

<b>NWS Form E-5</b> (04-2006) (PRES. BY NWS Instruction 10-924)	<b>U.S. DEPARTMENT OF COMMERCE</b> <b>NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION</b> <b>NATIONAL WEATHER SERVICE</b>	HYDROLOGIC SERVICE AREA (HSA) Burlington VT
		REPORT FOR: MONTH            YEAR July                2020
<b>MONTHLY REPORT OF HYDROLOGIC CONDITIONS</b>		SIGNATURE John Goff, Meteorologist /s/
TO: Hydrologic Information Center, W/OS31 NOAA's National Weather Service 1325 East West Highway Silver Spring, MD 20910-3283		DATE August 18, 2020

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.

July 2020 continued the trends from June in being a dry and hot month across most of the NWS Burlington HSA. In fact, Burlington, VT (KBTV) experienced its hottest July (and month) on record with an average temperature 76.9 degrees. Negative precipitation departures generally averaged in general from 1 to 3 inches with only portions of northeastern Vermont seeing near normal values (Fig. 1). This allowed for a broad increase in abnormally dry to drought level conditions across the area with much of southern Vermont elevating into the D1 category. After near record dryness in June, the St. Lawrence Valley was elevated into the D2 category, or severe drought during the week of July 7 which continued through the end of the month (Fig. 2). Prompted by the increasingly dry conditions and feedback through various constituencies, NWS Burlington issued a [Drought Information Statement](#) on Friday, July 10. See Table 1 for selected feedback from solicited agricultural partners through the month.

The only episode of more organized heavy rainfall occurred during the morning of July 14 when a mesoscale convective system pivoted across portions of northeastern Vermont. Scattered areas saw rainfall totals from 1.5 to 3.0 inches in only a few hours which prompted the issuance of several Flash Flood Warnings. While overall impacts were relatively minor, several reports of road washouts were received along with a report of a small landslide (Figures 3 and 4).

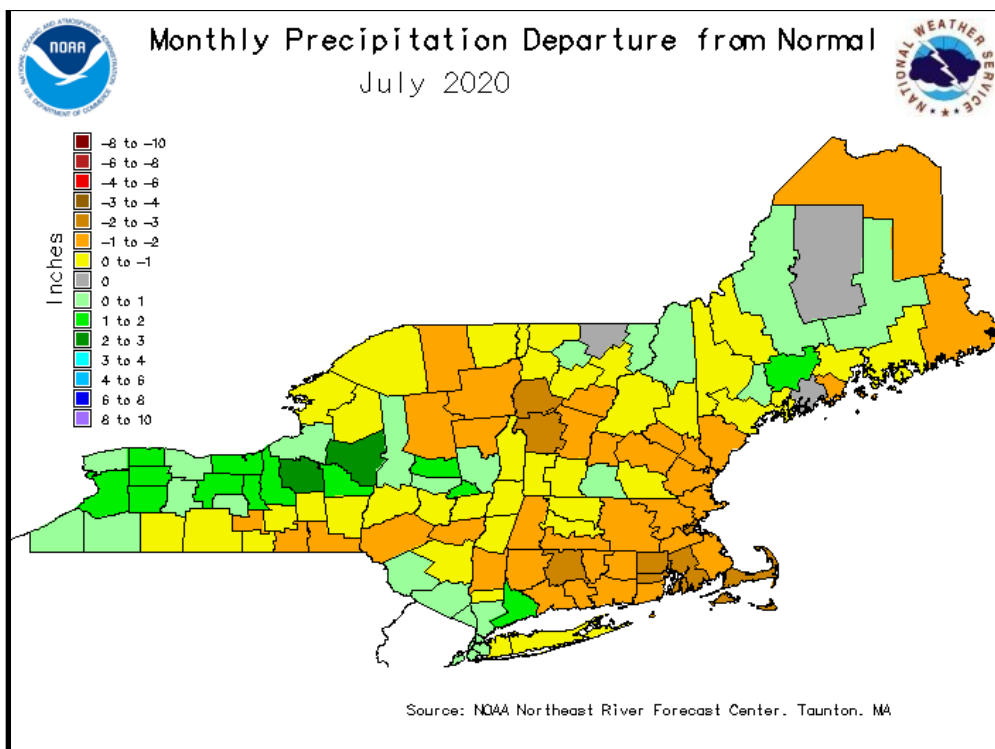


Figure 1. Monthly precipitation departures from normal (July 2020).

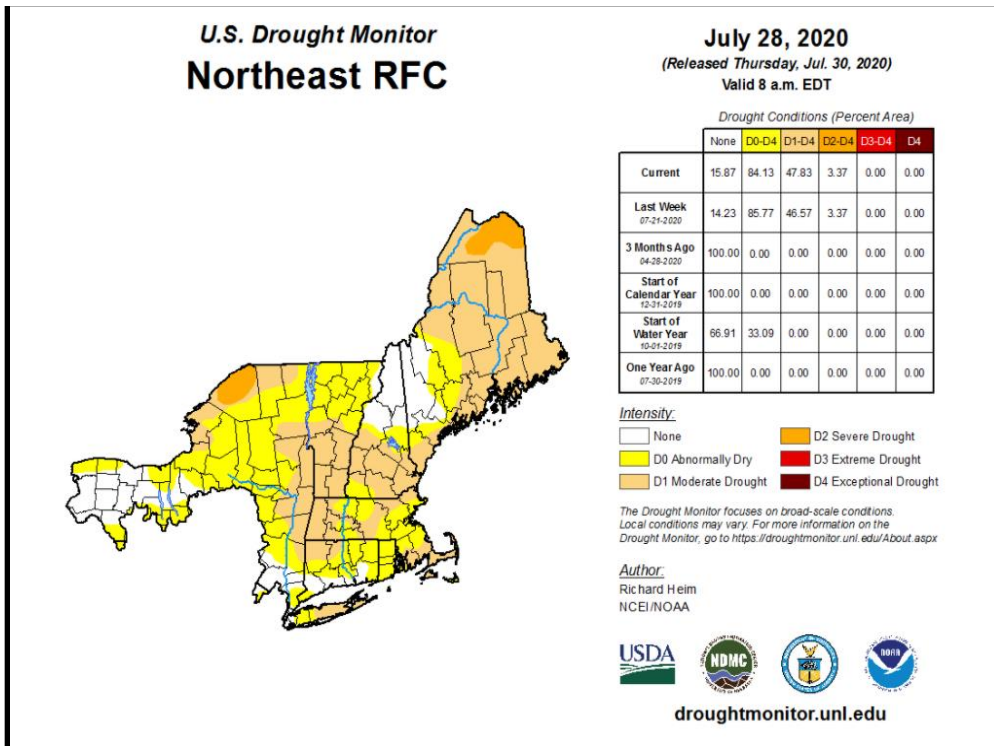


Figure 2. U.S. Drought Monitor Map for July 28, 2020. Note D1 conditions in much of southern VT and D2 conditions across portions of the St. Lawrence Valley.

DATE	FEEDBACK
July 9	<p>*Northern NY/St. Lawrence/Clinton Counties: very dry! All corn is rolled tight (has been for 2 weeks), patches turning bluish grey in the D2 areas, worried corn won't survive; few showers but very little rain in them</p> <p>*Champlain Valley: dry! .1" rain; corn starting to show stress</p>
July 16	<p>*North Country/St Lawrence/Clinton: .4-3", some of worst drought spots got low end of rain, corn looks better but don't expect to last long; alfalfa looks like garbage - showing nutrient deficiency ; soybeans short &amp; showing pale color deficiency symptoms due to early dry conditions; spring barley plots are a bust</p> <p>*Champlain Valley: rainfall was hit or miss, over 1" in Chazy, only .25" in Willsboro, corn still looks good &amp; hasn't started tasseling yet</p>
July 30	<p>*St Lawrence/Clinton County: bottom of plants are crispy due to drought; rolled short corn</p>

Table 1: Selected feedback from the New York State weekly Field Crop Call highlighting the effects of drought in the NWS Burlington HSA during July 2020.

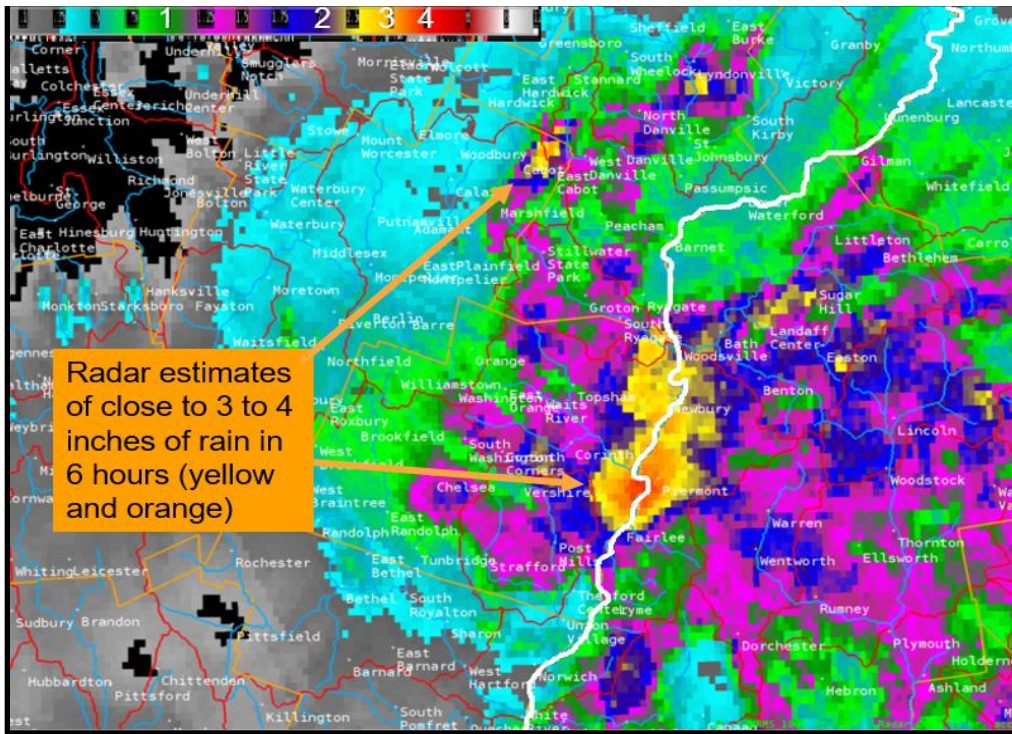


Figure 3. 6 hour radar estimated precipitation totals across northeastern Vermont ending at 10:00 AM LST on July 14.



Figure 4. Mud slide that occurred in St. Johnsbury, VT after heavy rains on the morning of July 14. Photo courtesy of State of Vermont, Division of Fire Safety.