

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 January 2016
		SIGNATURE /s/ Gregory A. Hanson, SH WFO BTV DATE 2/9/2016

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.

After a record warm December, wintry temperatures returned to the North Country. There was no flooding, and only two periods of river rises worth note. The first rises were due to rainfall runoff, and the second from river ice formation.

An arctic cold front moved through late on January 3, dropping temperatures below normal. Rivers had been running freely and at above normal flows from liquid precipitation and continued runoff in December, but river ice began to form after the cold outbreak. The coldest temperatures were short lived however, and by the end of the first week of January daytime highs rebounded into the 30s with lows above zero. These above normal temperatures were not conducive to significant ice formation.

A warm front on January 10 brought daytime highs in the 40s and 50s with overnight lows above freezing in many locations. Rainfall with the front dropped 1 to 1.5 inches of rain in central and southern Vermont, with a quarter to half inch to the north and west (Figure 1). Rivers saw modest rises of a few feet on the 11th, and cleared of river ice that had grown only a few inches thick at best.

A cold front followed, with below freezing temperatures through mid-month with light snow associated with periodic clipper systems. Rivers were in recession from higher flows of the 11th. A cold front around the 19th brought much colder temperatures, even below normal, with highs in the teens and lows below zero. River ice began to redevelop, and some gages saw within-bank rises as the result of developing freeze-up ice jams.

The remainder of the month trended warmer with only light precipitation. Temperatures were near or below freezing, but above normal. The warmer than normal temperatures for much of the month limited the growth of river ice, and most rivers ended the month with open channels and ice forming along the borders. Snow pack was significantly below normal, as the only appreciable precipitation fell as liquid on the 10th. Snow Depths were one to two feet below their normal values (Figure 2). River flows were near to above normal (Figure 3), owing to continued high base flows from the very warm December and runoff from the January 10 rainfall event. Precipitation ended the month as much as two inches below normal (Figs 4 & 5).

January 2016

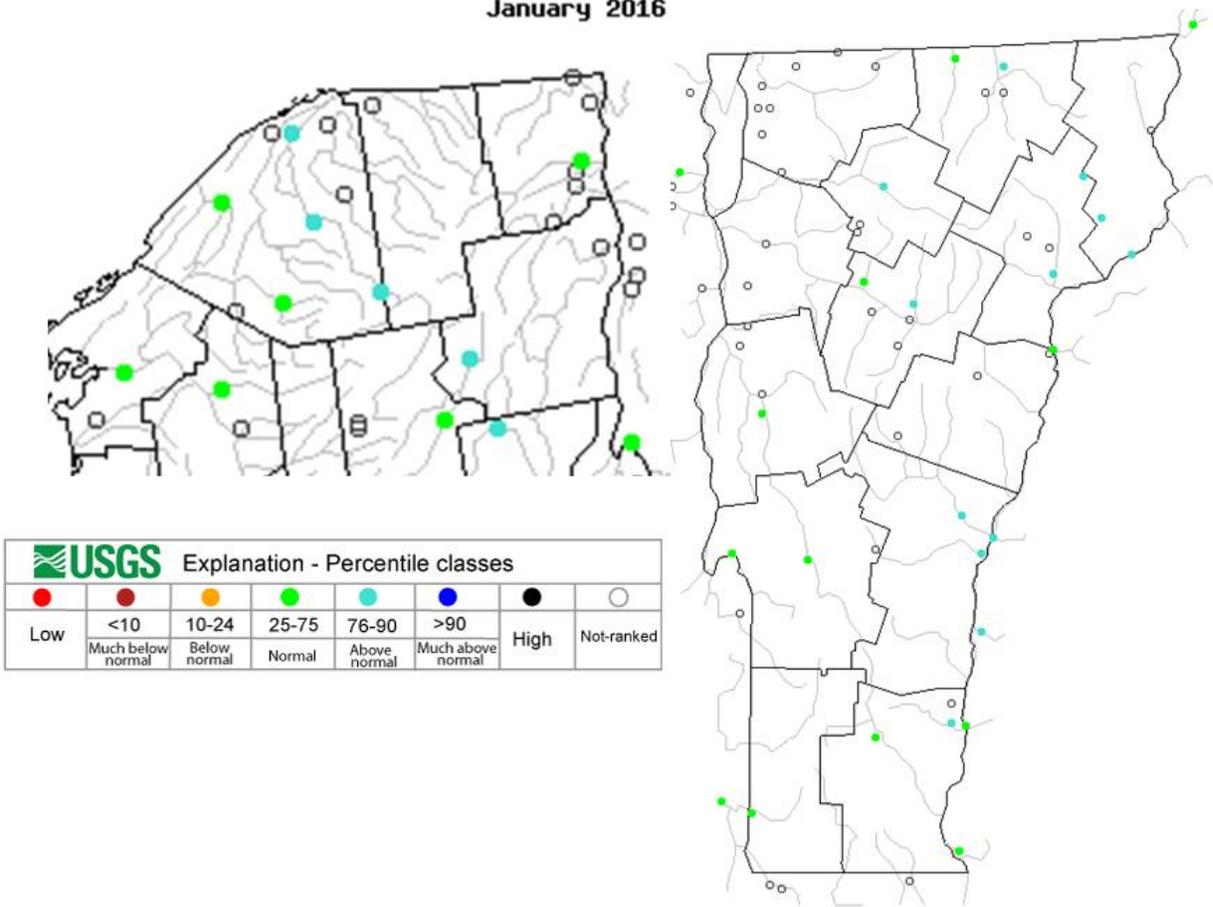


Figure 3

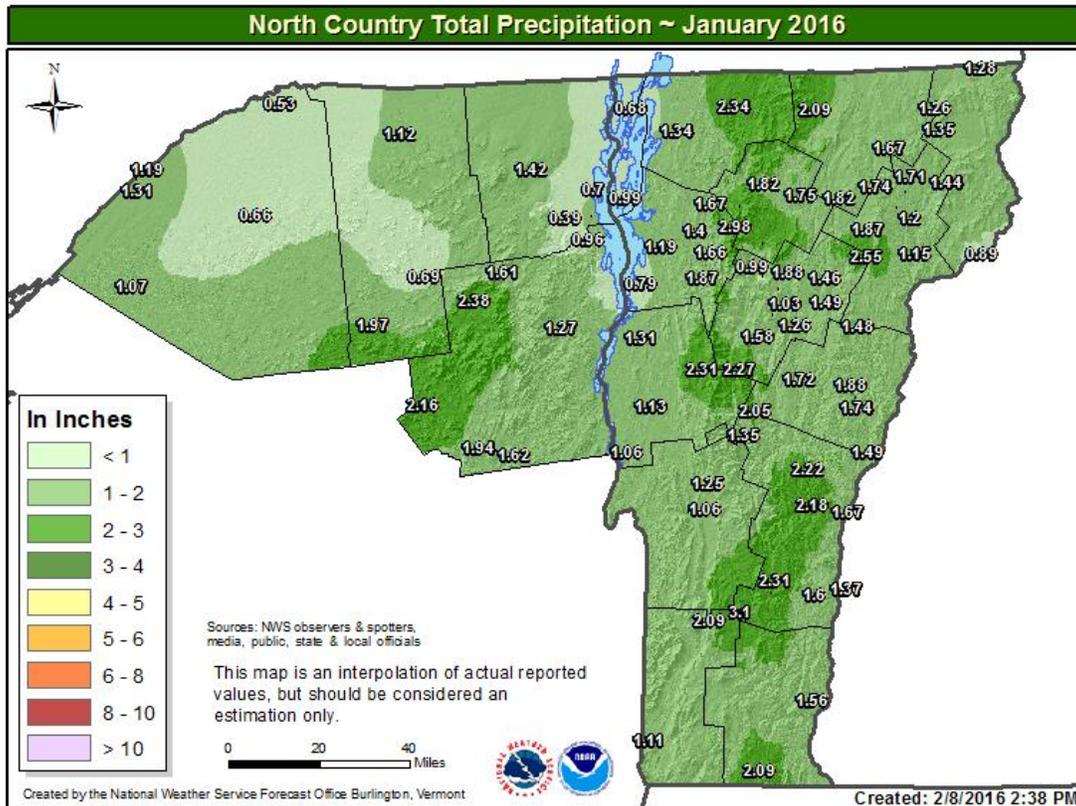


Figure 4

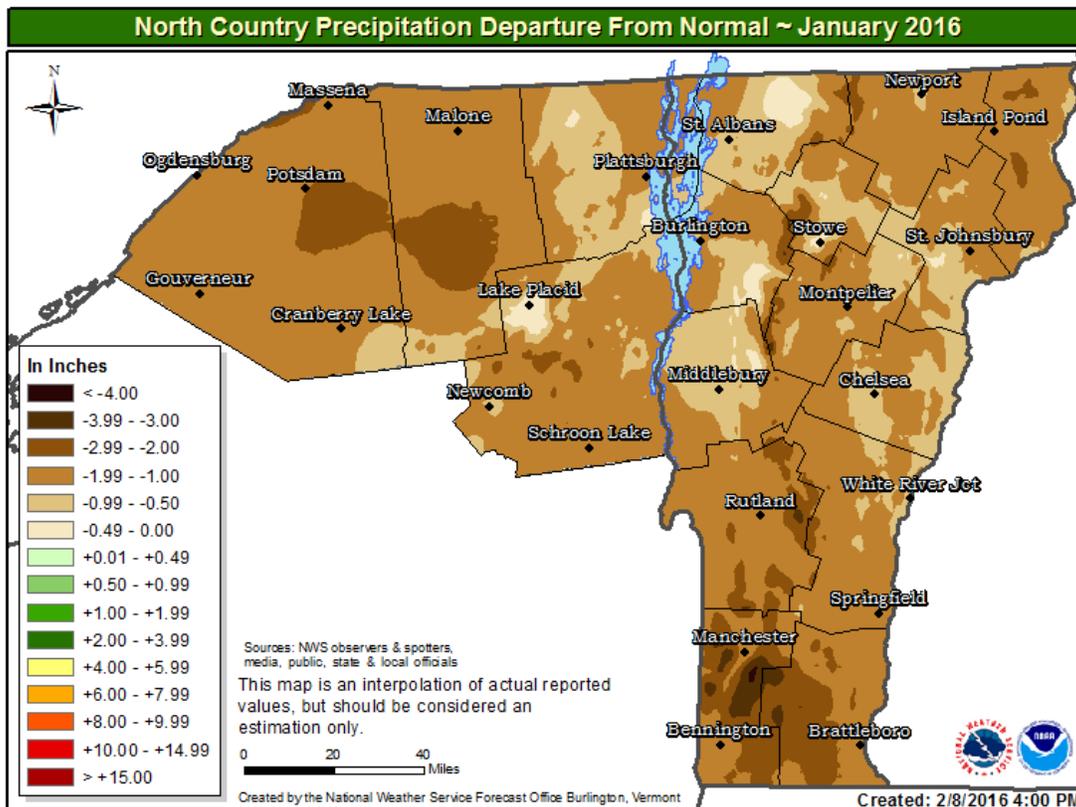


Figure 5