

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	
		REPORT FOR: MONTH YEAR November 2016	
MONTHLY REPORT OF HYDROLOGIC CONDITIONS		SIGNATURE /s/ Greg Hanson, Service Hydrologist	
TO: Hydrologic Information Center, W/OS31 NOAA's National Weather Service 1325 East West Highway Silver Spring, MD 20910-3283		DATE 12/13/2016	

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.

November was a quiet month from a hydrologic standpoint, with below normal precipitation leading to continuing drought conditions. Precipitation for the month was two to three inches, with only around 1 ½ inches in the St. Lawrence Valley of New York (Figure 1), which was one to two inches below normal (Figure 2). Snow returned to the North Country, mainly across the higher terrain of New York and Vermont (Figure 3). River flows were near to below normal for the month (Figure 4).

A passing cold front on November 3 brought a solid 0.5 to 1.0 inch of rain to the region. Rivers responded with small rises of around a foot, as preceding dry conditions moderated runoff into streams. Dry weather followed through mid-month, with rivers generally in recession. Temperatures warmed well above normal during this period, reaching into the 60s on November 19. A cold front followed on November 20, producing a half to three quarters inch of precipitation. Precipitation was mostly rain at the lower elevations and a foot to 18 inches of snow across the higher terrain. Because of the colder temperatures there was little runoff from this event and rivers remained nearly steady. The last increase in river flows was at the end of the month when rises of a foot or more were produced by ½ to 1 inch of warm frontal rainfall on November 29 and 30. The month ended with rivers still on the rising limb of the hydrograph. The overall flow patterns for New York and Vermont are depicted in Figures 5 and 6.

Although below normal, the precipitation in November combined with lessening evapo-transpiration demand allowed for a relaxing of drought categorization for the area. The US Drought Monitor shrunk the area of D2, Severe Drought from a broad swath from northern New York to Southeast Vermont to a smaller area near the Champlain Valley. Moderate Drought, D1, was downgraded to Abnormally Dry, D0, for St. Lawrence County (Figures 7 & 8).

Lake Champlain rose slightly during November, although it still trended ¾ foot to 1 foot below normal. The lake was 93.96 feet on November 1, and finished the month at 94.26 (Figure 9).

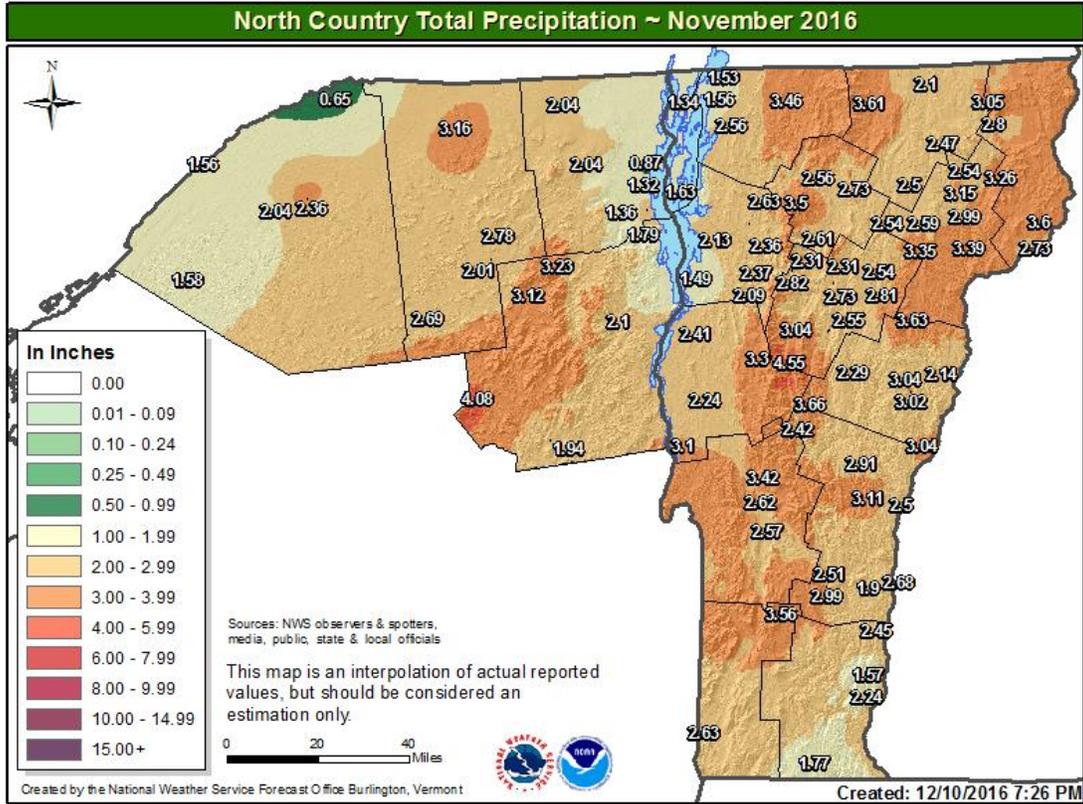


Figure 1

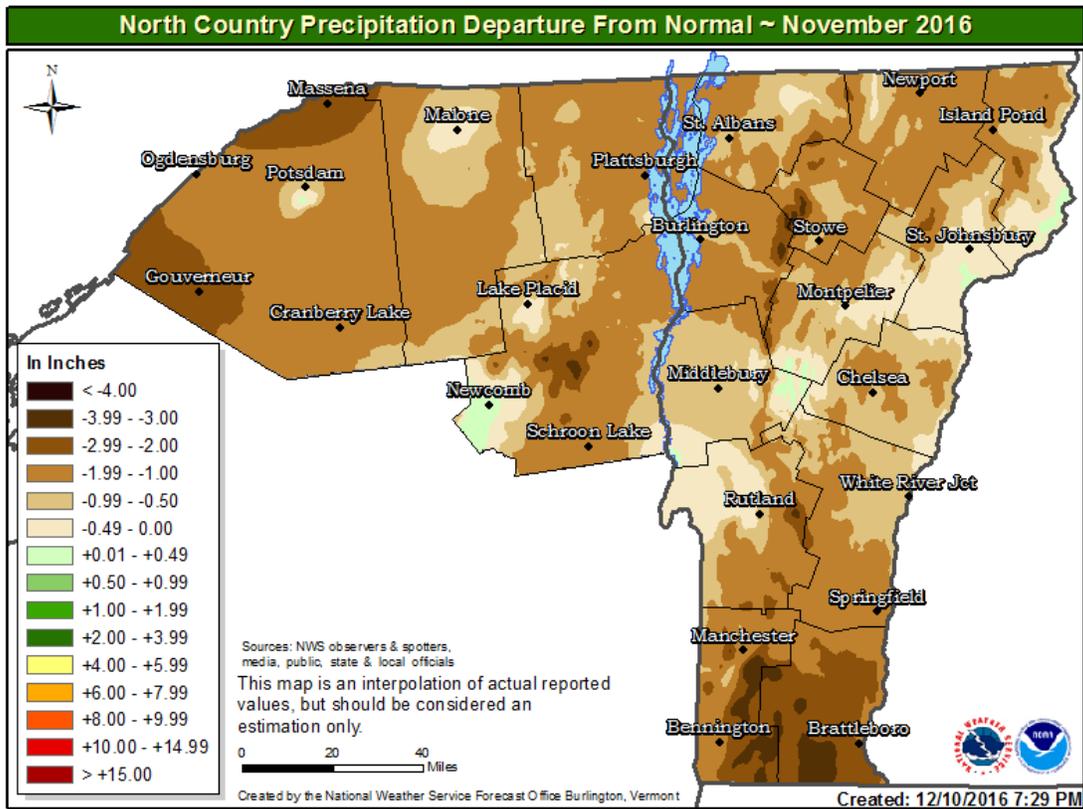


Figure 2

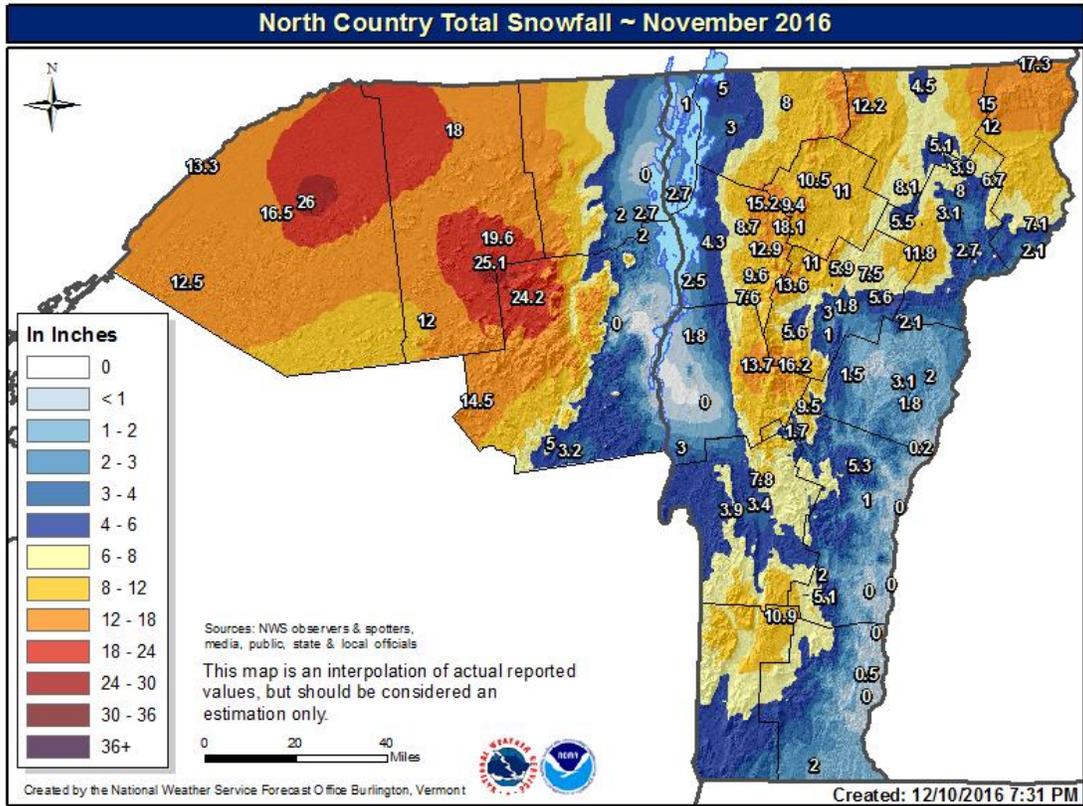


Figure 3

November 2016

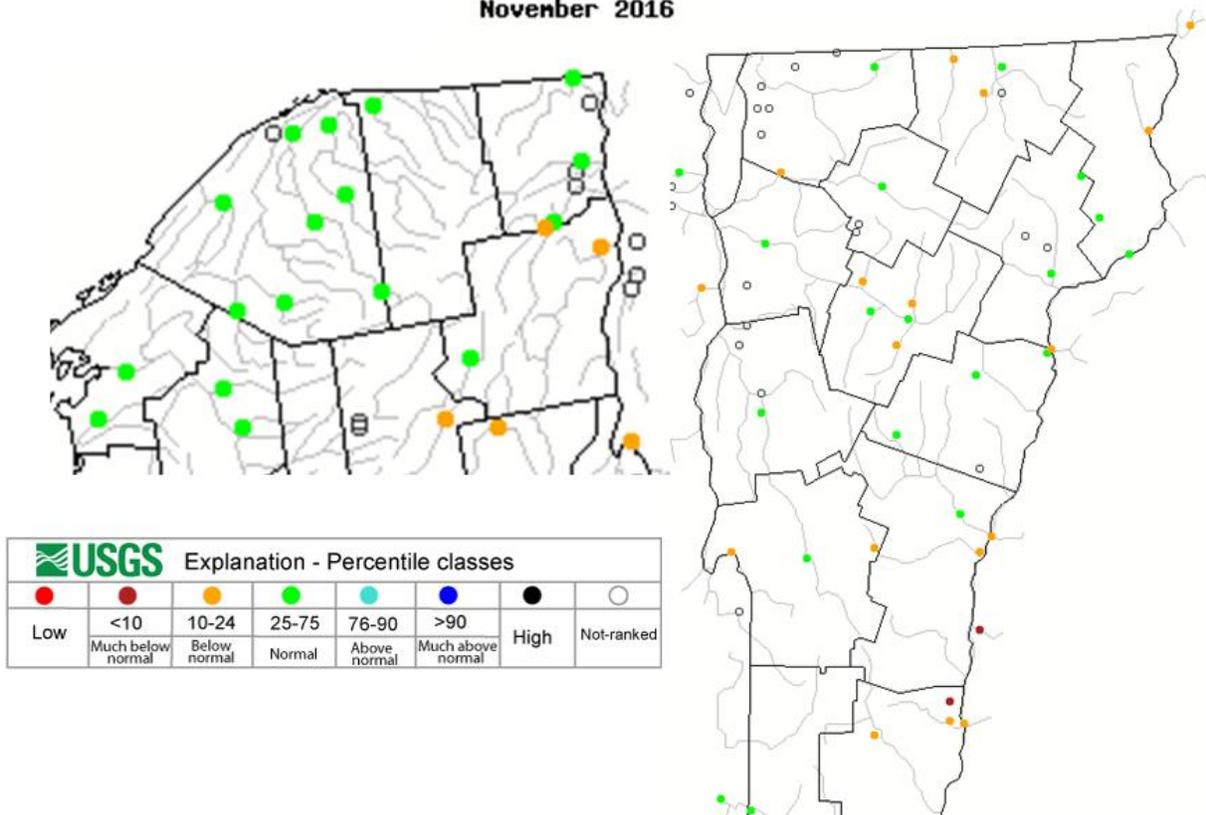


Figure 4

Last 45 Days

New York

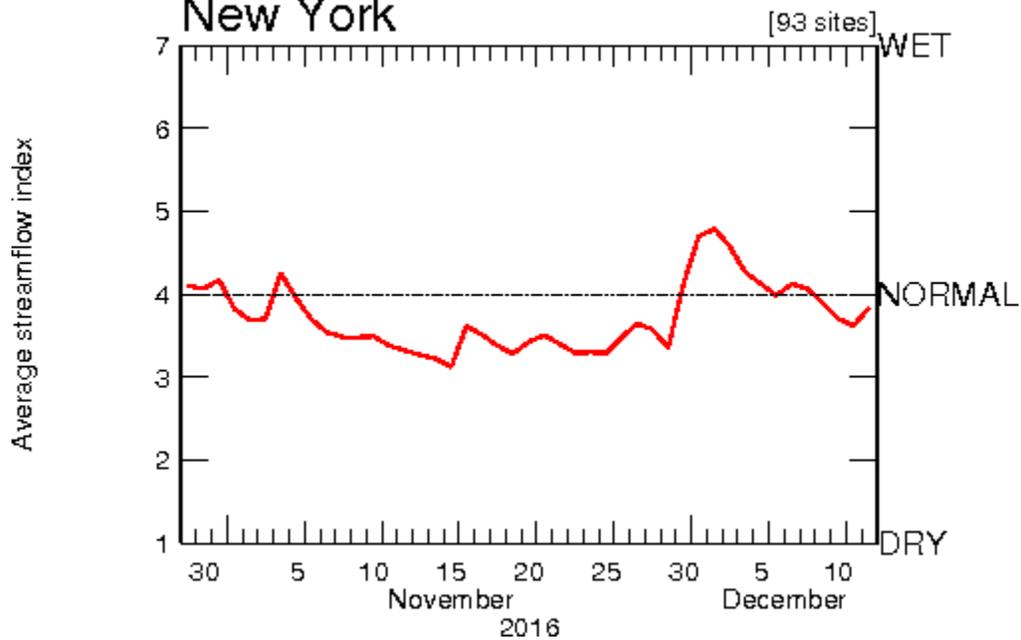


Figure 5, New York Average Streamflow

Last 45 Days

Vermont

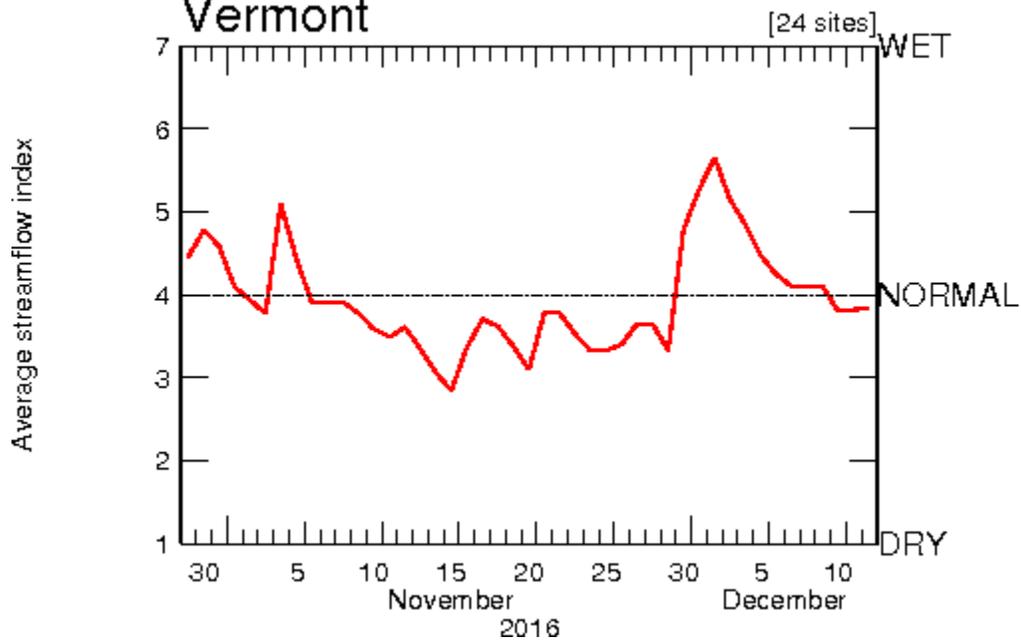
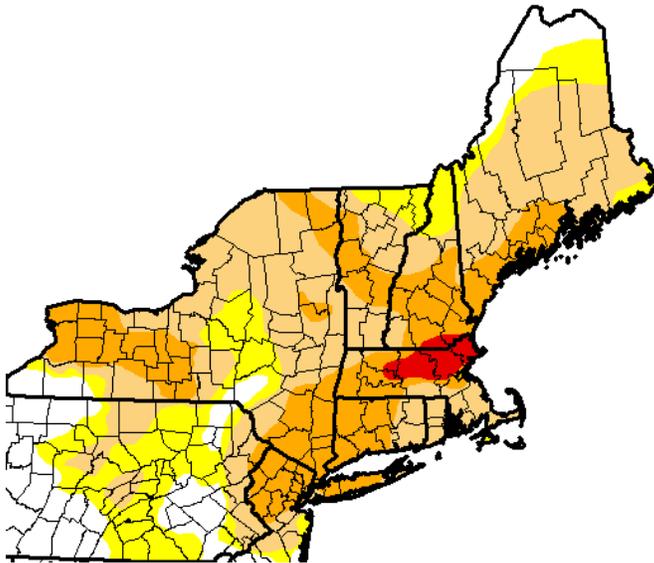


Figure 6, Vermont Average Streamflow

U.S. Drought Monitor Northeast

November 1, 2016
(Released Thursday, Nov. 3, 2016)
Valid 8 a.m. EDT



Intensity:

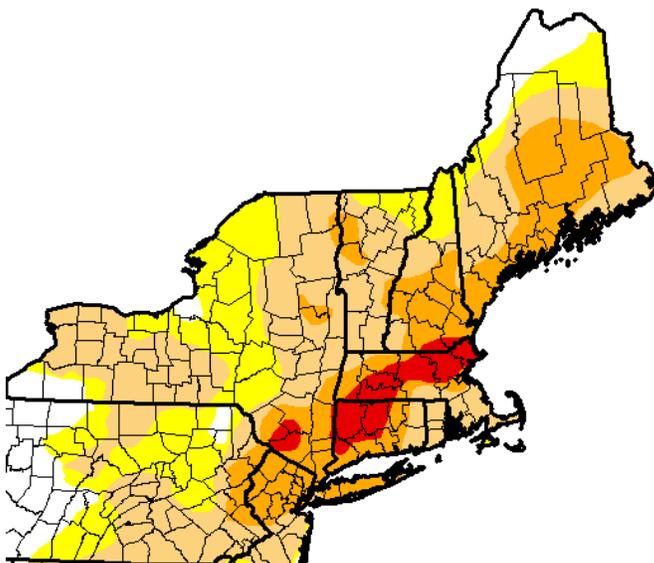
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Figure 7

U.S. Drought Monitor Northeast

November 29, 2016
(Released Thursday, Dec. 1, 2016)
Valid 7 a.m. EST



Intensity:

- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Figure 8

Lake Champlain Extremes and 2016 Level

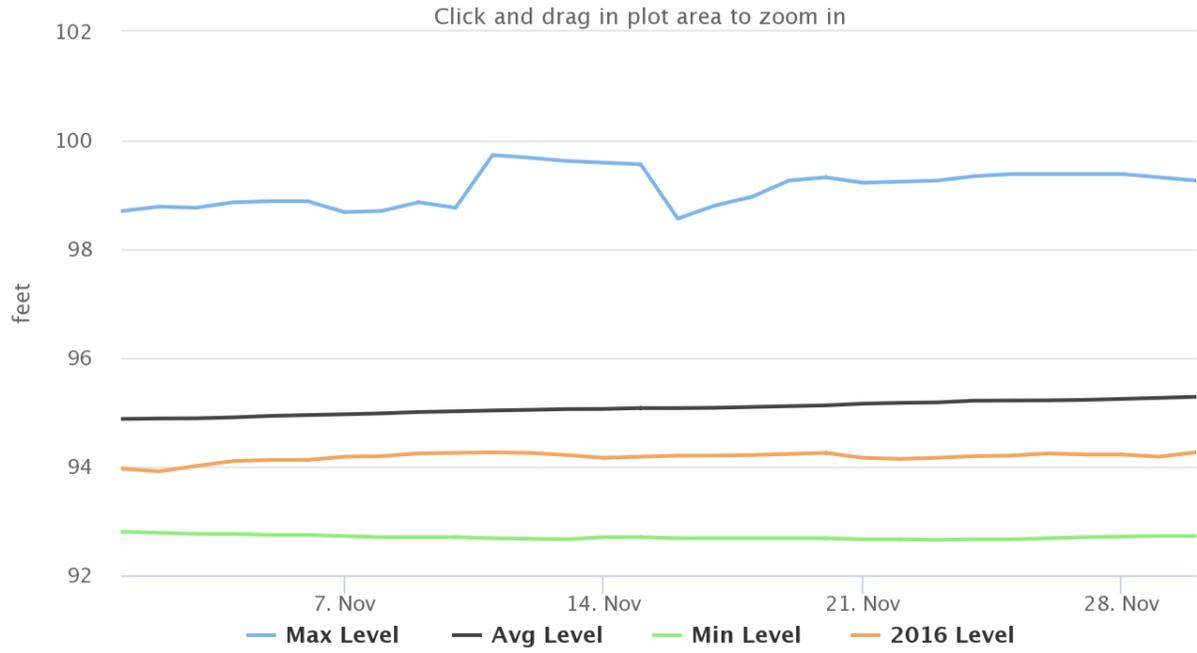


Figure 9, Lake Champlain Levels for November

Highcharts.com