

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	
TO: Hydrologic Information Center, W/OS31 NOAA's National Weather Service 1325 East West Highway Silver Spring, MD 20910-3283		REPORT FOR: MONTH YEAR	October 2016
		SIGNATURE /s/ Robert L Deal, Meteorologist WFO BTV	DATE November 14 2016

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.

With the exception of a heavy rain event over the Saint Lawrence valley, drought conditions continued for much of the North Country during October. Overall the monthly rainfall totals ranged from one and a half to three inches over Vermont and one and half to six inches over Northern New York with the heavier totals across the Saint Lawrence Valley (Figure 1). This amounted to portions of Northern New York getting a brief reprieve of the drought conditions ending up between one to two inches above normal in the Saint Lawrence with the rest of the hydrologic service area falling another one to three inches below normal (Figure 2).

A low pressure system brought rainfall over the Saint Lawrence River Valley in the form of a stalled cold front on Oct 20-21 and then lifted a warm front through the North Country bringing much needed rainfall to the region mainly over northern New York. The 24 hour rainfall totals from Oct 20th can be seen in Figure 3. The rainfall from the 3 day event from Oct 20-22 temporarily brought stream flows above normal ending the month below to near normal for both New York (Figured 4) and Vermont (Figure 5). Figure 6 shows the average stream flows for all river gauged stations during the month for both New York and Vermont.

With the beneficial rainfall over northern New York, the US Drought Monitor held the Moderate Drought conditions for the Saint Lawrence Valley but with the lack of normal rainfall across the rest of the area, the Moderate Drought (D1) was upgraded to Severe Drought (D2) in the Champlain Valley of New York and Vermont. For portions of the Northeast Kingdom of Vermont, conditions were upgraded to Abnormally Dry (D0) (Figs 7 & 8). With the drought conditions the Lake Champlain water levels remain below normal however with the large amount of water added to the Lake Champlain watershed from Oct 20-22, the lake is now beginning to rise although ending the month still one foot below normal on October 31st. (Fig 9).

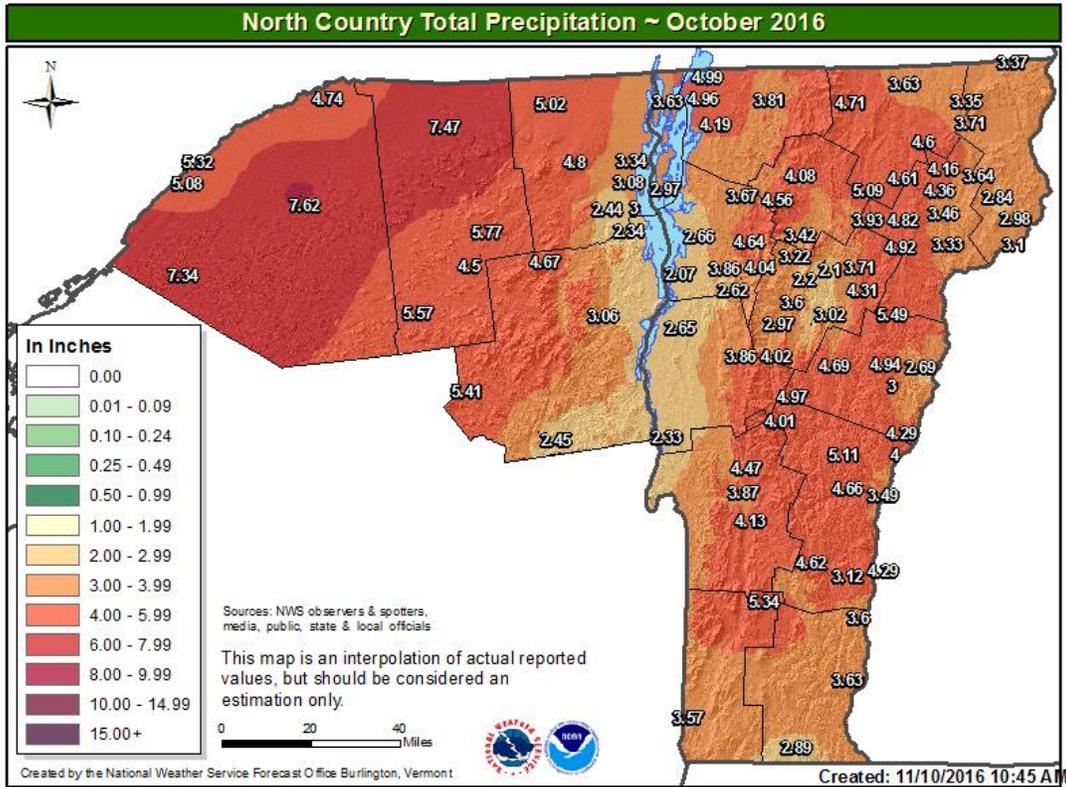


Figure 1

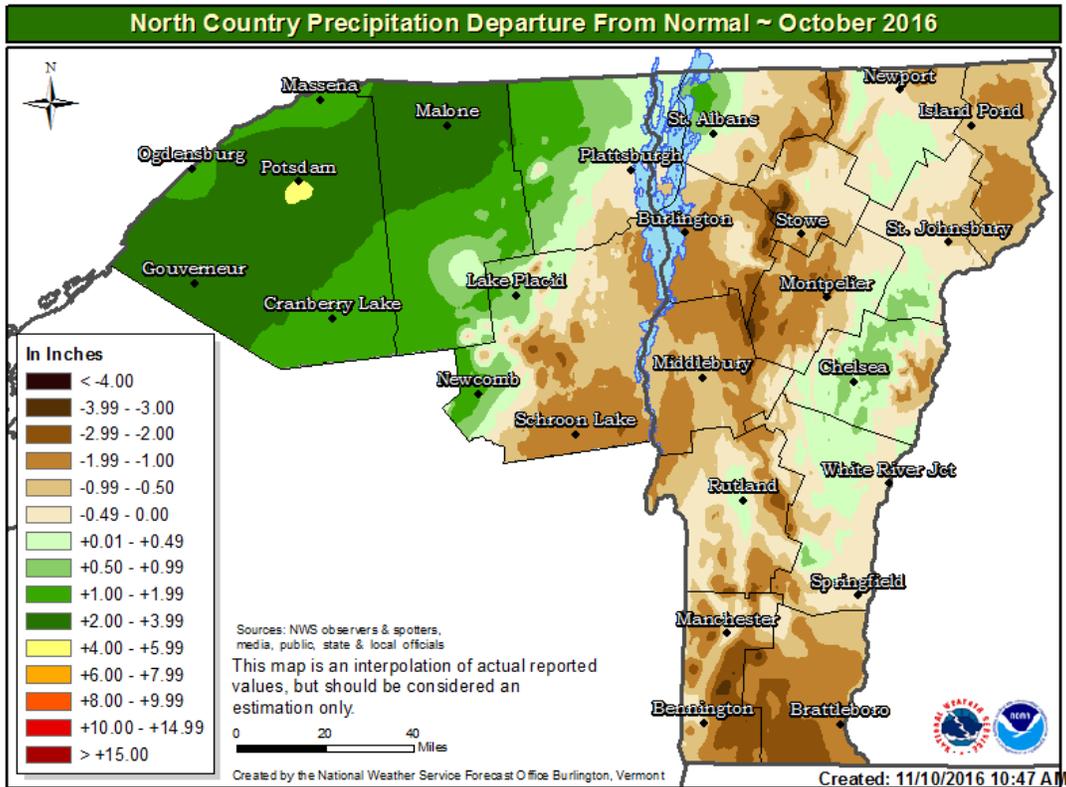
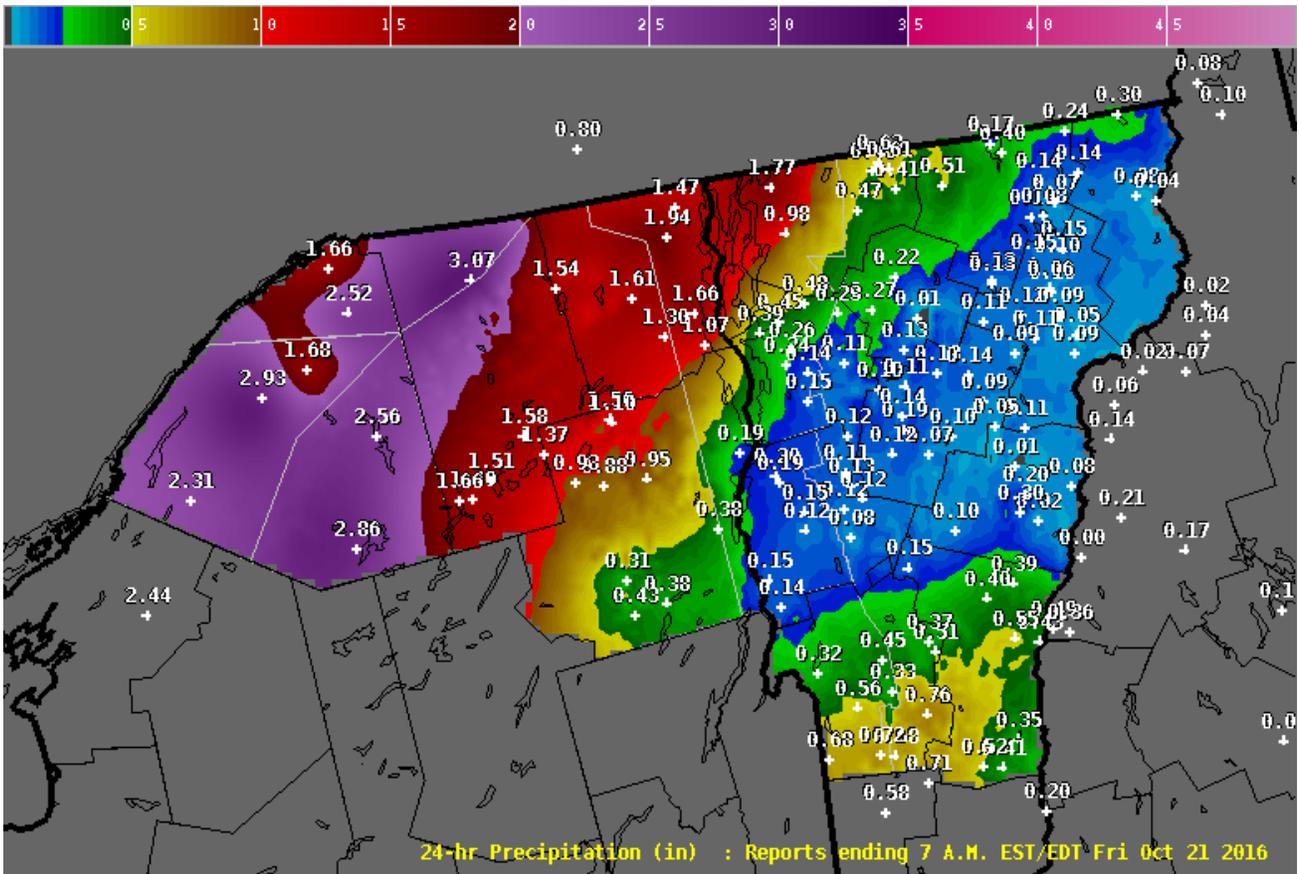


Figure 2



NOAA / National Weather Service Burlington, Vermont
 Graphic created: Fri Oct 21 2016 10:28 AM EDT



Figure 3

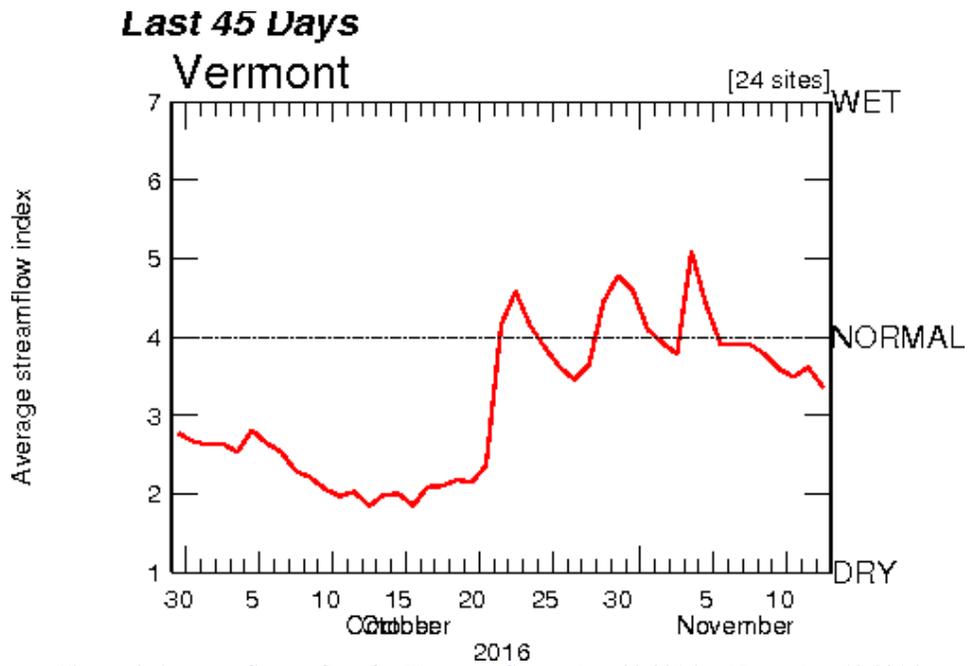


Figure 4, Average Streamflow for Vermont September 30 2016 to November 12 2016

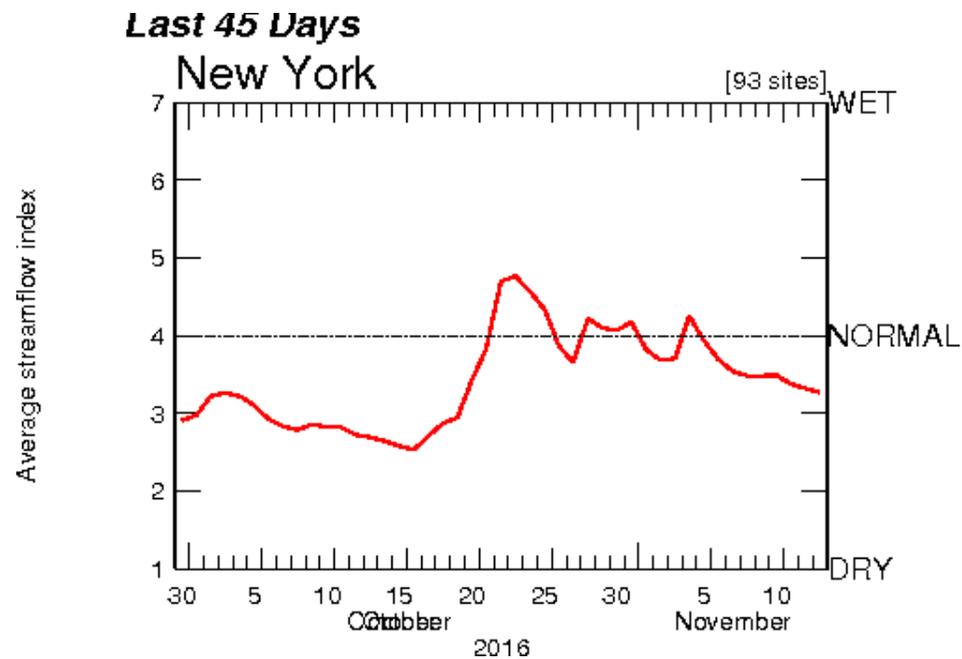


Figure 5, Average Streamflow for New York September 30 2016 to November 12 2016.

October 2016

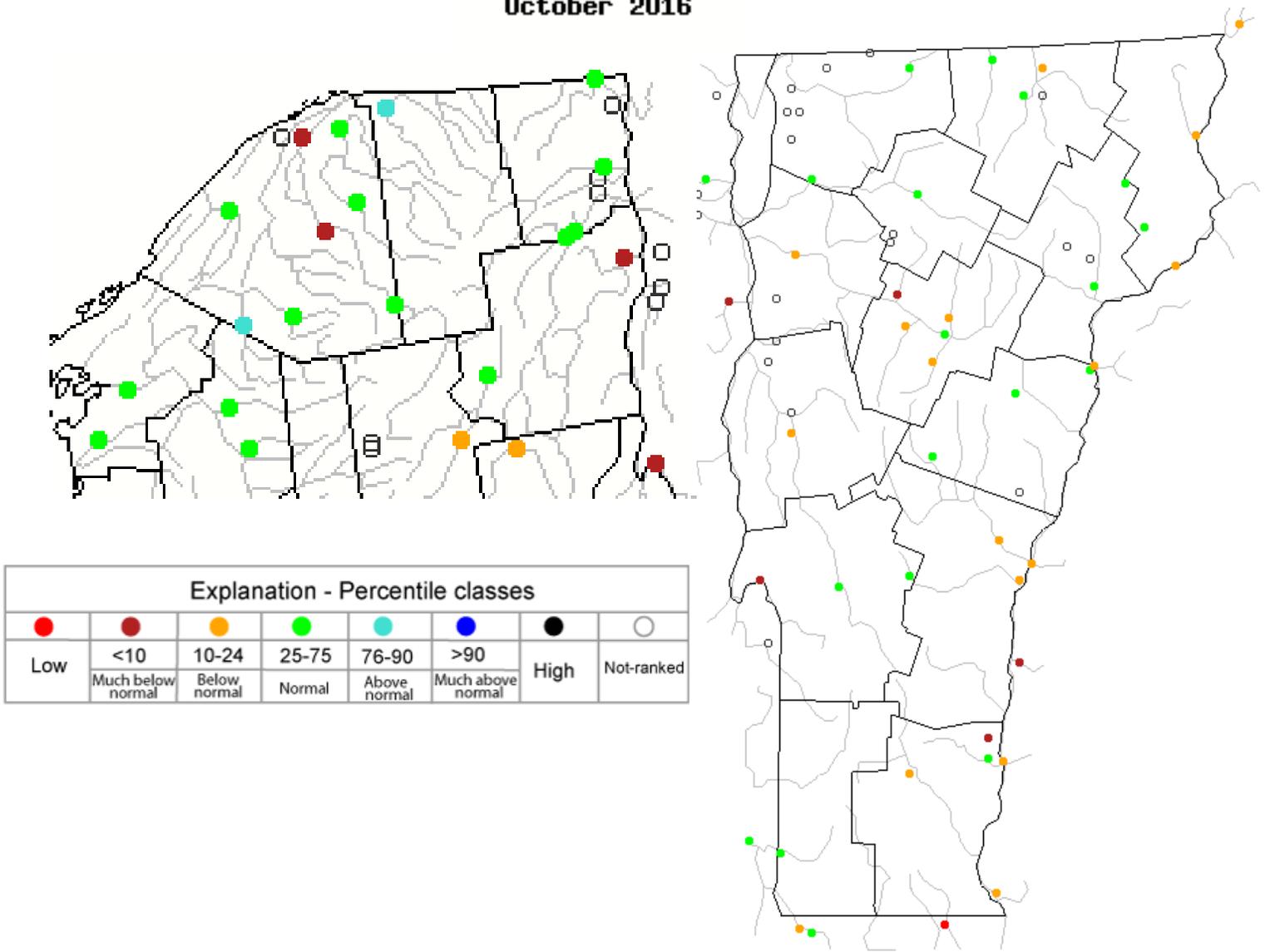


Figure 6, October 2016 average streamflows

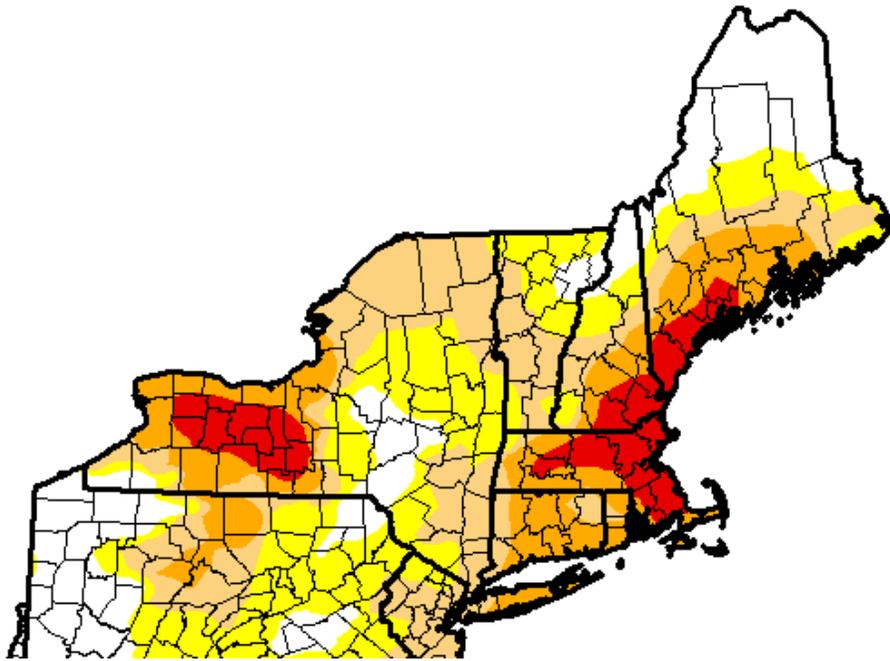


Figure 7, US Drought Monitor September 27 2016

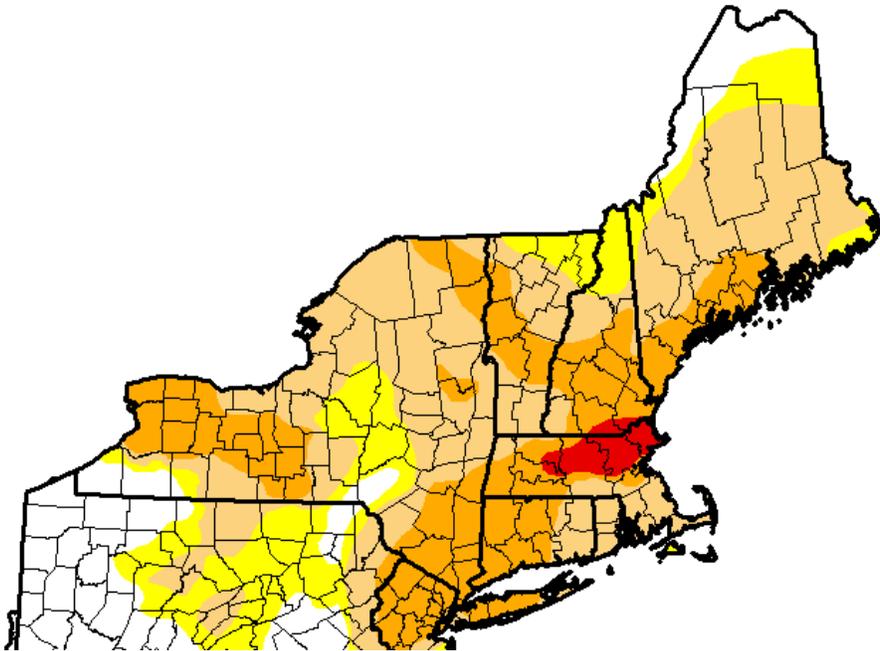


Figure 8, US Drought Monitor November 1 2016

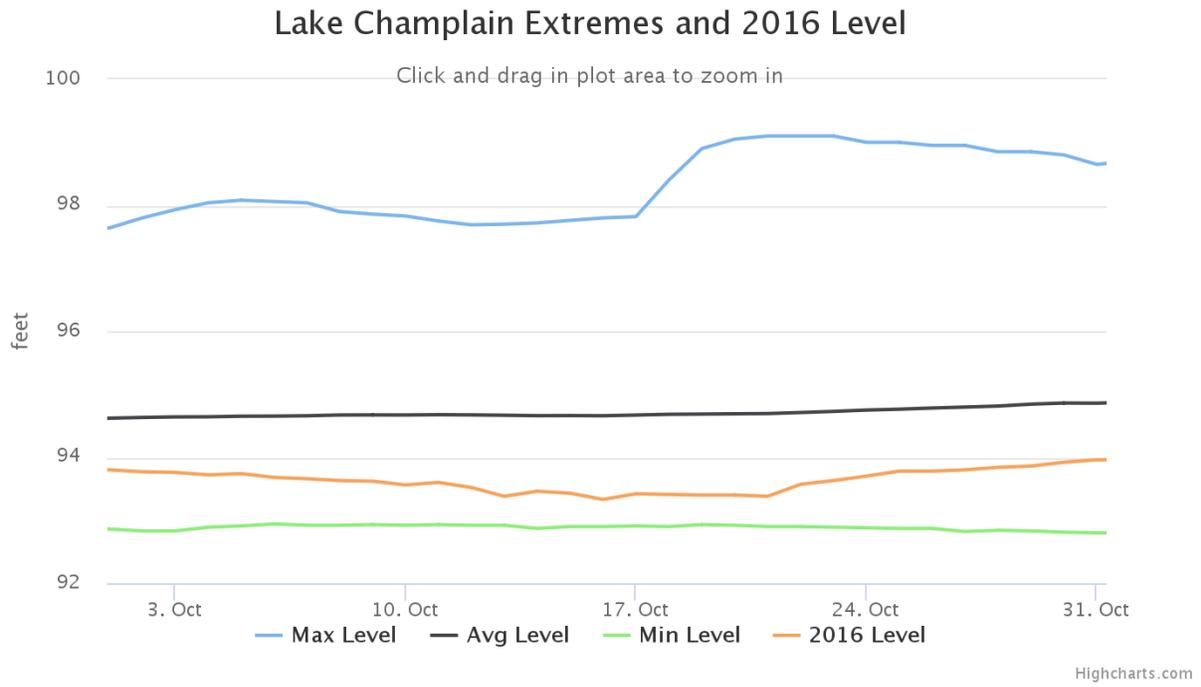


Figure 3, Lake Champlain at Burlington Sept 1 2016 - Sept 30 2016