

MONTHLY REPORT OF HYDROLOGIC CONDITIONS

REPORT FOR:
MONTH YEAR
May 2014

TO: Hydrologic Information Center, W/OS31
NOAA's National Weather Service
1325 East West Highway
Silver Spring, MD 20910-3283

SIGNATURE
/s/ John M. Goff, METEOROLOGIST WFO BTV

DATE
June 17, 2014

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.

May 2014 was fairly normal from a climatological perspective, with departures of temperature and precipitation running within 1 standard deviation of the 30-year monthly mean for most stations (see table 1 below). Generally progressive flow lead to frequent frontal passages with light to moderate rainfall, keeping soil moisture on the high side. That said, 3 minor flooding episodes were observed across the area.

As runoff from snowmelt lessened Lake Champlain continued a gradual decline, falling below its 100 foot flood stage on the 9th with only minor impacts observed.

The heaviest precipitation event of the month then occurred during the 16th and 17th, when widespread totals of 0.75 to 1.50 inches were observed across the HSA (see Figure 1 below). Most rivers handled the resultant runoff quite well with only modest within bank rises noted. However, residual snowmelt from the higher elevations added to the runoff in portions of the Adirondack Mountains, leading to sharper rises in several watersheds. Most affected was the Ausable River basin, where the gage on the East Branch of the Ausable (ASFN6) climbed sharply into minor flood on the 17th (see table 2).

The last noteworthy event occurred on the 27th when an isolated supercell thunderstorm produced a narrow swath of heavy rain, hail and strong winds to portions of Addison and northern Rutland Counties. The storm passed directly over the city of Rutland, which experienced poor drainage flooding of basements, streets and businesses in several locations.

Location	ID	Total	Normal	Departure	% of Normal
Burlington, VT	KBTV	3.94	3.45	+0.49	114
Montpelier, VT	KMPV	3.14	3.37	-0.23	93
Springfield, VT	KVSF	4.12	3.74	+0.38	110
St. Johnsbury, VT	K1V4	4.62	3.36	+1.26	138
Morrisville, VT	KMVL	3.55	3.27	+0.28	109
Rutland, VT	KRUT	3.13	n/a	n/a	n/a
Plattburgh, NY	KPBG	3.89	n/a	n/a	n/a
Saranac Lake, NY	KSLK	3.85	3.44	+0.41	112
Massena, NY	KMSS	2.11	3.07	-0.96	69

Table 1. Monthly precipitation totals and departures for selected automated surface observing sites (ASOS) for May 2014 (NWS Burlington, VT HSA)

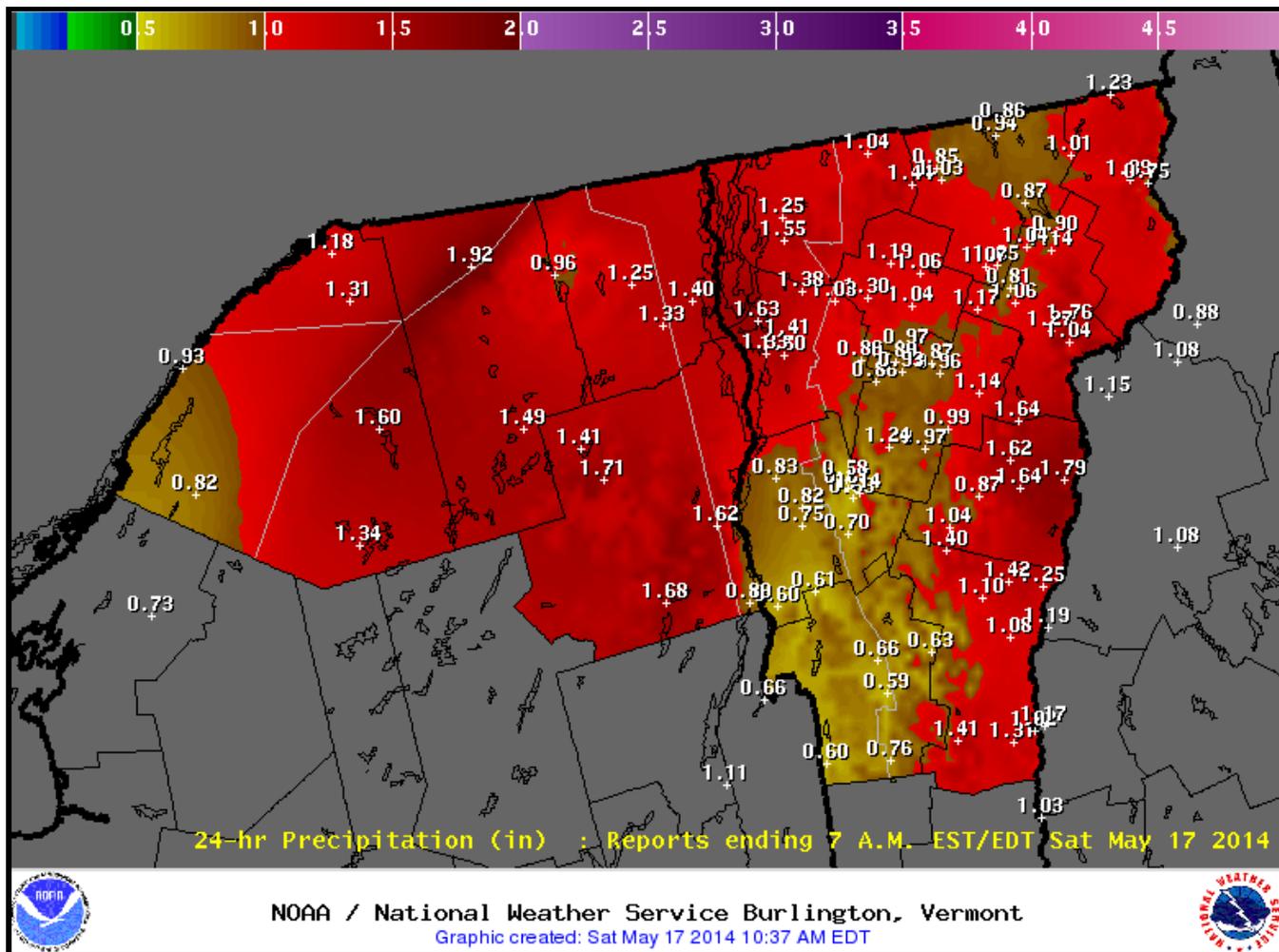


Figure 1. 24 hour precipitation totals across the NWS BTV HSA ending 7 A.M. EDT May 17, 2014 showing the heavy rainfall across the Adirondack Mountains which, along with residual snowmelt pushed the East Branch of the Ausable River into flood.

Location	ID	Date	Time (UTC)	Crest Stage (ft)	Flood Stage (ft)
EAST BRANCH OF AUSABLE RIVER AT AUSABLE FORKS, NY	ASFN6	05/17/14	1300	8.90	7.0

Table 2. Significant river crests for May 2014 (NWS Burlington, VT HSA)