The 1998-1999 Drought In Vermont

SUMMARY OF THE 1998-1999 DROUGHT IN VERMONT

1 February, 2000

The drought which surfaced as precipitation deficits in the fall for 1998 intensified over the course of the summer of 1999. A summer recap has been provided by the National Weather Service at the Burlington International Airport.

SEPTEMBER RAINS...

After a summer of record-breaking temperatures and marked precipitation deficits, the rainfall received in September contributed significantly towards recharging the various components of our landscape, including surface moisture, streamflow and groundwater supplies. As the growing season drew near to a close, much of this moisture recharge was not be of benefit to this year's harvest, but should help to stabilize conditions for next year.

Most of the September's precipitation was associated with remnants of Hurricane Dennis (September 6-7), Tropical Storm Floyd (September 16-17) and several cold fronts that moved across the state during the fourth week. Tropical Storm Floyd was by far the largest contributor, producing rainfall totals of 3-6 inches (76.2-152.4 mm) in a 48-hour time frame. The official totals from the National Weather Service are as follows:

...TROPICAL SYSTEM **FLOYD** DEPOSITS HEAVY RAIN ACROSS THE NORTH COUNTRY...

THE FOLLOWING IS AN...UPDATED LISTING...OF **STORM TOTAL** REPORTS IN INCHES FROM A VARIETY OF WEATHER SPOTTERS... COOPERATIVE OBSERVERS...AND AUTOMATED RAIN DETECTION EQUIPMENT.

CHAMPLAIN VALLEY

Berkshire	3.50
Bolton	6.34
Burlington	4.42
Chazy	3.71
Colchester	4.31
Ellensburg Depot	3.85
Jericho	4.38
Middlebury	5.07
New Haven Junction	4.34

Orwell	4.20
Plattsburgh	4.41
Salisbury	5.09
Schuyler Falls	3.85
Silver Lake	5.06
South Hero	3.59
South Lincoln	6.42
Underhill	6.38
Westford	4.45

CENTRAL VERMONT

Barre	4.95
Berlin	4.98
Chelsea	6.11
Eden	4.86
Irasville	4.95
Marshfield	5.68
Montpelier	4.64
Mount Mansfield	11.38
Waitsfield	7.05

NORTHEASTERN VERMONT

Brownington	6.56
East Albany	5.63
Greensboro	4.76
Jay Peak	5.77

Jeffersonville	6.35
Newark	7.21
Saint Johnsbury	5.49
Sutton	5.28
West Danville	5.20

SOUTHERN VERMONT

Bethel	5.77
East Wallingford	6.13
Rochester	5.96
Woodstock	6.05

Overall, the state received 215.4 mm (8.4 inches) during September 1999, which represents 246% of normal. While the tropical storm remnants and subsequent frontal activity of October 1999 substantially reversed the dry conditions, the cumulative effects of the 15-month precipitation shortage should continue to be monitored in light of the fact that in both November and December 1999, below normal precipitation amounts (73% and 43% statewide respectively) were again received.

For more information on the recent drought and methods by which to track drought conditions, see the:

- Vermont Department of Agriculture, Food & Markets - Drought page
- Farm Service Agency - Vermont Vermont Forage Report University of Vermont Extension Service
- NOAA Drought Information Centre
- National Climatic Data Center - CLIMVIS Drought Display System for the Palmer Drought Severity Index
- National Drought Mitigation Center
- American Meteorological Society Policy Statement on Meteorological Drought
- June 1999 - Initial drought statement
- July 1999 - Drought update and severe weather
- August 1999 - Impacts of the 1998-1999 drought
- USGS 1999 News Release on Drought Conditions in Vermont