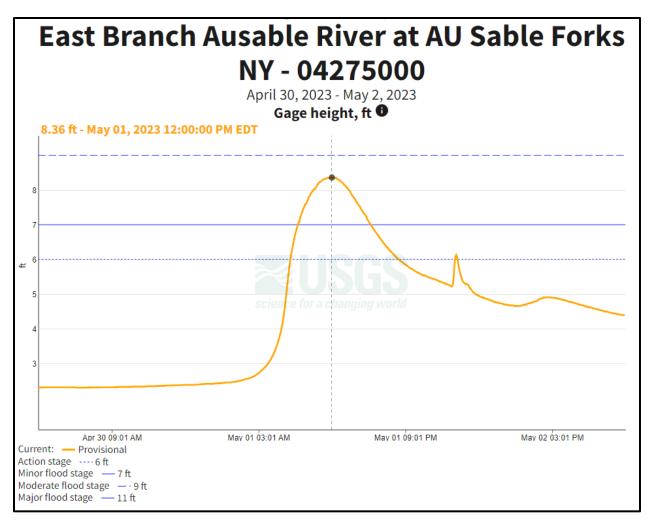


Figure 5: Hydrograph of the East Branch of the Ausable River at Au Sable Forks, NY from April 30 to May 2, 2023. Heavy rainfall during this period allowed the river to crest above minor flood stage on the morning of the 1st.