



Droughts and Downpours: Managing for Extremes

**Upper Valley Adaptation Workgroup
October 30, 2018**

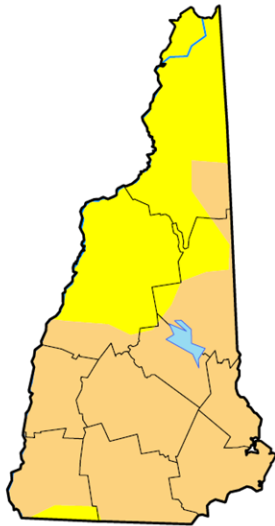
**Meghan Butts – Upper Valley Lake Sunapee Regional Planning
Commission**

Kevin Geiger – Two Rivers Ottauquechee Regional Commission

Sherry Godlewski – NH Department of Environmental Services

U.S. Drought Monitor New Hampshire

July 17, 2018
(Released Thursday, Jul. 19, 2018)
Valid 8 a.m. EDT



Intensity:

- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author:

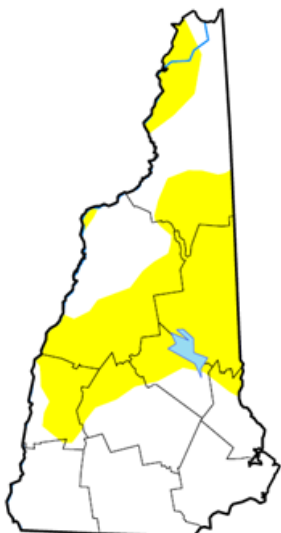
Curtis Riganti
National Drought Mitigation Center



<http://droughtmonitor.unl.edu/>

U.S. Drought Monitor New Hampshire

August 28, 2018
(Released Thursday, Aug. 30, 2018)
Valid 8 a.m. EDT



Intensity:

- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author:

Jessica Blunden
NCEI/NOAA



<http://droughtmonitor.unl.edu/>

Drought and Downpours

August Precipitation

Concord, NH

TOP 10 WETTEST			Updated 2016	TOP 10 DRIEST		
RANK	TOTAL	YEAR		RANK	TOTAL	YEAR
1	9.00	1892	9.36 (and counting!) in 2018	1	0.06	1996
2	7.68	1887		2	0.35	1882
3	7.52	2011		3	0.42	1876
4	7.26	1991	NORMAL (1981-2010)	4	0.65	1894
5	7.19	1990	3.18	5	0.67	2001
6	7.00	1872		6	0.95	1944
7	6.88	1973		7	0.95	1942
8	6.78	2003		8	0.97	1984
9	6.68	1901		9	1.13	1940
10	6.34	2012		10	1.15	1926

Records from 1868 to present

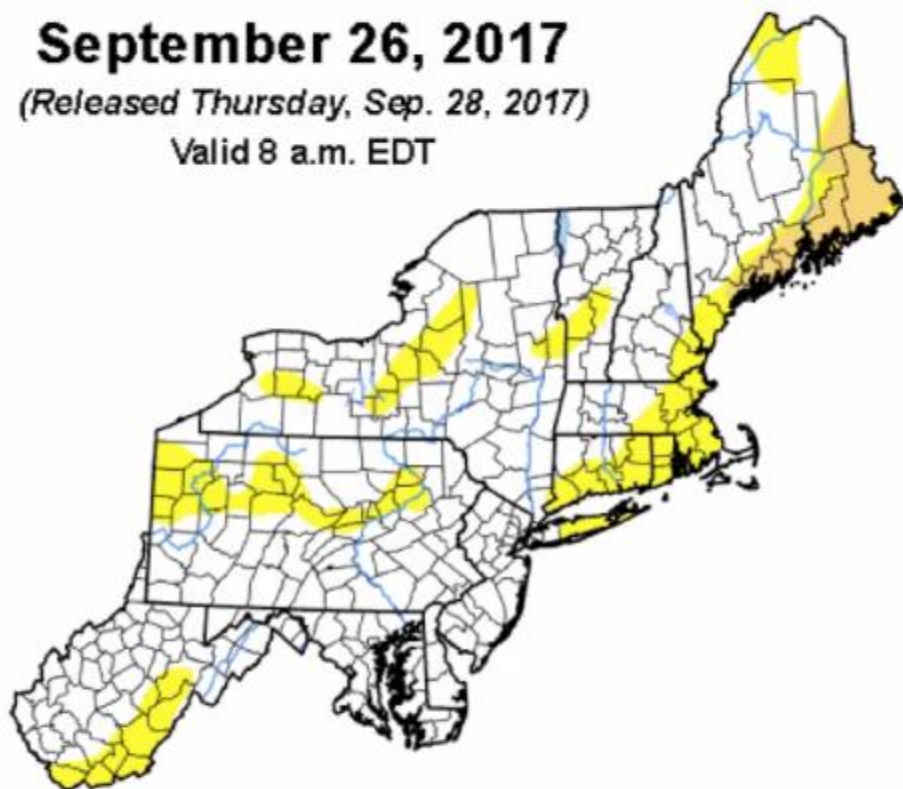
2018 wettest August on record,
10.6 inches in Concord
the average is 4.2 inches

Drought Monitor

September 26, 2017

(Released Thursday, Sep. 28, 2017)

Valid 8 a.m. EDT

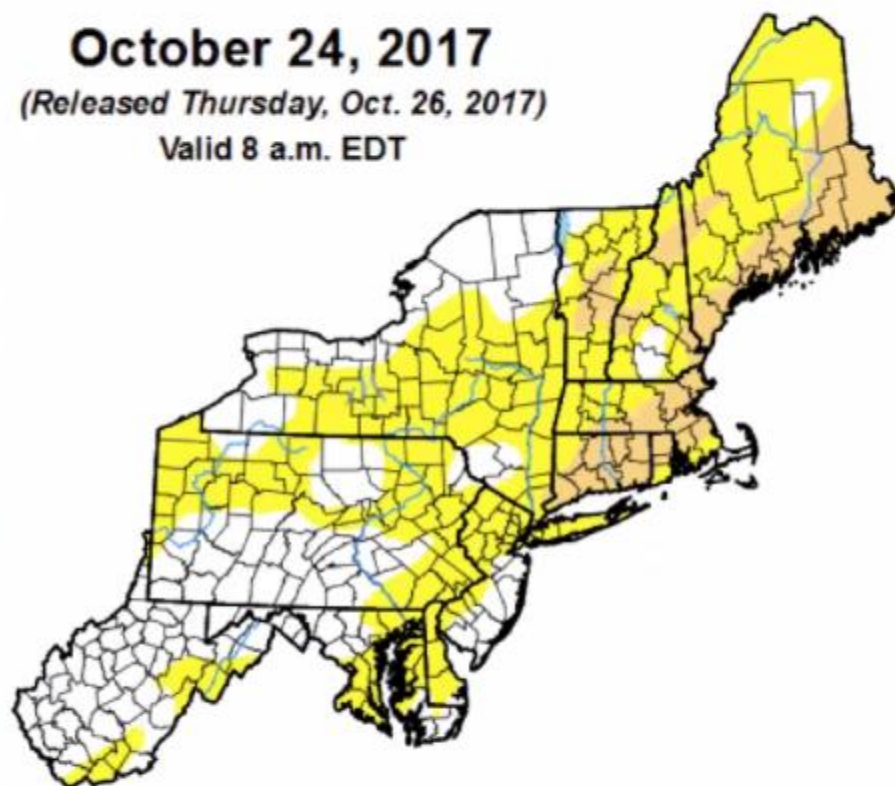


18% abnormally dry
4% in moderate drought

October 24, 2017

(Released Thursday, Oct. 26, 2017)

Valid 8 a.m. EDT



51% abnormally dry
12% in moderate drought

Intensity:

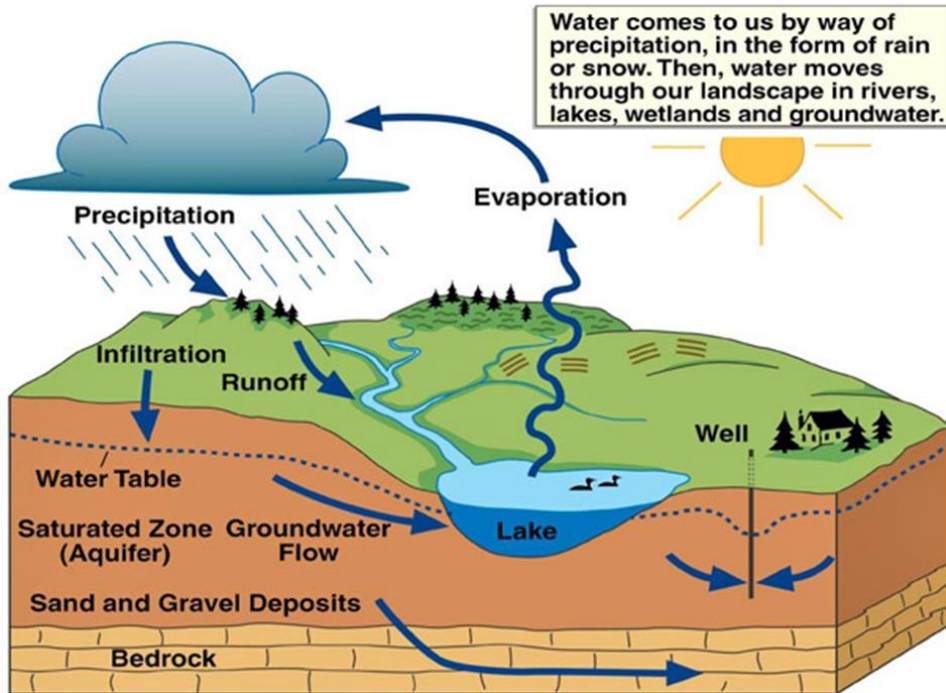
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought

NH October 29 Storm

At its peak, this storm caused fourth-largest storm-related power outage in NH history



The Hydrologic Cycle...



Private Wells
VT 70%
NH 46%

Sources of Drinking Water

Ground water:

- Shallow wells
- Deep wells

Surface water:

- Rivers
- Lakes
- Reservoirs

Preparing for Downpours Can Also Help to Prepare for Drought



Slow the Flow

Spread the Water

Absorb + Infiltrate

Municipal Examples

Meghan Butts

**Upper Valley Lake Sunapee
Regional Planning Commission**



Kevin Geiger

**Two Rivers Ottauquechee
Regional Commission**

