

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 JUNE 2014	
MONTHLY REPORT OF HYDROLOGIC CONDITIONS		SIGNATURE /s/ Kimberly McMahon, GF WFO BTV	
TO: Hydrologic Information Center, W/OS31 NOAA's National Weather Service 1325 East West Highway Silver Spring, MD 20910-3283		DATE 07/15/2014	

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.

Most of June 2014 was a quiet month, with the exception of two notable heavy rain events mid-month and towards the end of June. There were a total of four days when the Burlington Hydrologic Service Area (HSA) saw one inch or more of rainfall throughout the month; but overall about two-thirds of the month the Burlington HSA received a trace or more of rainfall. Northern New York and the Champlain Valley received above normal rainfall throughout the month – some areas in excess of two inches (Figure 1)- but mainly from the heavy rainfall events of June 11th-14th and June 24th-25th. Meanwhile, most of Vermont, running along the Green Mountains and westward were below normal, having received between two and four inches of rainfall for the month (Figures 1 & 2).

The Northeast United States experienced slightly anomalous mid to upper level troughing throughout the month of June (figure 3). The first heavy rainfall event occurred June 11th through 14th, as multiple systems affected the region (Figures 4 & 5) for a prolonged rainfall resulting in over three inches of rainfall in areas such as the Adirondacks (Figures 6-8). Main Stem Rivers rose generally one to three feet, with the East Branch of the Ausable River reaching Action Stage of six feet (Figure 9), but no flooding occurred.

During the second heavy rain event, June 24-25, a quasi-stationary front (Figure 10) had several waves of surface low pressure move over the Northeast, producing thunderstorms and heavy rainfall with Saranac Lake receiving 3.79 inches of rainfall over the two days (Figure 13). Most of the HSA received over an inch (Figures 11 & 12) with main stem rivers rising one to three feet again. But the mostly dry period between the last heavy rainfall and this late month rainfall allowed rivers to remain below flood.

The abnormally wet June across the Champlain Valley and Northern New York has resulted in Monthly Streamflow of 90% or more, while Vermont remained near normal (Figure 14).

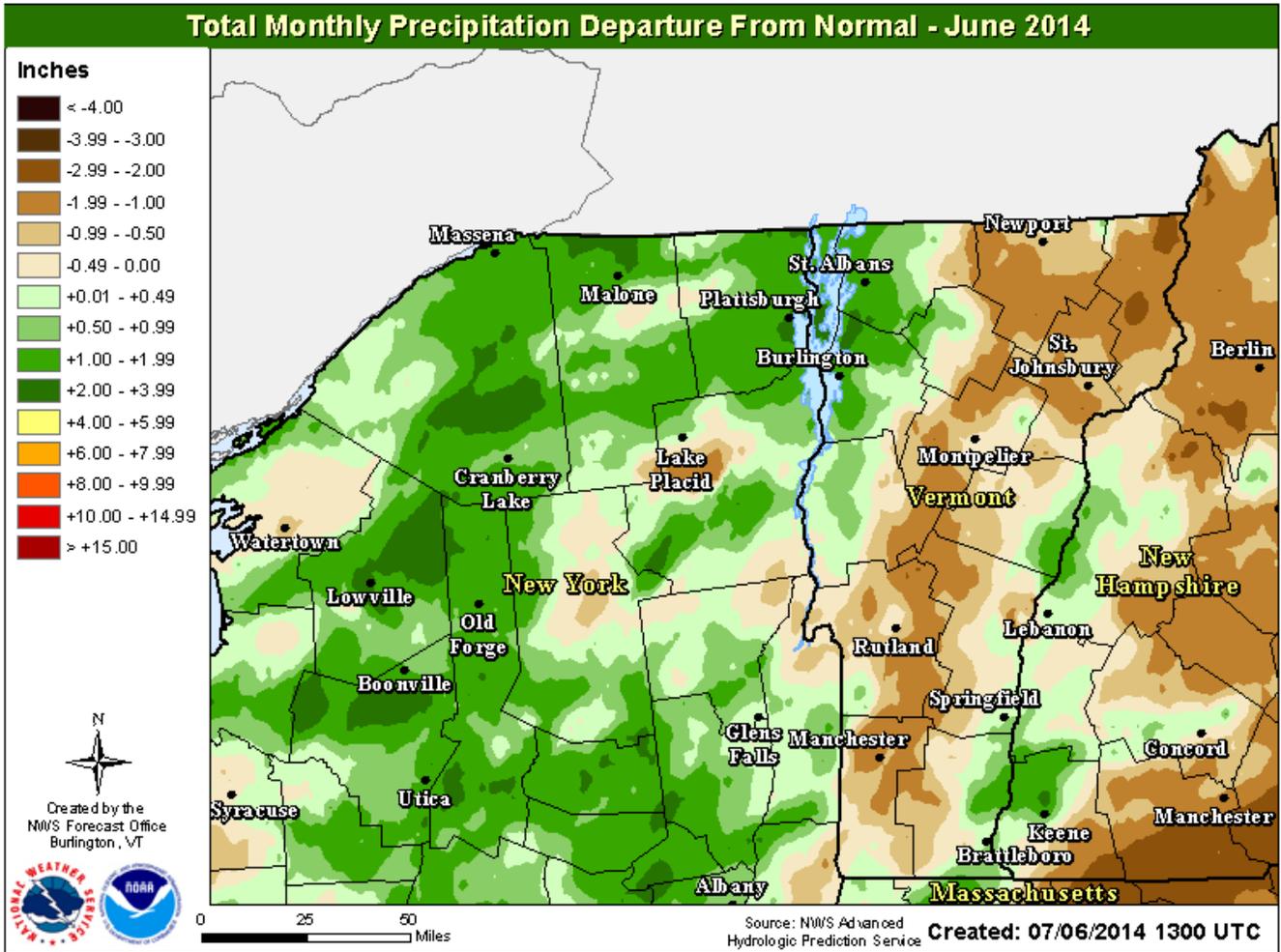


Figure 1. June 2014 Monthly Departure from Normal Precipitation.

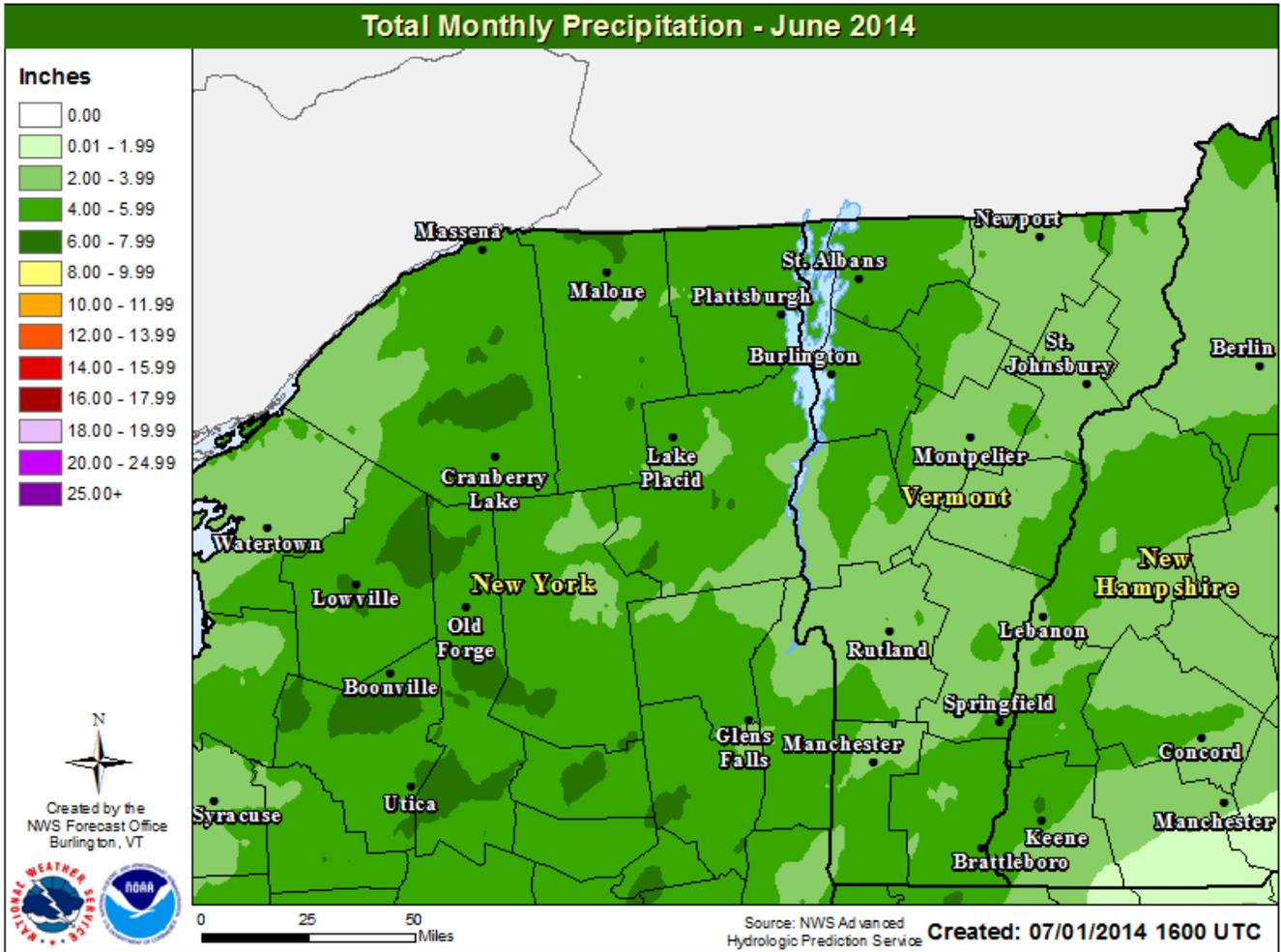


Figure 2. June 2014 Monthly Precipitation Total.

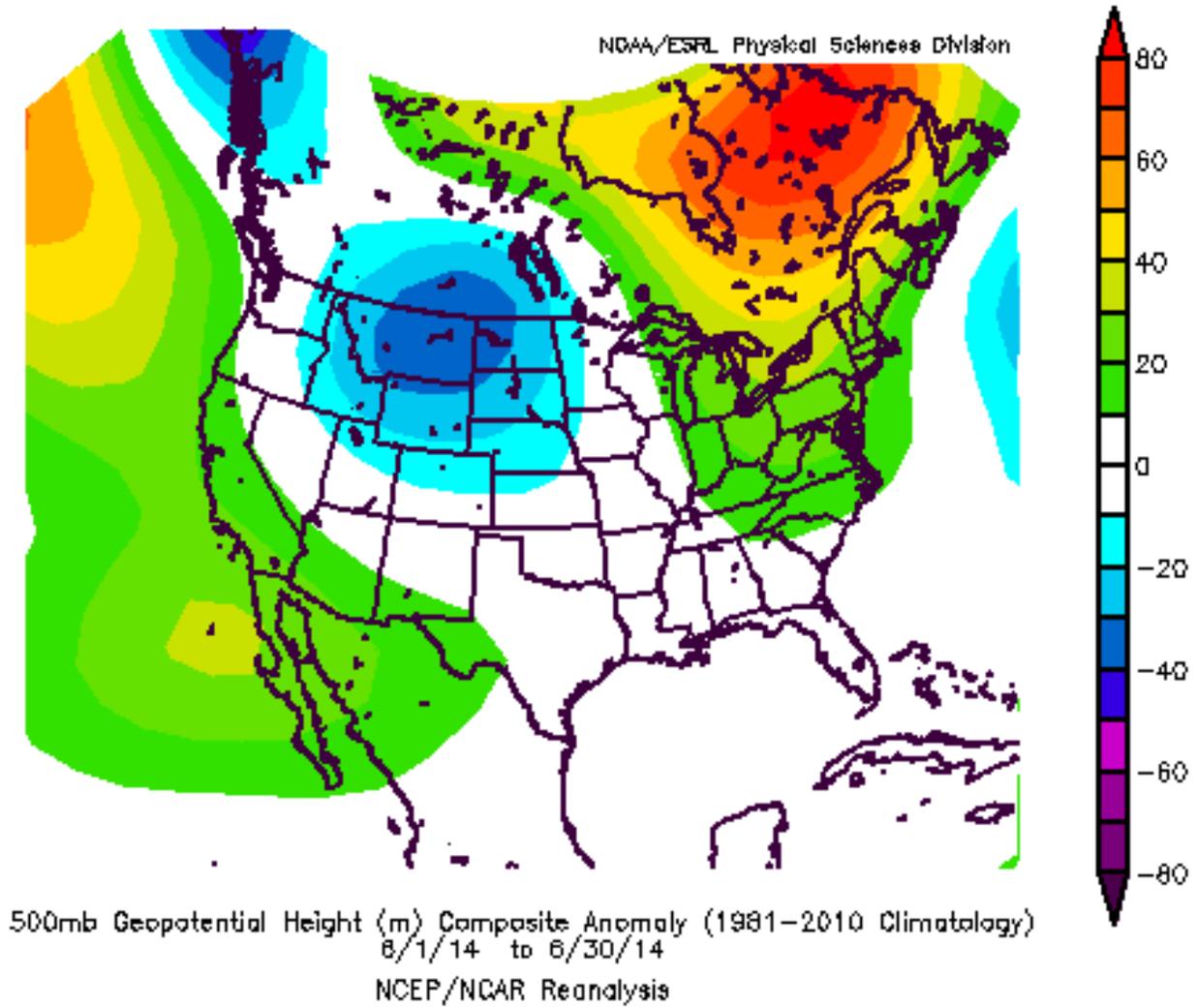


Figure 3. NCEP/NCAR Reanalysis of 500mb height anomalies for June 2014.

Significant Precipitation Events across the NWS Burlington HSA

June 11-13:

Figure 6. 24 hour rainfall ending 7AM Thursday June 12, 2014.

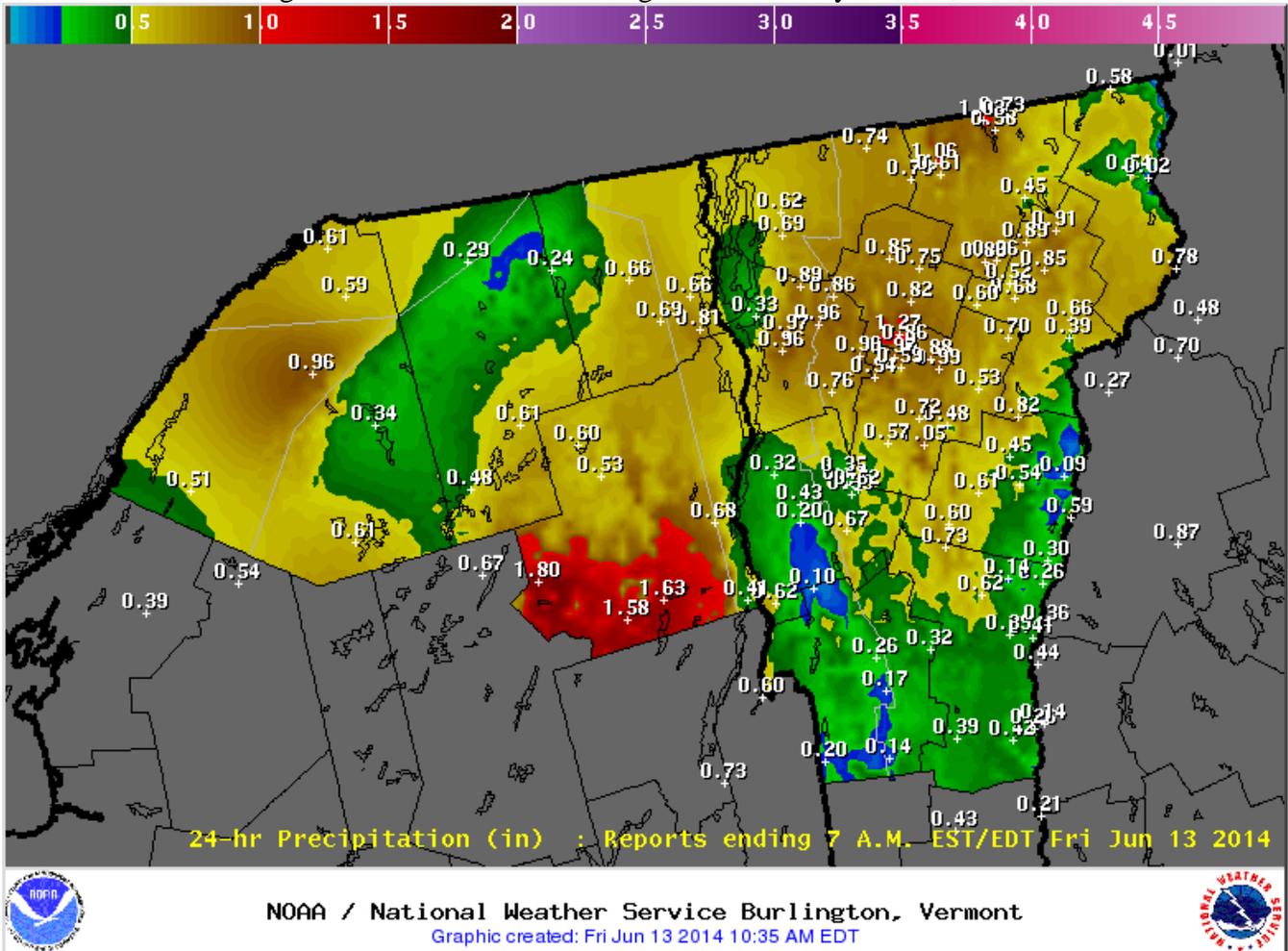


Figure 7. 24 hour rainfall ending 7AM Friday June 13, 2014

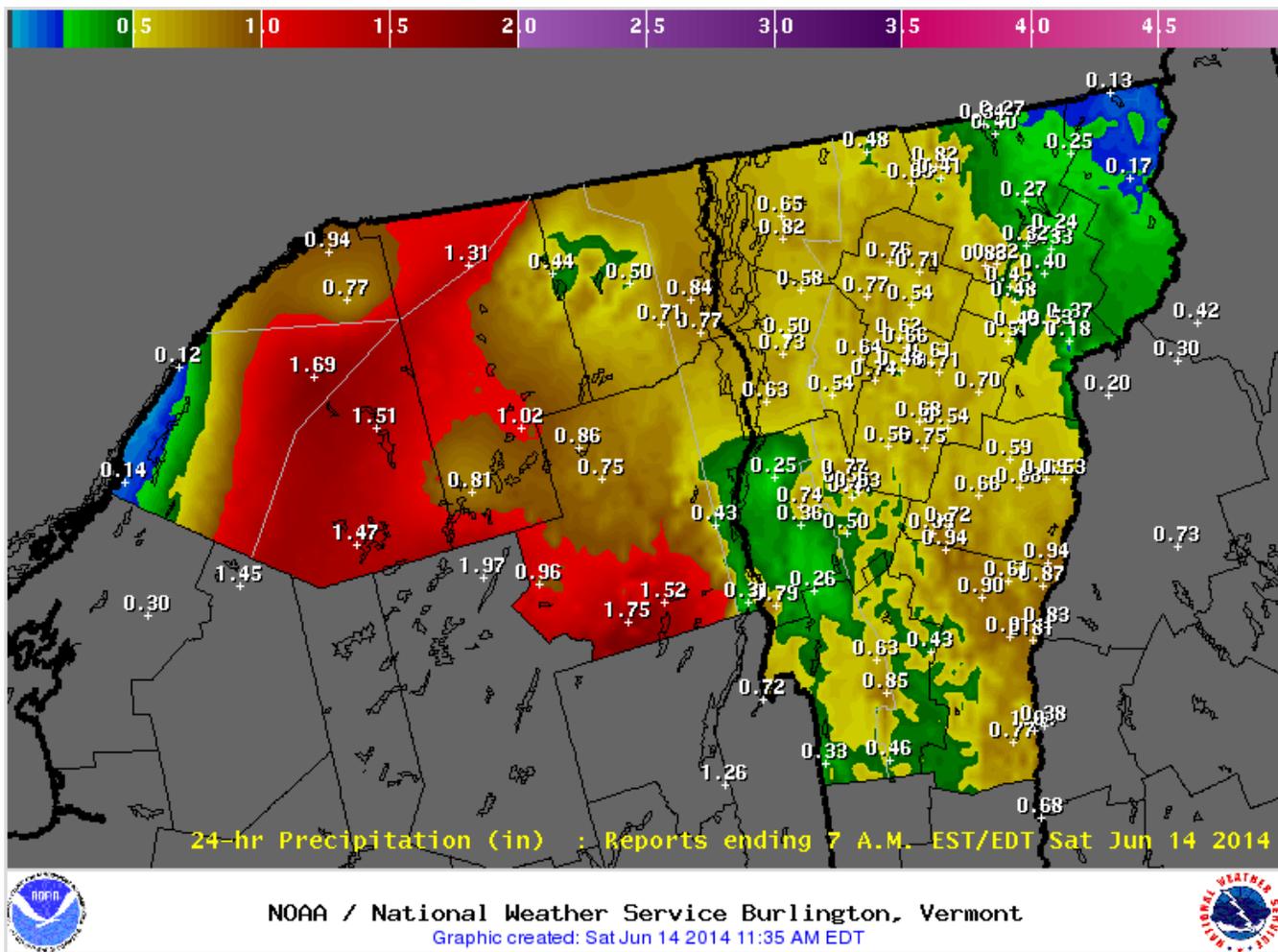


Figure 8. 24 hour rainfall ending 7AM Saturday June 14, 2014

**Flood Products Issued June 2014
WFO Burlington**

Product	Location (Counties/State)	Start (UTC)	End (UTC)
River Flood Warning	East Branch Ausable River @ Au Sable Forks/NY	13/1320	14/0602

Table 1. Only one Flood Warning was issued for NWS Burlington's HSA for June 2014.

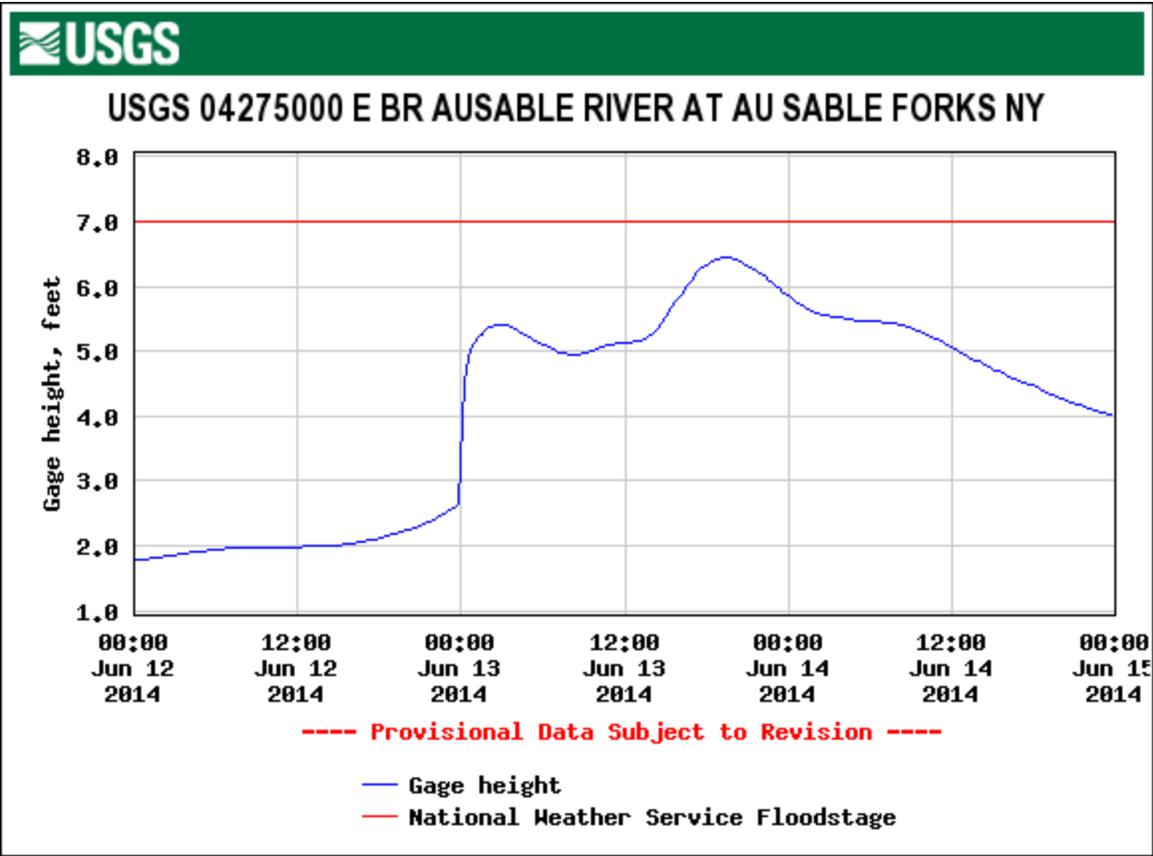
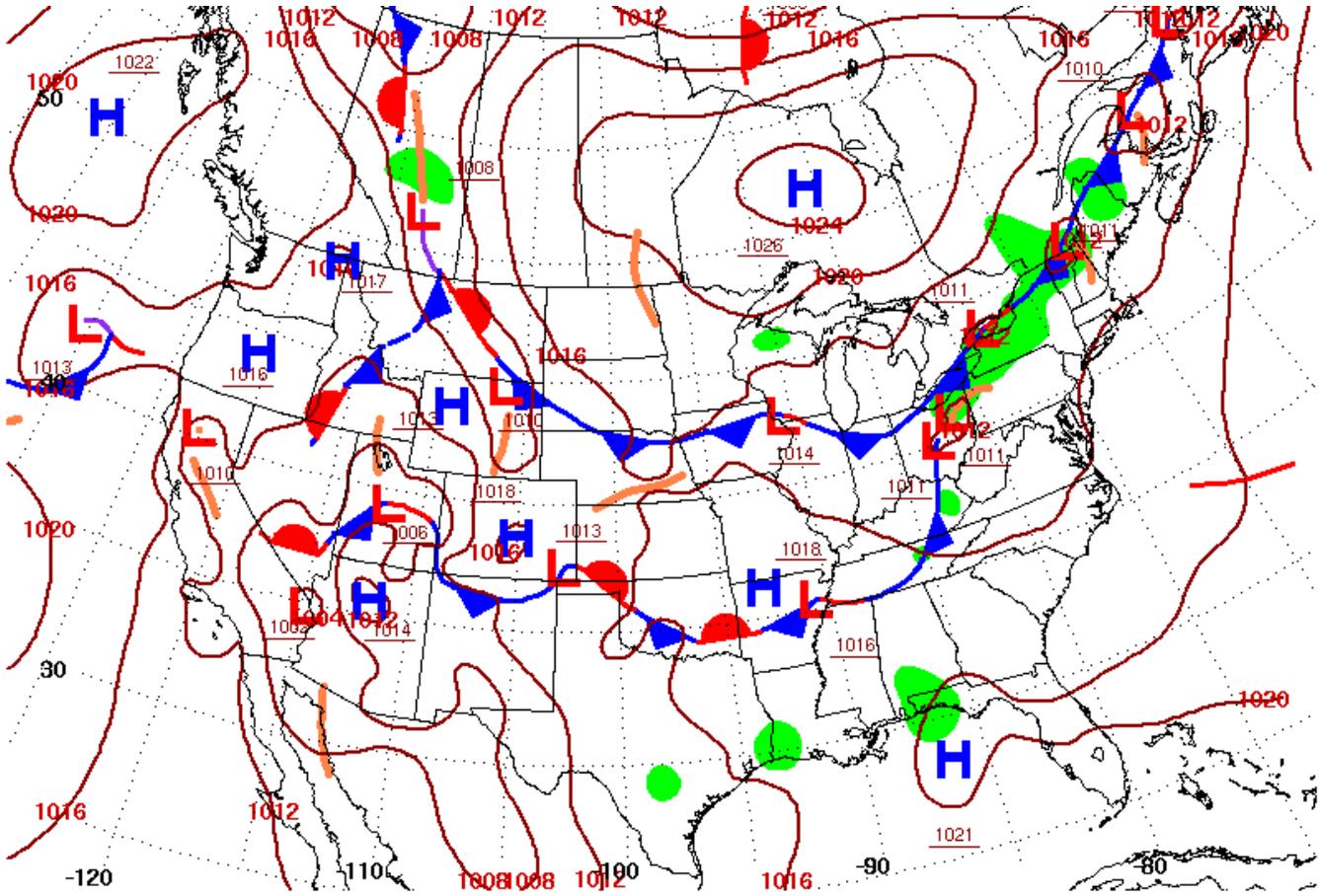


Figure 9. East Branch of Ausable River increases significantly, reaching Action Stage from heavy rainfall that occurred. No flooding occurred.



Surface Weather Map at 7:00 A.M. E.S.T.
 Figure 10. June 25 2014 Surface Map

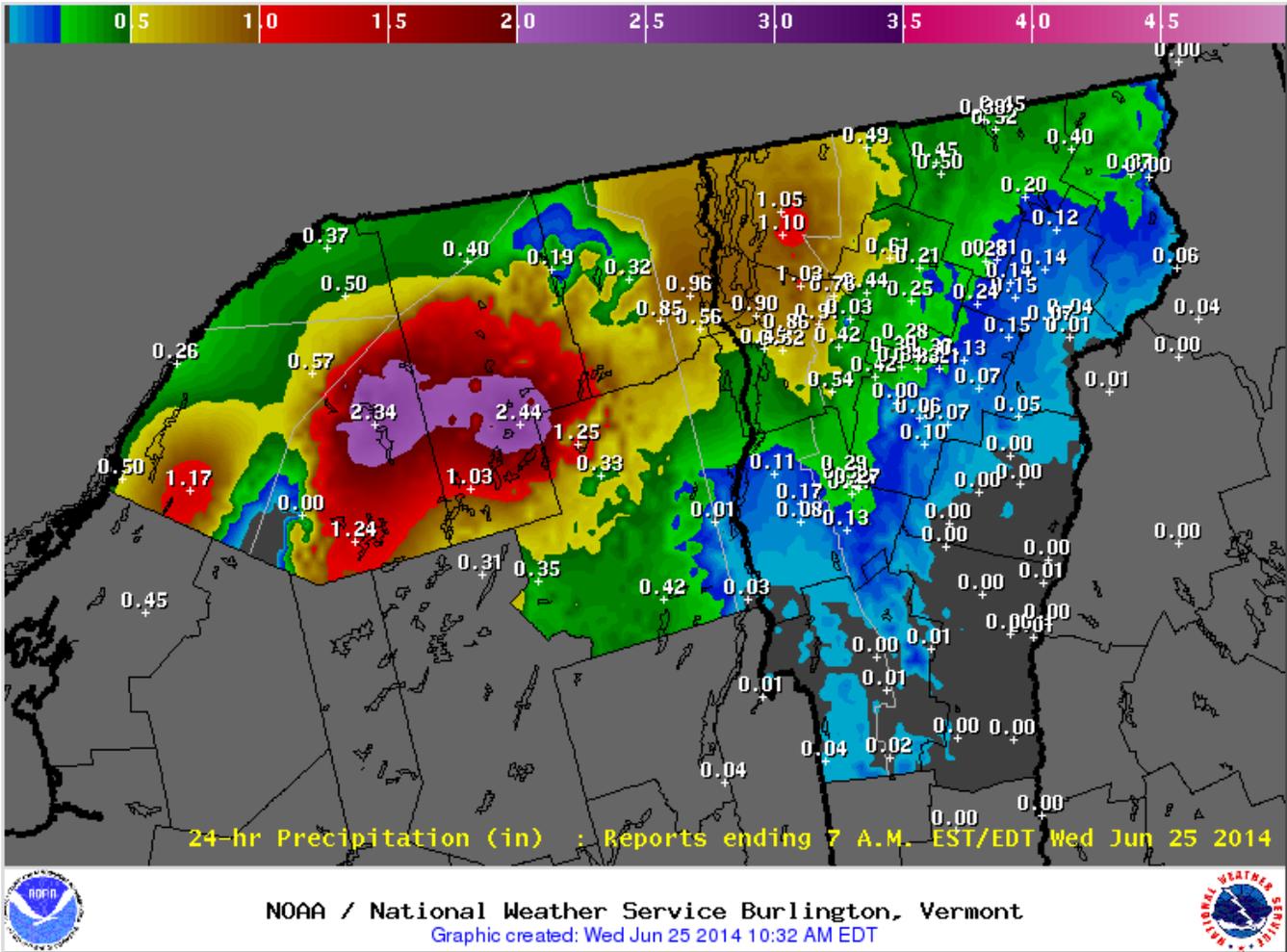


Figure 11. 24 hours Rainfall ending 7AM Wednesday June 25, 2014

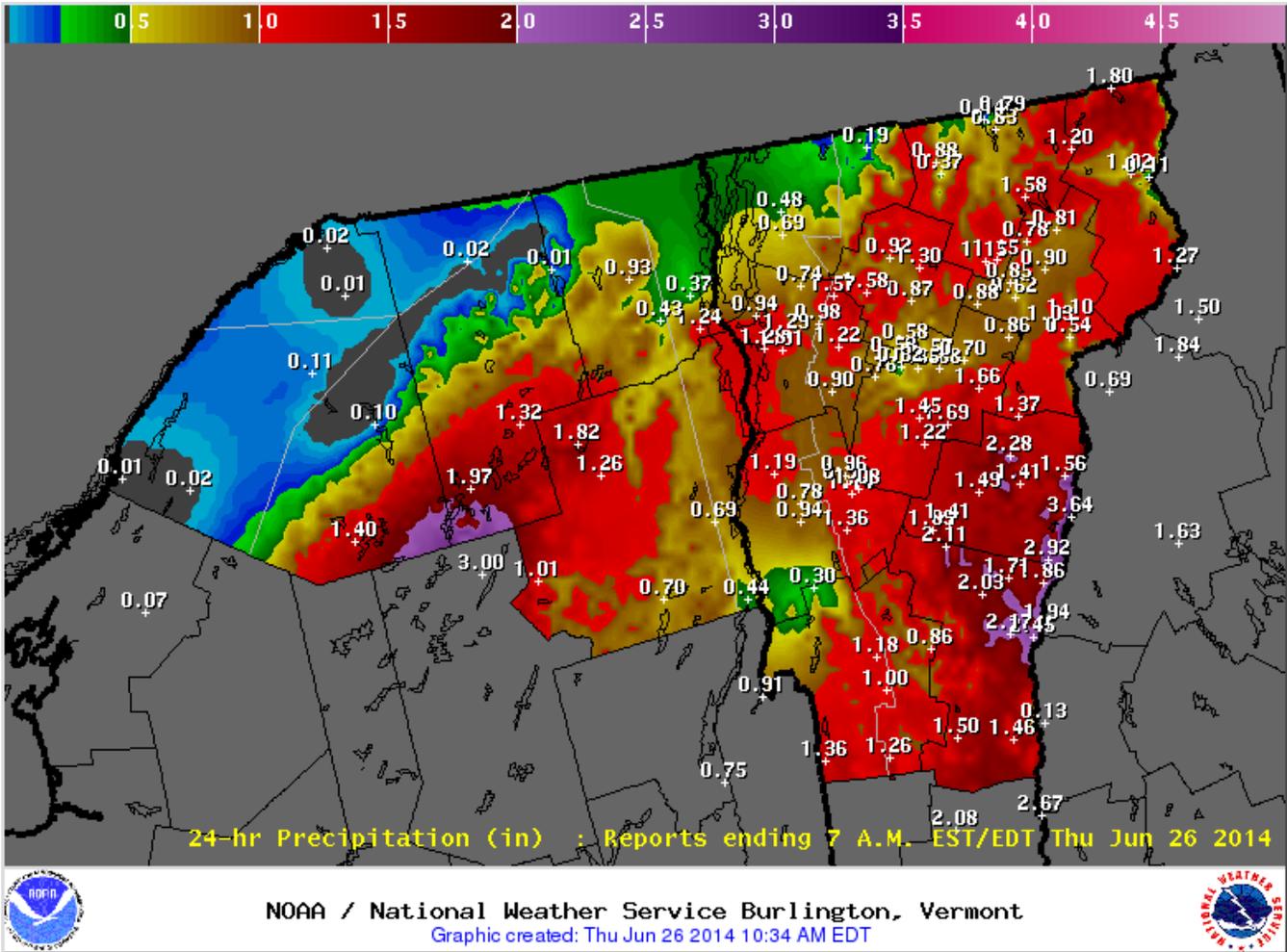


Figure 12. 24 hours Rainfall ending 7AM Thursday June 26, 2014

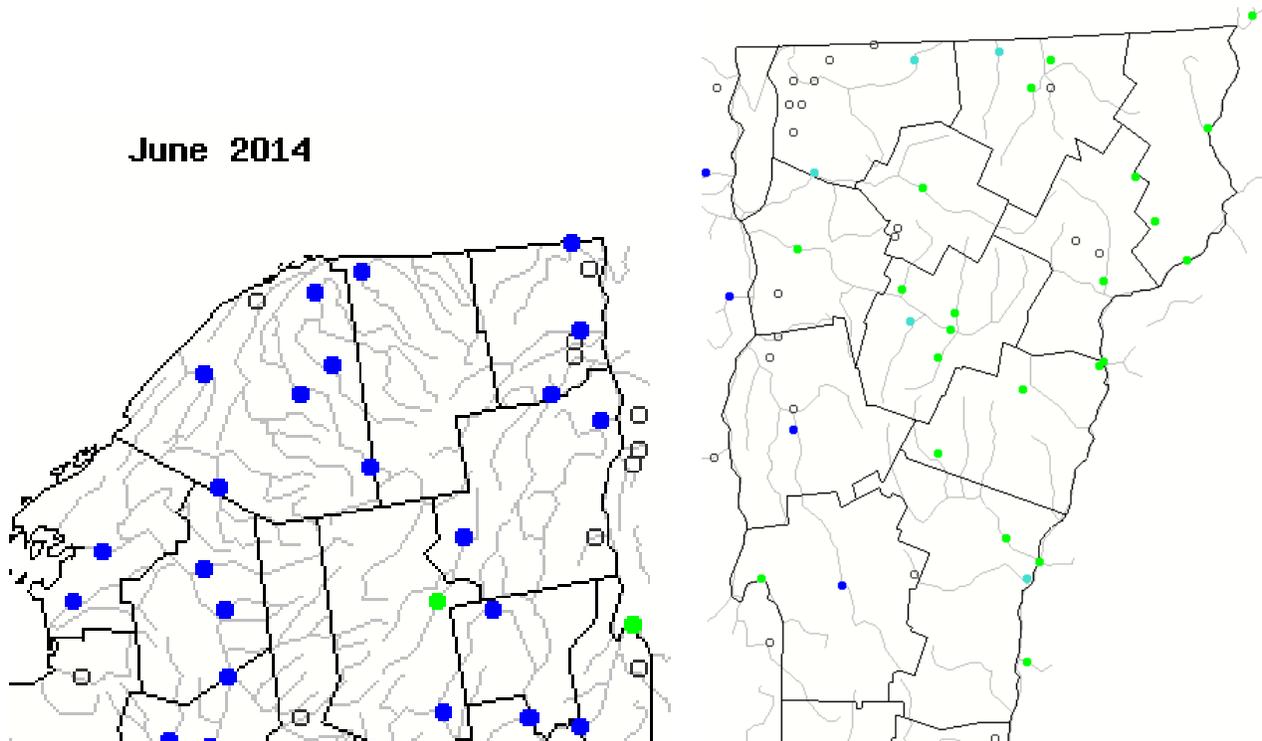
PUBLIC INFORMATION STATEMENT
 SPOTTER REPORTS
 NATIONAL WEATHER SERVICE BURLINGTON VT
 608 PM EDT WED JUN 25 2014

THE FOLLOWING ARE UNOFFICIAL OBSERVATIONS TAKEN DURING THE PAST 2 HOURS FOR THE STORM THAT HAS BEEN AFFECTING OUR REGION. APPRECIATION IS EXTENDED TO HIGHWAY DEPARTMENTS...COOPERATIVE AND COCORAHS OBSERVERS...SKYWARN SPOTTERS AND MEDIA FOR THESE REPORTS. THIS SUMMARY IS ALSO AVAILABLE ON OUR HOME PAGE AT WEATHER.GOV/BURLINGTON

*****24 HOUR RAINFALL*****

LOCATION	24 HOUR RAINFALL /INCHES/	TIME/DATE OF MEASUREMENT	COMMENTS
NEW YORK			
...CLINTON COUNTY...			
PLATTSBURGH INTL AIR	1.42	606 PM 6/25	ASOS
...FRANKLIN COUNTY...			
SARANAC LAKE ARPT	3.79	607 PM 6/25	ASOS

Figure 13. Excerpt of Public Information Statement showing high precipitation amounts for Northern New York.



Explanation - Percentile classes							
							
Low	<10	10-24	25-75	76-90	>90	High	Not-ranked
	Much below normal	Below normal	Normal	Above normal	Much above normal		

Figure 14. Monthly Streamflow for the NWS Burlington HSA (Northern New York & Central and Northern Vermont) for June 2014.