April 2011 Weather and Climate Summary

Averaged statewide, April 2011 was above normal in terms of temperature and precipitation (Table One). Although the state-averaged April 2011 temperature of 43.5 °F (rank 90) was 3.1 °F cooler than April 2010 (46.6 °F; rank 114), it was still above the 1971-2000 normal (42.2 °F) and 1895-2011 average (41.6 °F). This was the fourth consecutive year in which average monthly temperature for April was above normal. Total April precipitation of 4.72 inches (rank 100) was more than an inch above the climatic normal (3.50 inches) and average for the period of record (3.46 inches). It was also well above the total April 2010 (2.75 inches; 39) precipitation and included significant statewide snowfall.

Table One: Statewide average temperature (in degrees Fahrenheit) and total precipitation (in inches) for April 2007 through 2011. April temperature and precipitation ranks are based on the 1895-2011 period of record (117 – warmest/wettest; 1 – coolest/driest). Percent of normal estimates are based on the 1971-2000 climate normal period (NCDC/NESDIS 2011).

<table>
<thead>
<tr>
<th>April</th>
<th>Temperature</th>
<th>Precipitation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Monthly Average</td>
<td>Rank</td>
</tr>
<tr>
<td>2011</td>
<td>43.5 °F</td>
<td>90</td>
</tr>
<tr>
<td>2010</td>
<td>46.6 °F</td>
<td>114</td>
</tr>
<tr>
<td>2009</td>
<td>44.4 °F</td>
<td>102</td>
</tr>
<tr>
<td>2008</td>
<td>44.3 °F</td>
<td>98</td>
</tr>
<tr>
<td>2007</td>
<td>39.9 °F</td>
<td>30</td>
</tr>
</tbody>
</table>
**Temperature:**

Despite a cold, snowy start to the month, average daily temperatures for April 2011 were near normal for northern areas of the state to slightly above normal across the south. Winter held its grip on the state through the first week of April. Daily temperatures for the first week of April were near normal across northern parts of the state, with highs in the 40’s and nighttime lows below freezing. Daytime highs fluctuated between below normal and normal for southern stations with nighttime lows hovering near the freezing point. As daytime highs began to rise statewide during the second week of April, nighttime lows dropped into the 20’s south and teens north from the 7th to the 10th. These were the coldest nights of the month with daily minimum temperatures below 20 °F on the 7th at First Connecticut Lake (6 °F); Colebrook (12 °F); Pinkham Notch (14 °F); North Stratford (15 °F); Benton and Lancaster (17 °F); Berlin and Concord (19 °F). The Mount Washington Observatory reported the month’s coldest temperature of 4 °F the morning of the 6th.

Daytime highs continued to climb statewide through the second week of April, peaking 10 °F to 20 °F above normal by the 11th and 12th. Daytime highs reached the 70’s °F south and 60’s °F with maximum daily temperatures of 75 °F or greater reported on the 11th at Lebanon (75 °F) and Concord (76°F) and on the 12th at Epping (75 °F); Massabesic Lake (76 °F); Keene (77 °F) and Hudson (78 °F). Maximum daily temperatures began to drop on the 13th and remained below normal through the 23rd with near normal minimum temperatures. Daily temperatures began a steady rise on the 24th, peaking as much as 15 °F above normal on the 27th south and up to 20 °F above normal on the 28th north. Southern stations reporting high temperatures above 80 °F on the 27th include Concord and Lebanon (81 °F) and Hanover (83 °F). Northern stations reporting temperatures above 80 °F on the 28th include North Stratford (81 °F) and Lancaster (83 °F). Daily temperatures dropped to near normal to end the month. Unlike April 2010, no New Hampshire station reported temperatures in the 90’s °F during the month of April 2011.

**Precipitation:**

Over all, much of the state ended the month with above normal precipitation with greater departures for areas to the north and west. Only patchy snow cover remained within the southern parts of the state as significant snowstorm approached New England on March 31st. This “April Fools Day storm” blanketed the state with several inches of wet snow on the 1st and 2nd. Two day storm totals of half a foot of snow or more were reported at North Hampton (6.0 inches); North Stratford (6.3 inches); Epping and Rochester (7.0 inches); Berlin and First Connecticut Lake (9.0 inches) and Colebrook (9.3 inches). Highest snowfall occurred at the summit of Mount Washington, which reported 13.2 inches of new snow from the 1st to the 3rd. This was the last significant snowfall of the season for areas south of the White Mountains. Accumulated snow quickly melted and most areas of southern New Hampshire were again snow free by the 3rd.

Several inches of new snow accumulated at higher elevations of the White Mountains with lesser amounts in the valleys and Great North Woods on the 5th. Except for higher elevations, remaining snow on the ground melted by the 11th as temperatures
reached the 60’s °F and 70’s °F statewide. The summit of Mount Washington reported an inch of snow on the ground the morning of April 30.

An unstable weather pattern set up over New England mid-month resulting in a trace or more of rainfall nearly every day through the end of the month. Daily rainfall totals under 0.50 inches occurred at most stations however significant rainfall occurred throughout the state on the 17th, over western areas on the 26th and to the north on the 27th. Stations reporting and inch or more of rainfall on the 17th include North Hampton and Pinkham Notch (1.10 inches); Concord (1.13 inches); Greenland (1.31 inches); Hudson (1.39 inches); Epping (1.45 inches); Berlin (1.56 inches); Rochester (1.90 inches); and North Conway (2.04 inches). The passage of several frontal systems on the 26th and 27th produced over half an inch of rain or more across western and northern New Hampshire on the 26th with over an inch reported at North Conway (1.05 inches) and Hanover (1.22 inches). Heavy rainfall was limited to far northern areas of the state on the 27th with 2.60 inches of rain reported at First Connecticut Lake.

**Data Sources:**
- National Center for Environmental Prediction (NCEP)/Hydrometeorological Prediction Center (HPC): [Daily Weather Maps](http://www.hpc.ncep.noaa.gov/dailywxmap/)
- Northeast Regional Climate Center: [CLIMOD](http://climod.nrcc.cornell.edu/)
  1. *Daily Temperature, Precipitation and Snowfall Data for a Month*
  2. *1971-2000 Monthly Temperature, Precipitation and Degree Day Normals*
  3. *Monthly and Seasonal Temperature and Precipitation Distributions*
  4. *Summarized Snowfall and Snow Depth data for a time interval*

*Note: All current data are preliminary and have not been quality controlled. Observations reported are not intended for research purposes.*