

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 April 2022
TO: Hydrologic Information Center, W/OS31 NOAA's National Weather Service 1325 East West Highway Silver Spring, MD 20910-3283		SIGNATURE <i>/s/ John Goff, Senior Service Hydrologist</i>	
		DATE May 19, 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.

April 2022 was generally an uneventful month across the NWS Burlington Hydrologic Service Area (HSA). In general, the pattern was characterized by frequent passages of weak low pressure systems and their associated frontal systems every 2 to 4 days. Precipitation, on average was light to moderate with most of these systems, which was evident by end of month totals and resultant departures (Table 1). Given the frequent bouts of precipitation, overall dryness across portions of north central and northeastern Vermont continued to shrink, with the month's end U.S. Drought Monitor map showing only a very small area of D0 (abnormally dry) conditions lingering across northeastern Vermont (Figure 1). While typical temperature swings up and down were observed, values overall continued to gradually warm over time, typical of an early spring pattern.

Two significant storm systems affected the region, most notably on April 7-10, and again on April 19 when moderate to locally heavy precipitation affected the region. The first system brought a mild and very moist airmass northward. Multi-day totals averaged from 1 to 2 inches with a stripe of 2 to 3 inch totals observed across portions of the Northern Adirondack Mountains into the northern Champlain Valley (Figure 2). Additional runoff into stream and rivers was complicated by late season, higher-elevation snowmelt. This led to considerable, mainly within bank rises on many streams and rivers in the area with the gage on the East Branch of the Ausable River at Au Sable, Forks, NY cresting just above its 7.0 foot minor flood stage (Figure 3). The second significant system occurred on April 19-20 when coastal low pressure dragged a late season cold airmass down atop the HSA with widespread accumulating snow. Snow totals were highly variable and elevation dependent, typical of late season winter storms when the higher sun angle and time of day play critical roles in accumulation. In general, valleys received 1 to 6 inches of snow while higher elevations received six or more inches. The Northern Adirondacks were the winners again with totals near one foot observed in and around the Lake Placid area (Figure 4).

Observation site	April precip. total (in.)	April precip. departure (in.)
Burlington, VT (KBTV)	4.21	+1.14
Montpelier, VT (KMPV)	3.41	+0.37
Morrisville, VT (KMVL)	4.46	+1.66
St. Johnsbury, VT (K1V4)	3.74	+0.48
Springfield, VT (KVSF)	3.28	-0.07
Plattsburgh, NY (KPBG)	3.53	+0.98
Saranac Lake, NY (KSLK)	3.80	+0.71
Massena, NY (KMSS)	2.56	-0.35

Table 1: April 2022 precipitation totals and departures (in inches) for selected NWS ASOS platforms in the NWS Burlington HSA. Amounts generally ranged within an inch of climatological monthly norms.

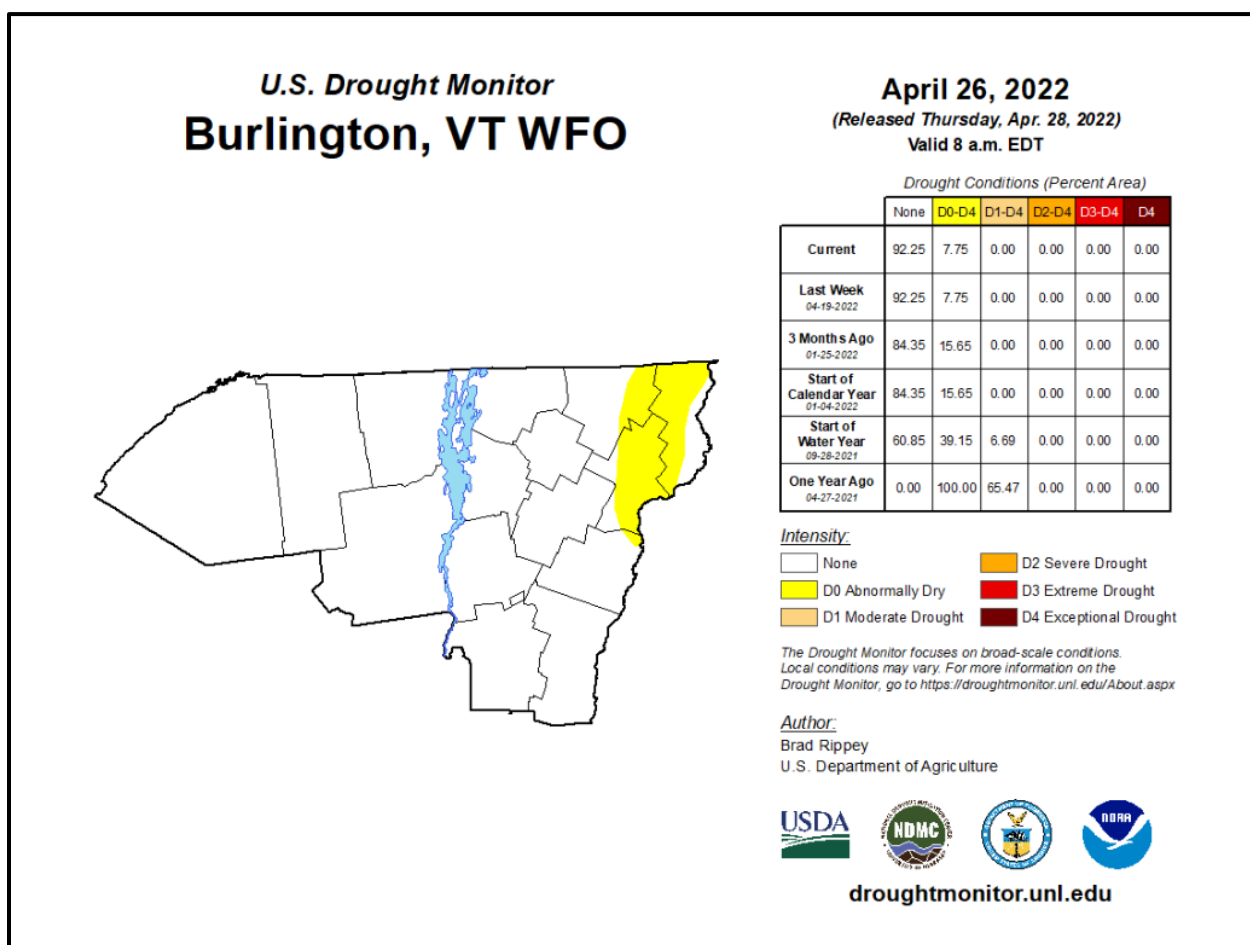


Figure 1: U.S. Drought Monitor map for the week of April 26, 2022, showing just a small, lingering area of D0 (abnormally dry) conditions across northeastern Vermont.

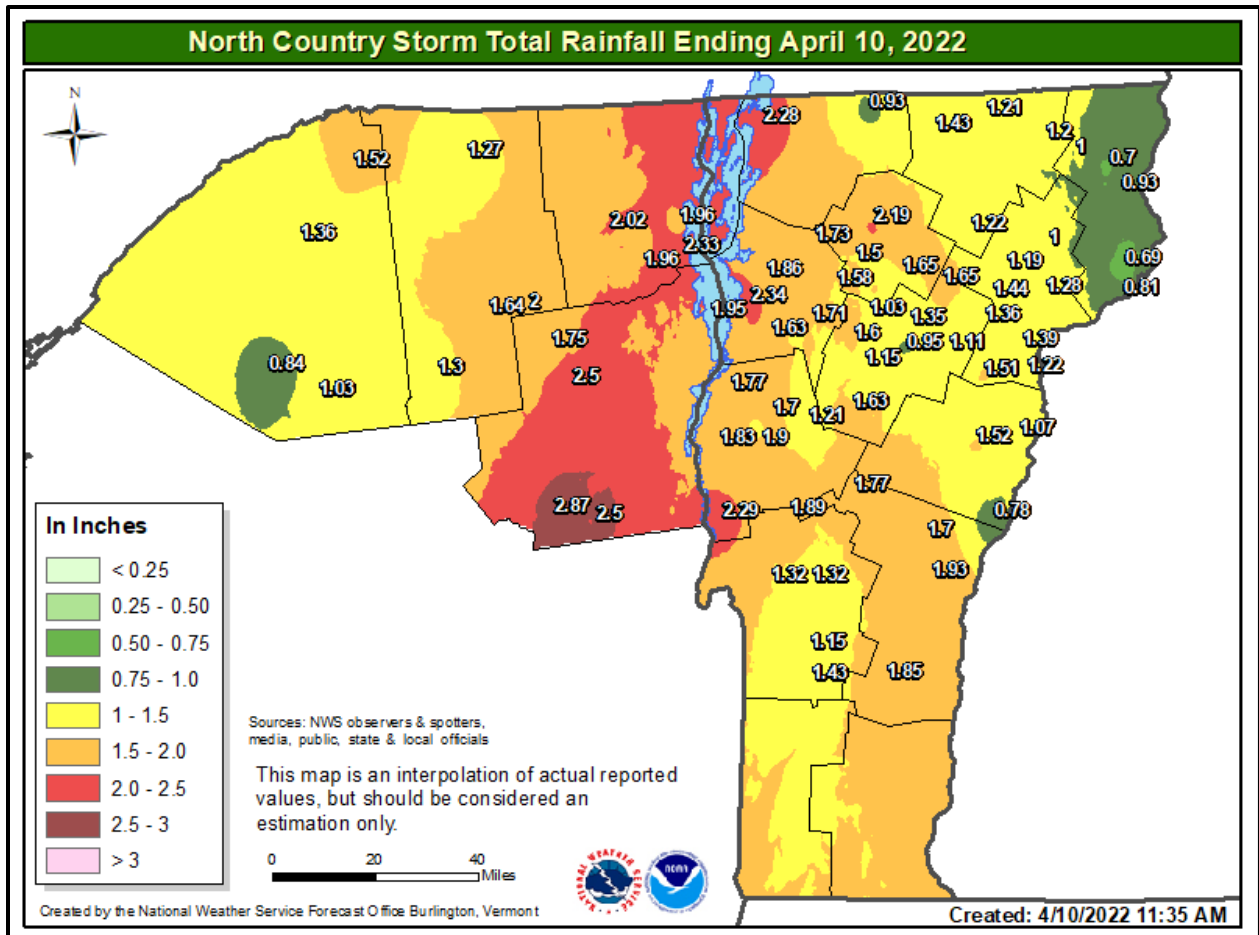


Figure 2: Total rainfall observed from the storm that affected the region from April 7-10, 2022. Amounts generally ranged from 1 to 2 inches with a stripe of 2 to 3 inch totals observed in the Northern Adirondack Mountains into portions of the northern Champlain Valley.



USGS 04275000 EAST BRANCH AUSABLE RIVER AT AU SABLE FORKS NY

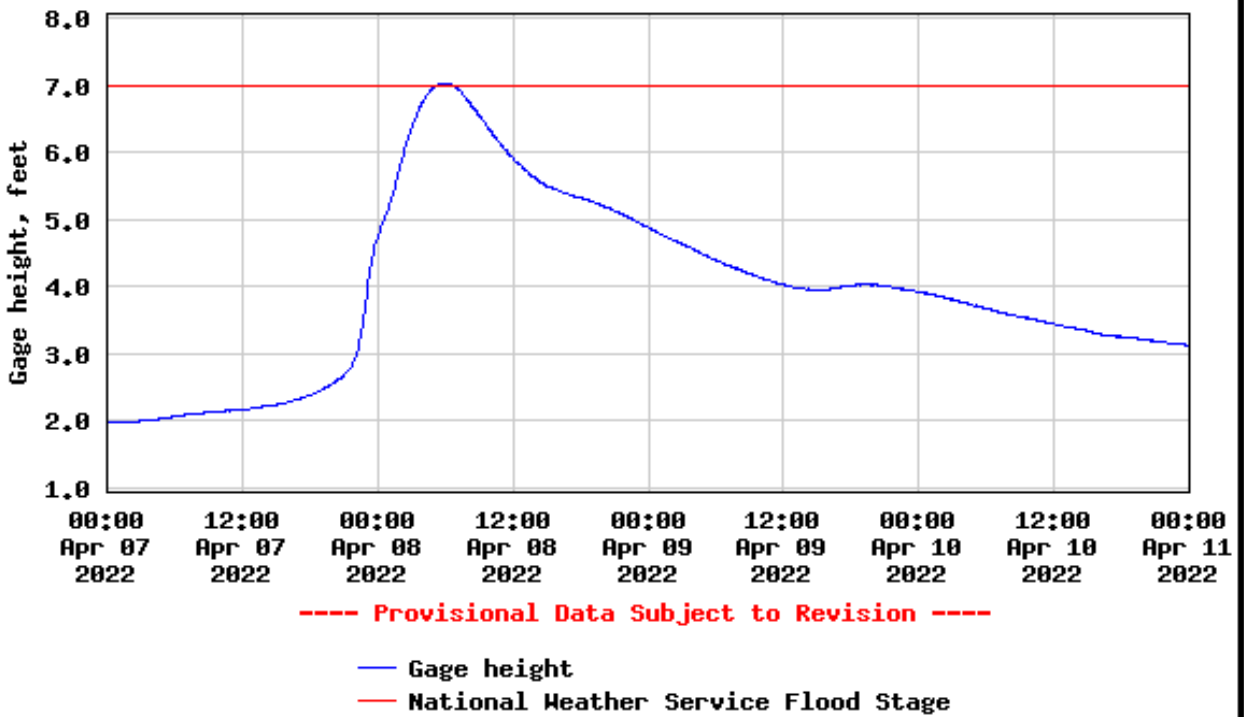
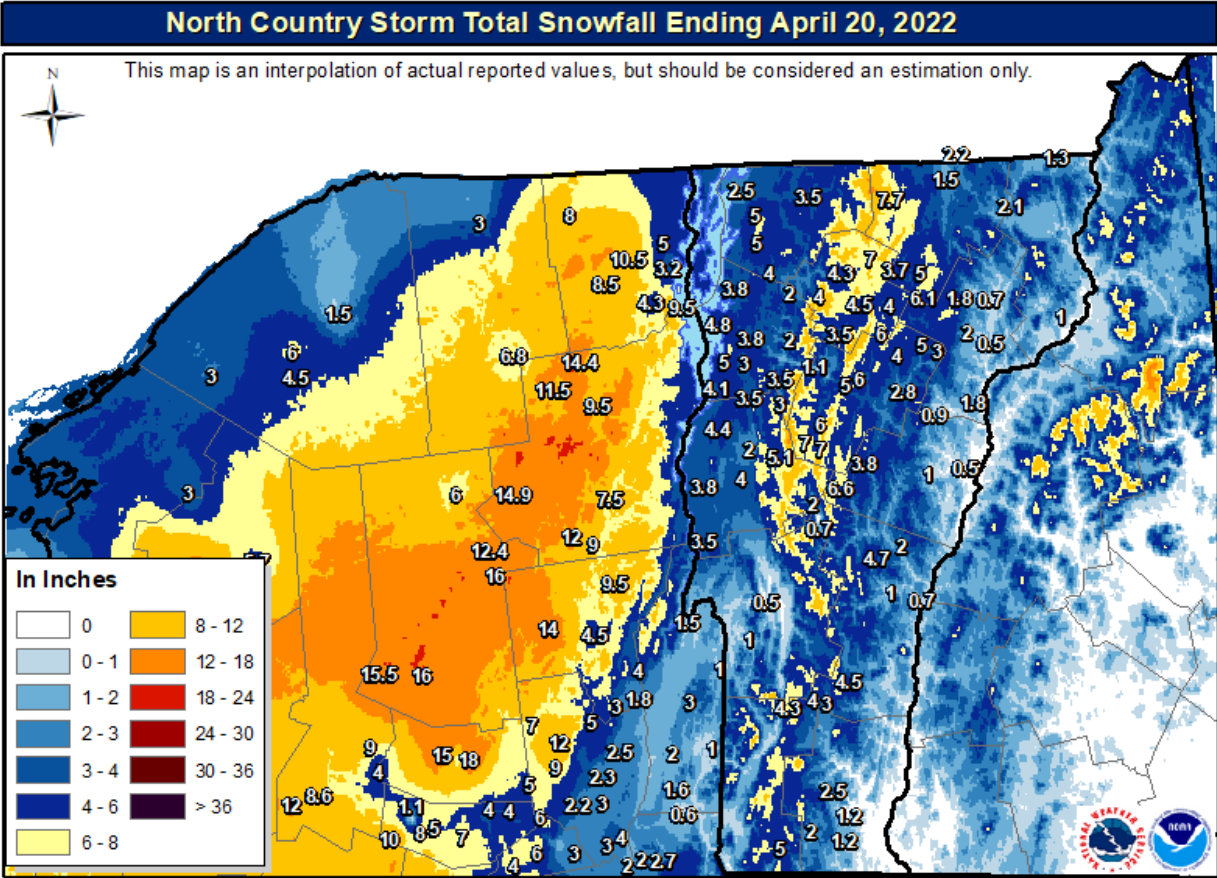


Figure 3: United States Geological Survey hydrograph for the river gage on the East Branch of the Ausable River at Au Sable Forks, NY from April 7-10, 2022. The plot shows the gage cresting just above flood stage of 7.0 feet on the morning of April 8, 2022, after heavy rainfall affected the region.



Created by the National Weather Service Forecast Office Burlington, Vermont
 Sources: NWS observers & spotters, media, public, state & local officials

Created: 4/20/2022 11:30 AM

Figure 4: Observed storm total snowfall from April 19-20, 2022. Snowfall was highly elevation dependent with the greatest totals observed across the Northern Adirondack Mountains.