

The Great Vermont Flood of 1927, November 3-4

Number of fatalities: 84 (greatest from a natural disaster in state history)

Number of injuries: hundreds

Dollar damage: \$30-35 million (~ \$450 million adjusted for inflation 2012)

Significant occurrences: 1,285 bridges lost, Lieutenant Governor killed

The flood of November 3-4, 1927, stands as the greatest natural disaster in Vermont history. Devastation occurred throughout the state, with 1,285 bridges lost, countless homes and buildings destroyed, and hundreds of miles of roads and railroad tracks swept away. The flood waters claimed 84 lives, including that of the Vermont Lieutenant Governor at the time, S. Hollister Jackson. An account of the flooding across the state written by Luther B. Johnson, editor of the *Randolph Herald*, was published in 1928. His account was republished in 1996 by Greenhills Books. The following information is from that book and *The Vermont Weather Book*, by David Ludlum.

Rainfall during the month of October averaged about 150 percent of normal across the state. In northern and central sections, some stations received 200-300 percent of normal. Heavy rainfall periods during the month were separated enough so flooding did not occur. Instead, the rain caused the soil to become saturated. Combined with the lateness of the year and the fact that most vegetation was either in, or near, seasonal dormancy, any further rainfall would runoff directly into the rivers. This is exactly the scenario that led to Vermont's greatest disaster.

Rain began on the evening of November 2, as a cold front moved into the area from the west. Rainfall continued through the night with light amounts being recorded by the morning of the 3rd [Figure 1]. Rainfall intensity increased during the morning of the 3rd as a low pressure center moved up along the Northeast coast. This low had copious moisture associated with the remnants of a former tropical storm [Figure 2]. As the low moved up the coast, a strong southeast flow developed. This moisture-laden air was forced to rise as it encountered the Green Mountains, resulting in torrential downpours along and east of the Green Mountains. Rainfall amounts at the Weather Bureau station in Northfield totaled 1.65 inches from 4 am to 11 am on the 3rd, with 4.24 inches falling from 11 am to 8 pm. The total from late evening of the 2nd to late morning on the 4th was 8.71 inches [Table 1].

Devastation was distributed fairly evenly across the state, but the hardest hit area was most likely the Winooski Valley, where the majority of the population lived [Figure 3]. As a result of the statewide devastation caused by the flood, the U.S. Army Corps of Engineers built 3 flood retention reservoirs and accompanying dams in the Winooski River basin at East Barre, Wrightsville and Waterbury to try to mitigate the effects of further flooding. In 1949 the Union Village Reservoir and dam on the Ompompanoosuc River was completed. By the early 1960s, four other reservoirs/dams were completed in the Connecticut River basin. These were built on the Ottaquechee River at North Hartland, the Black River at North Springfield, and the West River at Ball Mountain (Jamaica) and Townshend. The historic flooding of Tropical Storm Irene brought additional devastation to the state in

August 2011, but given the massive extent of damage, the flood of 1927 still stands as the worst natural disaster in Vermont history.

For further information:

- [Vermont Historical Society - The Flood of '27](#)
- [University of Vermont Landscape Change Program - The 1927 Flood](#)
- [VT Digger - Then Again: Remembering the terror and losses of 1927 flood](#)
- [Vermont's 1927 Flood Footage: Vermont Historical Society](#)
- [Vermont Public Television - Vermont's Great Flood](#)
- [Monthly Weather Review - November 1927](#)

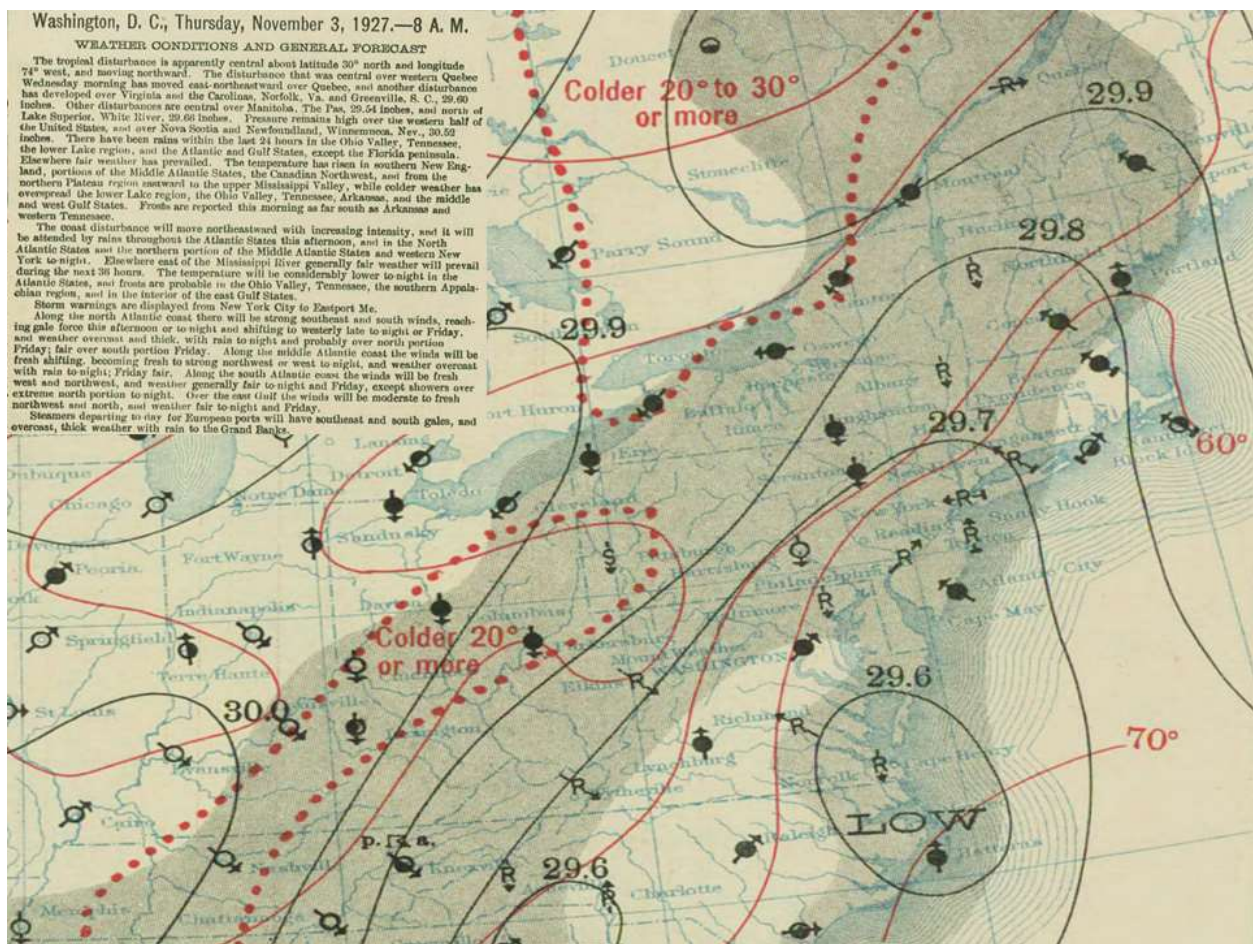


Figure 1: Weather Map Thu Nov 3, 1927 8 am

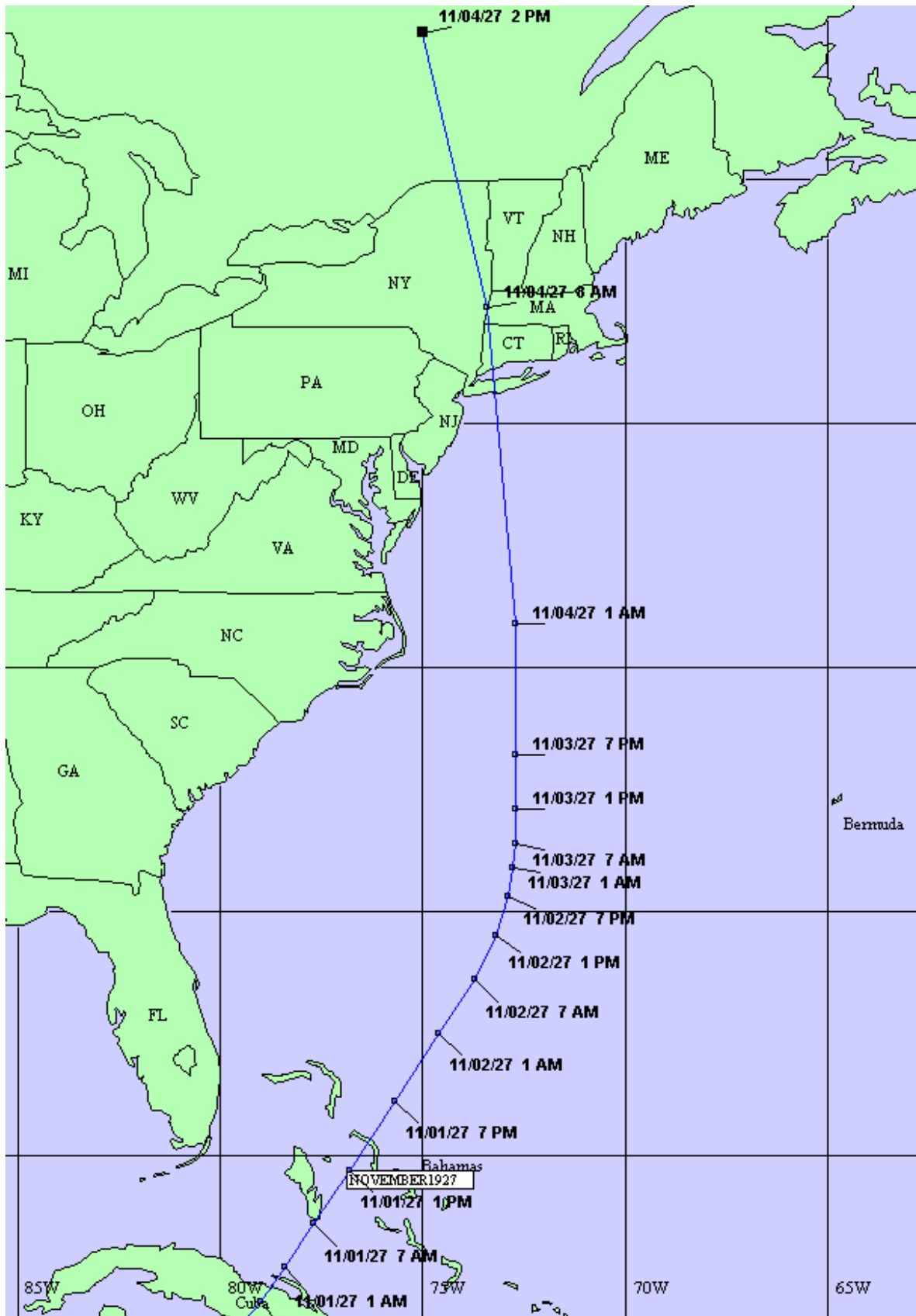


Figure 2: Track of tropical system November 1927

Northfield Hourly Rainfall												
	1	2	3	4	5	6	7	8	9	10	11	12
Nov. 2 pm										.02	.20	.01
Nov. 3 am	.03	.01	T	.04	.43	.29	.20	.14	.30	.15	.14	.45
Nov. 3 pm	.51	.54	.57	.62	.51	.31	.35	.38	.14	.35	.43	.24
Nov. 4 am	.18	.16	.21	.11	.11	.10	.04	.02	.14	.15	.03	

Table 1: Hourly rainfall data recorded at Weather Bureau station in Northfield, VT

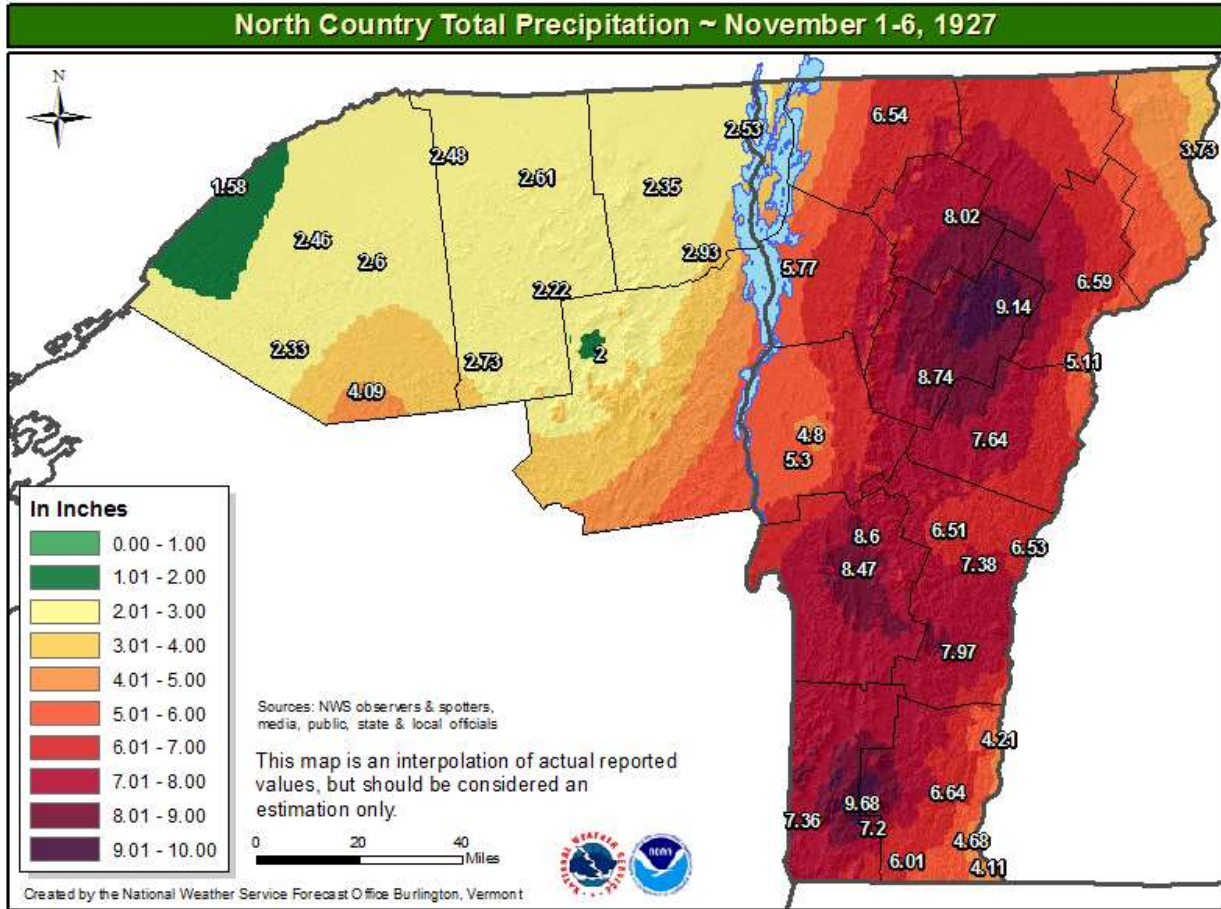


Figure 3: Total precipitation recorded from Nov 1-6, 1927

The following photos are from the UVM Landscape Change Program:



Otter Creek in Middlebury, VT



Covered bridge floating down river in St. Johnsbury, VT



Champlain Mills in Winooski, VT



East Barnet, VT after the Flood



East State St. Montpelier, VT



Destroyed railroad tracks Lyndon, VT