NWS Form E-5 U.S. DEPARTMENT OF COMMERCE (04-2006) NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (PRES. BY NWS Instruction 10-924) NATIONAL WEATHER SERVICE		HYDROLOGIC SERVICE AREA (HSA)  Burlington VT		
MONTHL	Y REPORT OF HYDROLOGIC CONDITIONS	REPORT FOR: MONTH June	YEAR 2008	
TO:	Hydrologic Information Center, W/OS31 NOAA's National Weather Service 1325 East West Highway Silver Spring, MD 20910-3283	SIGNATURE /s/ Jessica A. N DATE	Neiles, Meteorologist WFO BTV  Aug 12, 2008	
	oding occurs, include miscellaneous river conditions below the small conditions, snow cover, droughts, and hydrologic products issued (NV	,	· · · · · · · · · · · · · · · · · · ·	
An X i	nside this box indicates that no flooding occurred within this hydr	ologic service a	rea.	

The month of June was very active for WFO Burlington, VT. None of the rivers flooded in the Burlington, VT CWA, although we saw significant crests below flood stage during the heavier rainfall events throughout the month. The first time the rivers rose was following the June  $14^{th}$  thunderstorm event across the forecast area and the second time was following the heavy rain three day event at the end of the month, June  $27^{th} - 29^{th}$ .

On June 10<sup>th</sup> a significant severe weather outbreak occurred across northern New York as well as central and northern Vermont. This outbreak featured two major rounds of severe weather, which produced over fifty severe weather reports across the forecast area. Very heavy rain fell with some of these thunderstorms. Rainfall totals across the forecast area ranged from a quarter of an inch to more than three inches of rain in isolated areas.

On June 14<sup>th</sup> thunderstorms produced heavy rain over west central and southwest Vermont. The storms moved slowly, and in some cases several storms moved repeatedly over the same area. Widespread rainfall amounts of one to three inches in just a few hours were reported, with isolated amounts in excess of 5 inches. The excessive rainfall produced flash flooding in Addison and Rutland counties. The city of Rutland and the towns of Ripton and East Middlebury were particularly hard hit. In Rutland, there was extensive street flooding as stormwater drainage was quickly overwhelmed. Several businesses and state offices were impacted by basement flooding. In Ripton and East Middlebury, the heavy rainfall and steep terrain combined to wash out several roads. Culverts were overwhelmed and dirt roads were severely eroded. Outside the flash flood areas across the remainder of the forecast area rainfall totals ranged from a quarter of an inch to more than two and a half inches of rain in isolated areas.

Conditions for strong storms and heavy rains persisted into the following week. Showers and thunderstorms the afternoon of Sunday June 15<sup>th</sup> remained below severe limits and did not produce flooding. Stronger storms on Monday June 16<sup>th</sup> produced up to 1 inch hail. These storms also produced heavy rainfall, but were moving more quickly and no flooding resulted. On Tuesday June 17<sup>th</sup> strong thunderstorms produced pea sized hail and heavy rain in the Trout River basin in northwest Vermont. Flash flooding from the excessive rainfall resulted in the towns of Richford and Montgomery.

An upper level low pressure system, with associated shortwave energy brought showers and thunderstorms to the forecast area. Up to an inch of precipitation fell across isolated areas. A warm

front crossed the forecast area on June 28<sup>th</sup> bringing widespread showers with embedded thunderstorms to the area. Isolated areas received upwards of three inches of rainfall, while most of the forecast area had a quarter of an inch to an inch of rainfall. A flash flood watch was issued for additional rainfall forecasted for June 29<sup>th</sup> as associated cold front crossed the region. The rainfall was more scattered then the previous day and most areas had around a quarter of an inch to an inch of rain. Gradual rises were observed on area rivers, and crests were higher than earlier in the month because they were already running fairly high prior to the event.

## Non-Routine Hydrologic Products June 2008 WFO Burlington VT

PIL	Time (UTC)	Date	Description	
FLS	1837	06/10/08	URBAN AND SMALL STREAM FLOOD ADVISORY FOR CHITTENDEN COUNTY VERMONT	
FLS	2034	06/10/08	EXP. FLOOD ADVISORY FOR CHITTENDEN COUNTY VERMONT	
FLS	2032	06/14/08	URBAN AND SMALL STREAM FLOOD ADVISORY FOR CLINTON COUNTY NEW YORK	
FLS	2345	06/14/08	URBAN AND SMALL STREAM FLOOD ADVISORY FOR RUTLAND COUNTY VERMONT	
FFA	0011	06/15/08	FLASH FLOOD WATCH FOR RUTLAND AND WINDSOR COUNTIES VERMONT	
FFW	0029	06/15/08	FLASH FLOOD WARNING FOR RUTLAND AND WESTERN WINDSOR COUNTIES VERMONT	
FLS	0043	06/15/08	CAN. FLOOD ADVISORY FOR RUTLAND COUNTY VERMONT	
FFW	0103	06/15/08	FLASH FLOOD WARNING FOR ADDISON COUNTY VERMONT	
FFW	0148	06/15/08	EXT. FLASH FLOOD WARNING FOR EASTERN ADDISON COUNTY VERMONT	
FFS	0220	06/15/08	CON. FLASH FLOOD WARNING FOR RUTLAND AND WINDSOR COUNTIES VERMONT	
FFS	0227	06/15/08	CON. FLASH FLOOD WARNING FOR EASTERN ADDISON COUNTY VERMONT	
FFW	0245	06/15/08	FLASH FLOOD WARNING FOR WESTERN ORANGE, WASHINGTON, AND NORTHWESTERN WINDSOR COUNTIES VERMONT	
FFW	0247	06/15/08	EXT. FLASH FLOOD WARNING FOR WESTERN ORANGE, WASHINGTON, AND NORTHWESTERN WINDSOR COUNTIES VERMONT	
FFS	0414	06/15/08	CON. FLASH FLOOD WARNING FOR WESTERN ORANGE, WASHINGTON, AND NORTHWESTERN WINDSOR COUNTIES VERMONT	
FFA	0431	06/15/08	CAN. FLASH FLOOD WATCH FOR RUTLAND AND WINDSOR COUNTIES VERMONT	

			CON. FLASH FLOOD WARNING FOR RUTLAND
FFS	0509	06/15/08	AND WESTERN WINDSOR COUNTIES VERMONT
FFS	0511	06/15/08	CON. FLASH FLOOD WARNING FOR EASTERN ADDISON COUNTY VERMONT
FFS	0512	06/15/08	CON. FLASH FLOOD WARNING FOR WESTERN ORANGE, WASHINGTON, AND NORTHWESTERN WINDSOR COUNTIES VERMONT
FFS	0628	06/15/08	EXP. FLASH FLOOD WARNING FOR RUTLAND AND WESTERN WINDSOR COUNTIES VERMONT
FFS	0654	06/15/08	EXP. FLASH FLOOD WARNING FOR EASTERN ADDISON COUNTY VERMONT
FFS	0738	06/15/08	EXP. FLASH FLOOD WARNING FOR WESTERN ORANGE, WASHINGTON, AND NORTHWESTERN WINDSOR COUNTIES VERMONT
FLS	0211	06/23/08	FLOOD ADVISORY FOR LAMOILLE COUNTY VERMONT
FLS	0511	06/23/08	EXP. FLOOD ADVISORY FOR LAMOILLE COUNTY VERMONT
FLS	0031	06/27/08	URBAN AND SMALL STREAM FLOOD ADVISORY FOR WEST CENTRAL ST. LAWRENCE COUNTY NEW YORK
FLS	0224	06/27/08	CAN. URBAN AND SMALL STREAM FLOOD ADVISORY FOR WEST CENTRAL ST. LAWRENCE COUNTY NEW YORK
FLS	2113	06/28/08	URBAN AND SMALL STREAM FLOOD ADVISORY FOR RUTLAND AND WESTERN WINDSOR COUNTIES VERMONT
FFW	2154	06/28/08	FLASH FLOOD WARNING FOR RUTLAND AND WESTERN WINDSOR COUNTIES VERMONT
FFS	2256	06/28/08	CON. FLASH FLOOD WARNING FOR RUTLAND AND WESTERN WINDSOR COUNTIES VERMONT
FFS	0023	06/29/08	CON. FLASH FLOOD WARNING FOR RUTLAND AND WESTERN WINDSOR COUNTIES VERMONT
FFW	0406	06/29/08	FLASH FLOOD WARNING FOR SOUTHERN RUTLAND AND WEST CENTRAL WINDSOR COUNTIES VERMONT
FFS	0621	06/29/08	CAN. FLASH FLOOD WARNING FOR SOUTHERN RUTLAND AND WEST CENTRAL WINDSOR COUNTIES VERMONT
FFA	0745	06/29/08	FLASH FLOOD WATCH FOR EASTERN CLINTON, ESSEX, AND WESTERN CLINTON COUNTIES NEW YORK AND CALEDONIA, ADDISON, CHITTENDEN, FRANKLIN, RUTLAND, ESSEX, GRAND ISLE, LAMOILLE, ORANGE, ORLEANS, WASHINGTON AND WINDSOR COUNTIES VERMONT
FFA	1935	06/29/08	CON. FLASH FLOOD WATCH FOR EASTERN

			CLINTON, ESSEX, AND WESTERN CLINTON COUNTIES NEW YORK AND CALEDONIA, ADDISON, CHITTENDEN, FRANKLIN, RUTLAND, ESSEX, GRAND ISLE, LAMOILLE,
			ORANGE, ORLEANS, WASHINGTON AND WINDSOR COUNTIES VERMONT
FFA	0320	06/30/08	CAN. FLASH FLOOD WATCH FOR EASTERN CLINTON, ESSEX, AND WESTERN CLINTON COUNTIES NEW YORK AND CALEDONIA, ADDISON, CHITTENDEN, FRANKLIN, RUTLAND, ESSEX, GRAND ISLE, LAMOILLE, ORANGE, ORLEANS, WASHINGTON AND WINDSOR COUNTIES VERMONT

## Significant River Crests June 2008 WFO Burlington VT

Location	ID	Date	Time (UTC)	Crest Stage (ft)	Flood Stage (ft)
Missisquoi River at East Berkshire VT	EBKV1	06/18/08	00:15	8.83	13.0
Missisquoi River at North Troy VT	NTYV1	06/17/08	18:30	6.70	9.0
Otter Creek at Center Rutland VT	CENV1	06/15/08 06/29/08	7:30 16:45	5.52 7.64	8.0
Ottauquechee River at West Bridgewater VT	OTQV1	06/15/08 06/29/08	7:15 16:30	3.81 4.17	n/a