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: September YEAR: 2021
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 Svc. Hydrologist DATE: 10/15/2021

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.

The month of September could be characterized by intermittent, generally light rainfall with brief bouts of heavier precipitation. By months end, 30-day departures generally averaged within ± 1.0 inches of normal across the NWS Burlington HSA with the largest negative departures observed in the St. Lawrence Valley of New York and areas of central/northern Vermont (Figure 1). As a result, monthly average streamflows remained largely unchanged from August, with the lowest values remaining where they have largely resided over the past year – namely in the St. Lawrence Valley and northern Vermont (Figures 2 and 3). Not surprisingly, this precipitation did little to alleviate the longer-term drought across these areas with the U.S. Drought Monitor Map for the last week of the month showing little change in the extent of D0/D1 across the HSA (Figure 4). The only notable precipitation event occurred on the 8th of the month when scattered thunderstorms, some locally severe, affected the area with the passage of a cold front. A short burst of rainfall occurred in the City of Burlington, VT during the early evening hours during which minor nuisance flooding was observed (Figure 5). Otherwise, no flooding was reported in the NWS BTV HSA during the month.

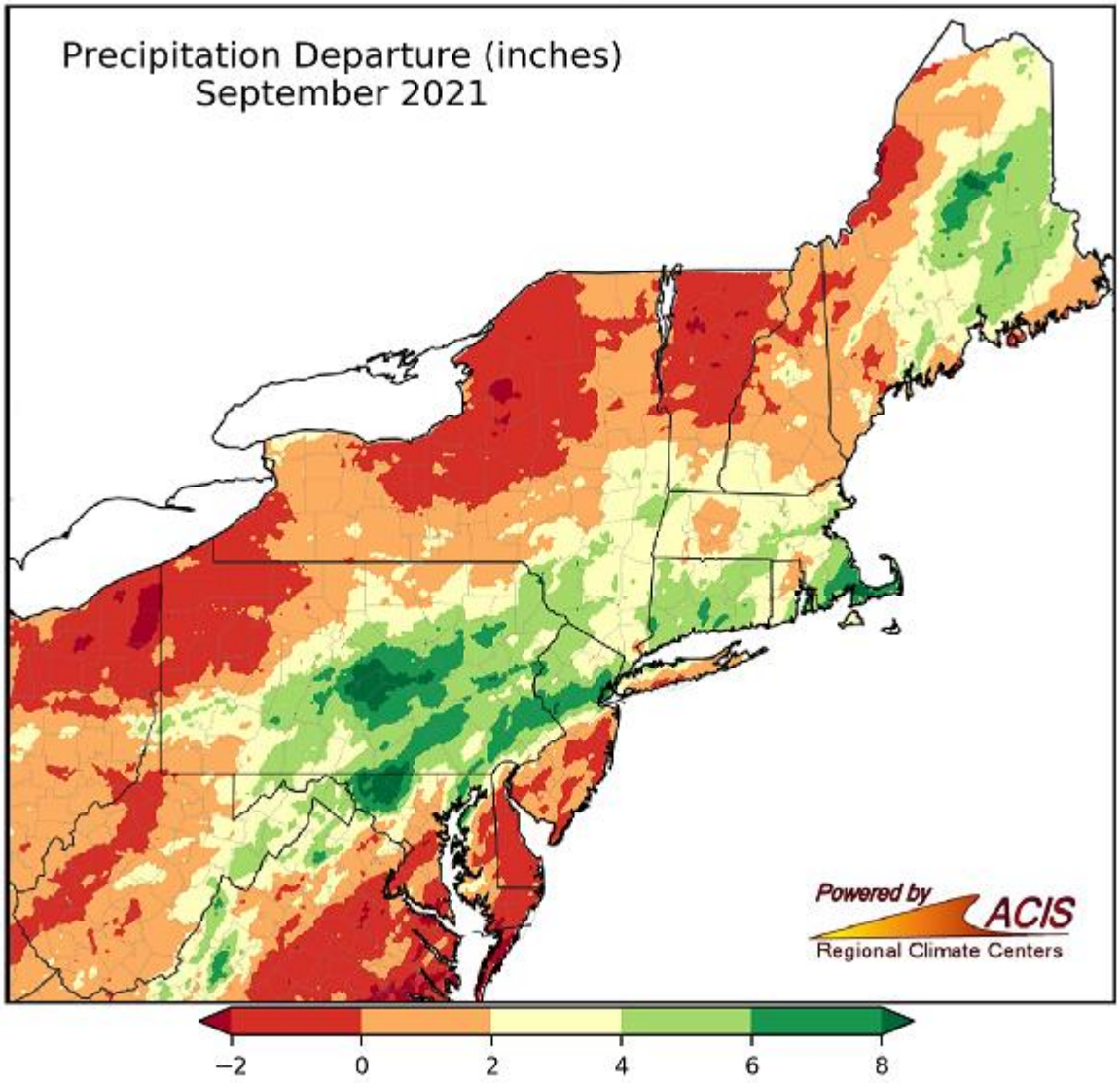

Figure 1. Precipitation departures from normal for September 2021.

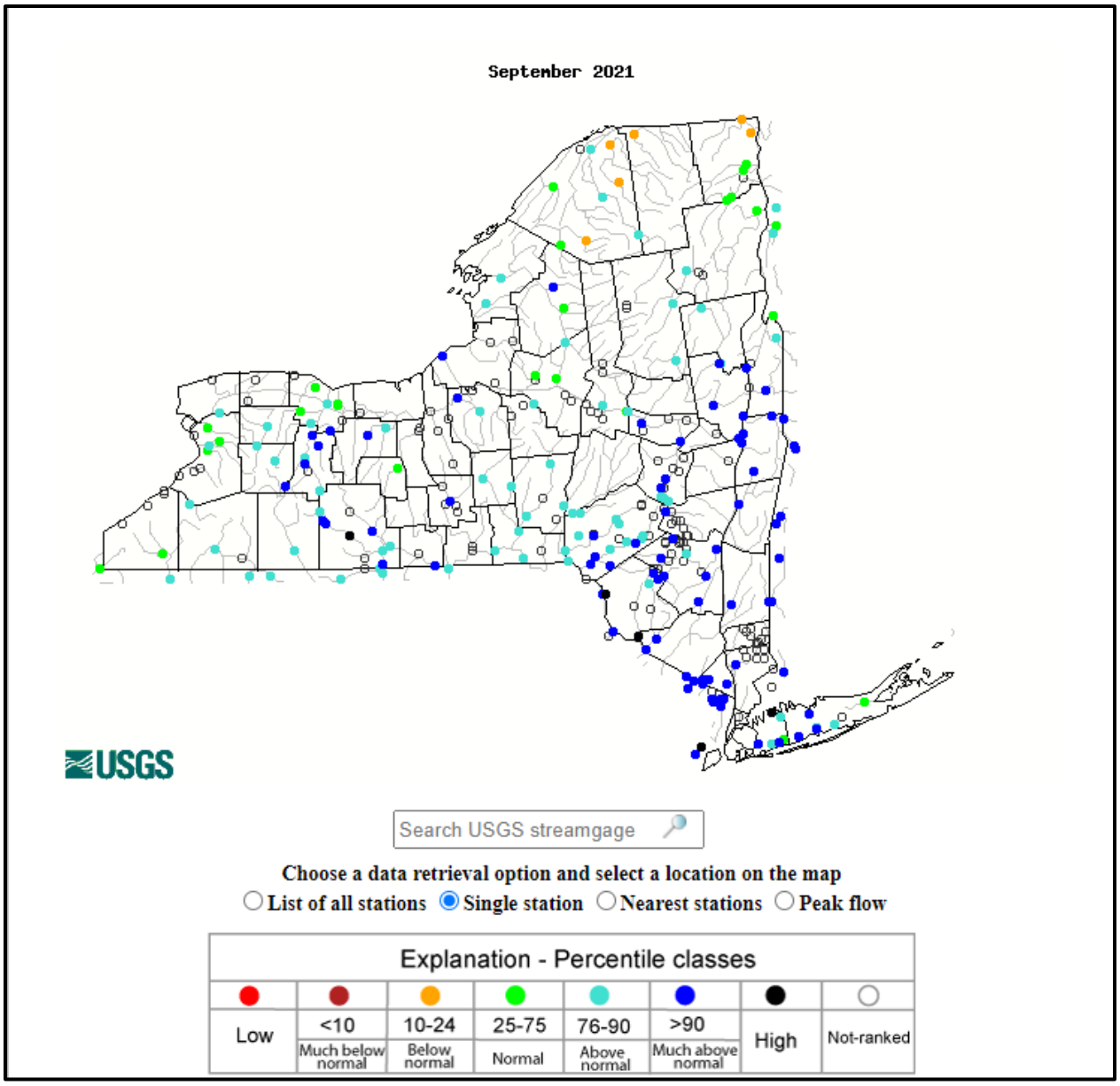

Figure 2. September monthly average streamflow for New York. Note below normal values for far northern portions of the state, mainly in the Saint Lawrence Valley.

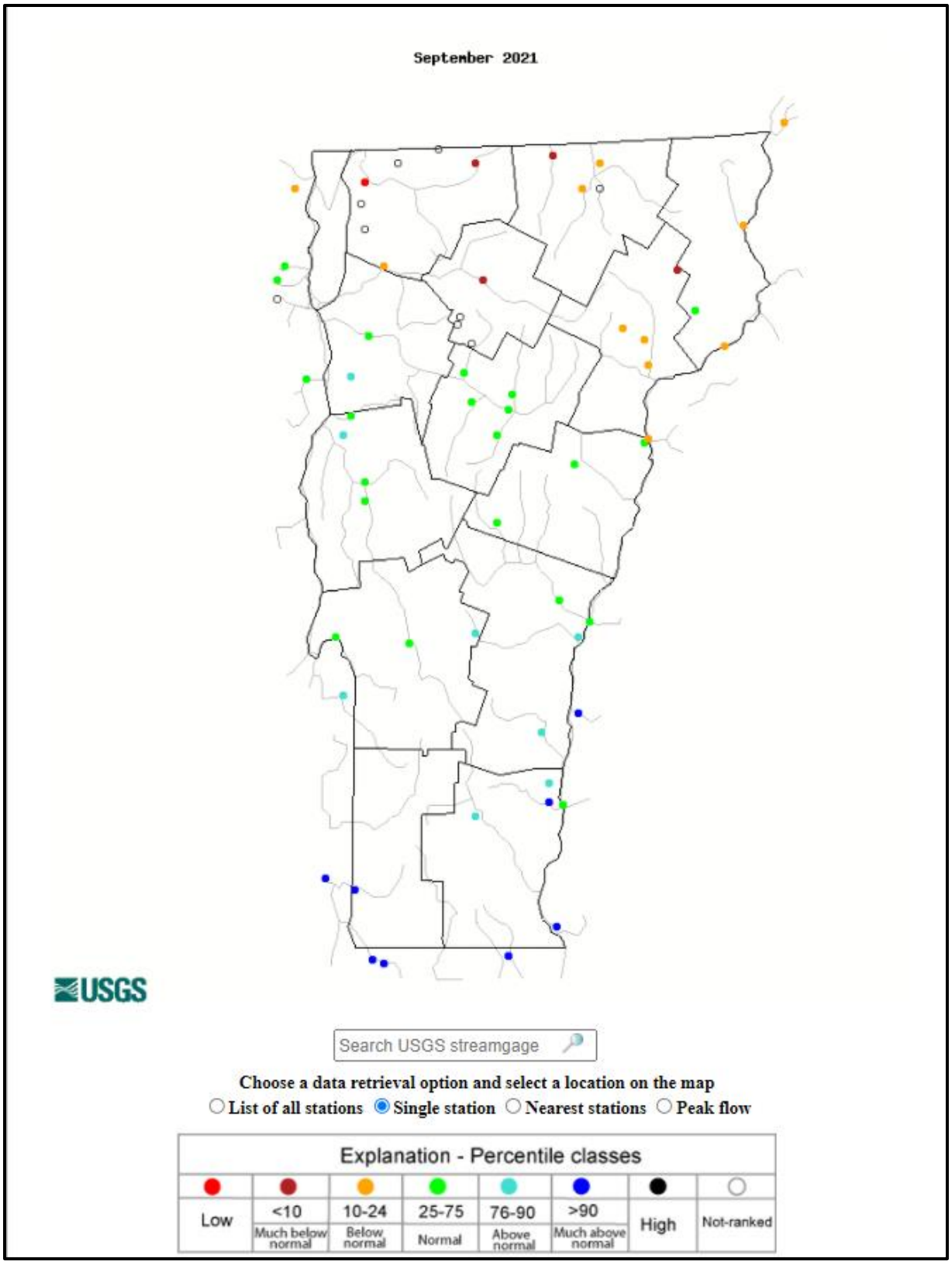

Figure 3. September monthly average streamflow for Vermont. Note below to much below normal values for far northern portions of the state.

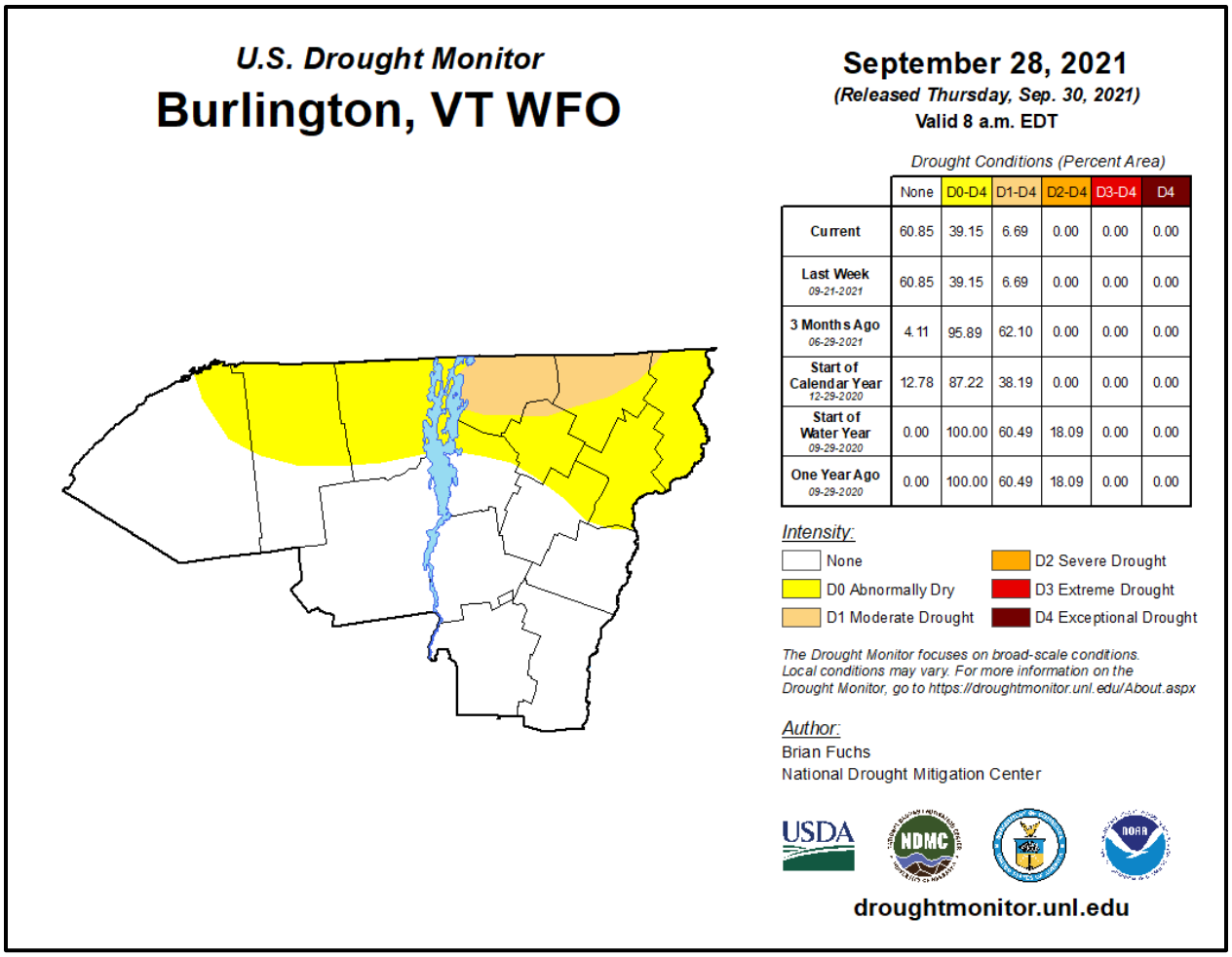

Figure 4. U.S. Drought Monitor map for the week of September 28, 2021 showing persistent areas of D0/D1 across far northern portions of New York and Vermont.

Figure 5. Nuisance flooding observed on Lakeside Avenue in Burlington on September 8, 2021, after brief, torrential rainfall from passing thunderstorms. Photo courtesy Matt Sutkoski.