

Current Water Conditions in Massachusetts

March 13, 2008



- February precipitation was much above normal
- February streamflows were above normal
- February ground-water levels were above normal
- Reservoir levels are generally normal and above normal

Precipitation Conditions

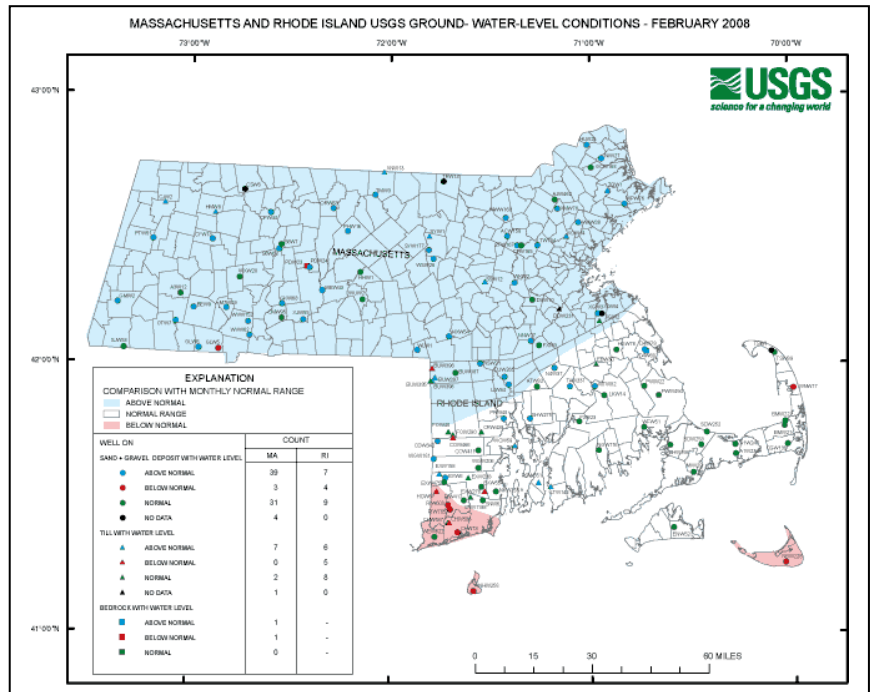
The statewide average precipitation for February 2008 is estimated as 8.71 inches, about 273 percent of normal. The regions of Massachusetts received between 358 percent (Connecticut River) and 155 percent (Cape Cod and Islands) of normal precipitation during February. Multiple large rain and snow events during the month generally contributed prodigious amounts of precipitation throughout Massachusetts. Several stations received record monthly totals. A table of February 2008 estimated precipitation statistics, based on precipitation data from the Department of Conservation and Recreation and National Weather Service precipitation monitoring networks is attached. A map at the back of this report shows the distribution of February total rainfall in New England. Early March has seen 2.5 to 4.5 inches of precipitation to date, which is 200 to 400 percent of normal for this time of the month.

In spite of this a Drought Advisory for the Connecticut River, Central, Northeast, and Southeast Regions of Massachusetts remains in effect. The Massachusetts Drought Management Task Force is scheduled to meet again on March 18th to re-evaluate hydrologic conditions in Massachusetts. Based on current conditions and hydrologic trends it is highly probable that the Advisory will be discontinued at that time.

Ground Water Levels

Ground-water levels reported by the United States Geological Survey (USGS) at the end of February 2008 were above normal (blue area on map) in a major portion of the State. Levels were normal (white areas on map) in southeastern MA , Cape Cod, and Martha’s Vineyard. Ground water levels were below normal on Nantucket. The USGS ground water level map and a Water Conditions Statement for the end of February 2008 can be viewed at the web site:

http://ma.water.usgs.gov/water/water_g.htm



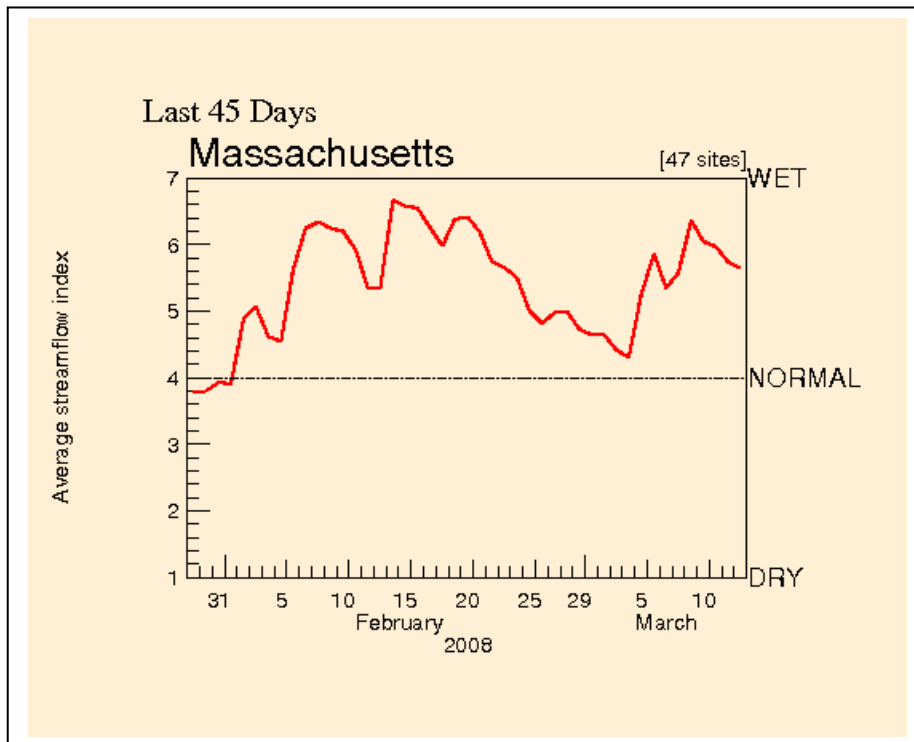
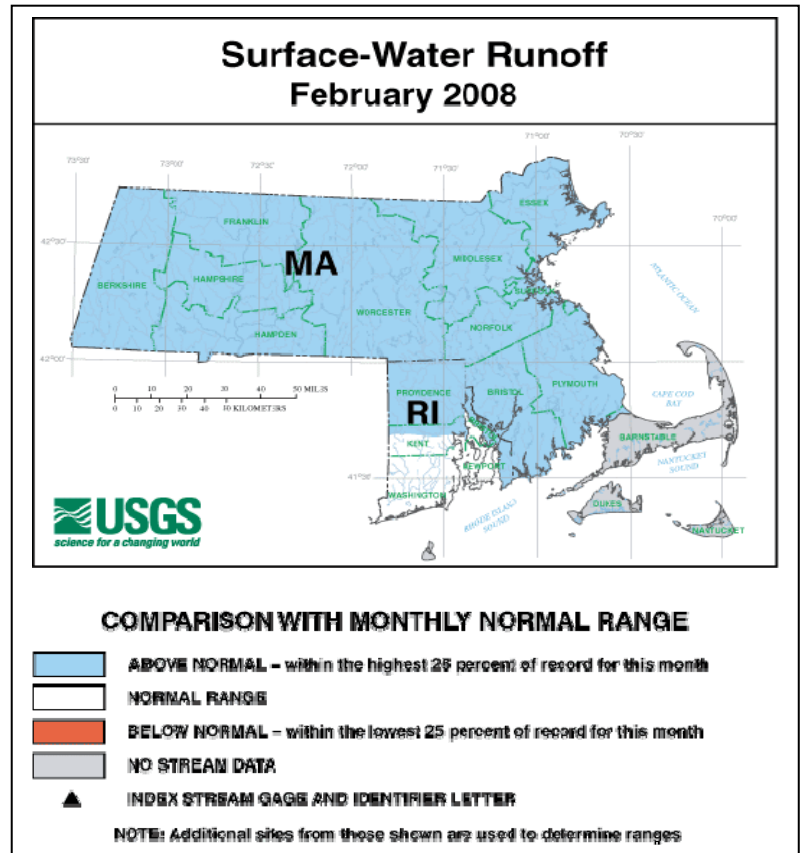
Stream Flow

During February stream flows in Massachusetts that are monitored by the United States Geological Survey (USGS) were above normal (blue area) throughout the State. The graph below depicts a composite daily streamflow relative to normal streamflow for Massachusetts as of March 12, 2008. The graph is a composite of 47 gages across the state with a long period of record. Slightly above normal streamflow at the beginning of February rose in response to several precipitation events and warmer weather during the month. Declining streamflows at the very end of February rose sharply in response to large precipitation events at the beginning of March. Several main stem rivers and tributaries experienced minor flooding in early March. Additional information on streamflow is available from the USGS web page:

<http://ma.water.usgs.gov/water/waters.htm>

Information on flooding conditions is available from the NWS web page:

<http://newweb.erh.noaa.gov/ahps2/forecasts.php?wfo=box&view=1,1,1,1,1,1,1,1&toggles=10,7,8,2,9,15,6>



KEY:

- 1 = New record low for day
- 2 = < 10th percentile
- 3 = 10th – 24th percentile
- 4 = 25th – 74th percentile
- 5 = 75th – 89th percentile
- 6 = ≥ 90th percentile
- 7 = New record high for day

Water Supply Reservoir Levels

Surface water reservoir percent full values for water supply sources provided by water suppliers are listed below. The reservoir levels listed are reported to range from above to a little below normal for this time of year.

February 2007 /March 2008 Massachusetts Reservoir Status

Reservoir/City or Town	Percent Full	Reservoir/City or Town	Percent Full
Quabbin	94	Beverly/Salem	98
Worcester	100	Lynn	82.8
Cobble Mt./ Springfield	86	Taunton/New Bedford/Assawompsett	100+

Note: N.A. Indicates data not available for this report

Fire Danger

During February the cold weather, rain/snow events, and snow cover have resulted in a low fire danger.

Drought Indices/Forecasts

The National Drought Mitigation Center's (NDMC's) March 11, 2008 Drought Monitor Map of The United States shown at right indicates that there are no drought conditions in Massachusetts or the entire northeast United States.

Standardized Precipitation Index:

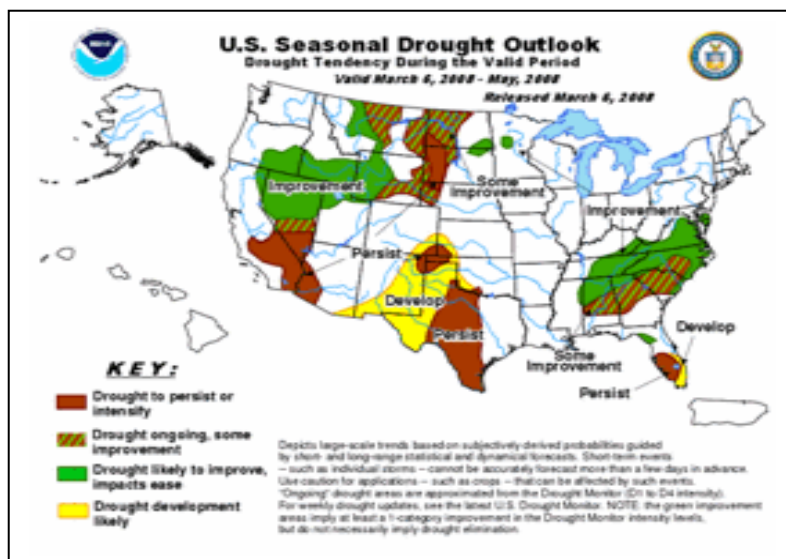
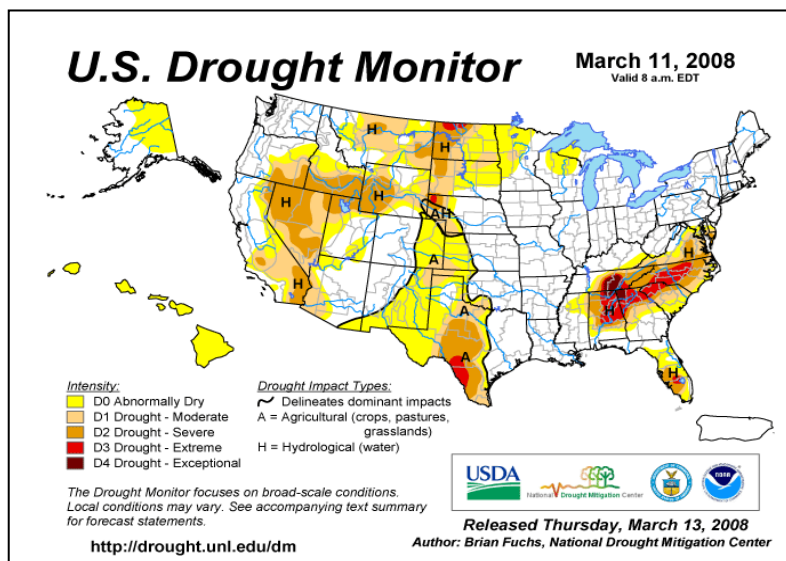
The Western Regional Climate Center's (Desert Research Institute, University and Community College System of Nevada) 1, 3, 6, and 12-Month Standardized Precipitation Index through the end of February shows exceptionally/extremely wet, extremely/very wet, normal/very wet, and moderately/very wet conditions respectively.

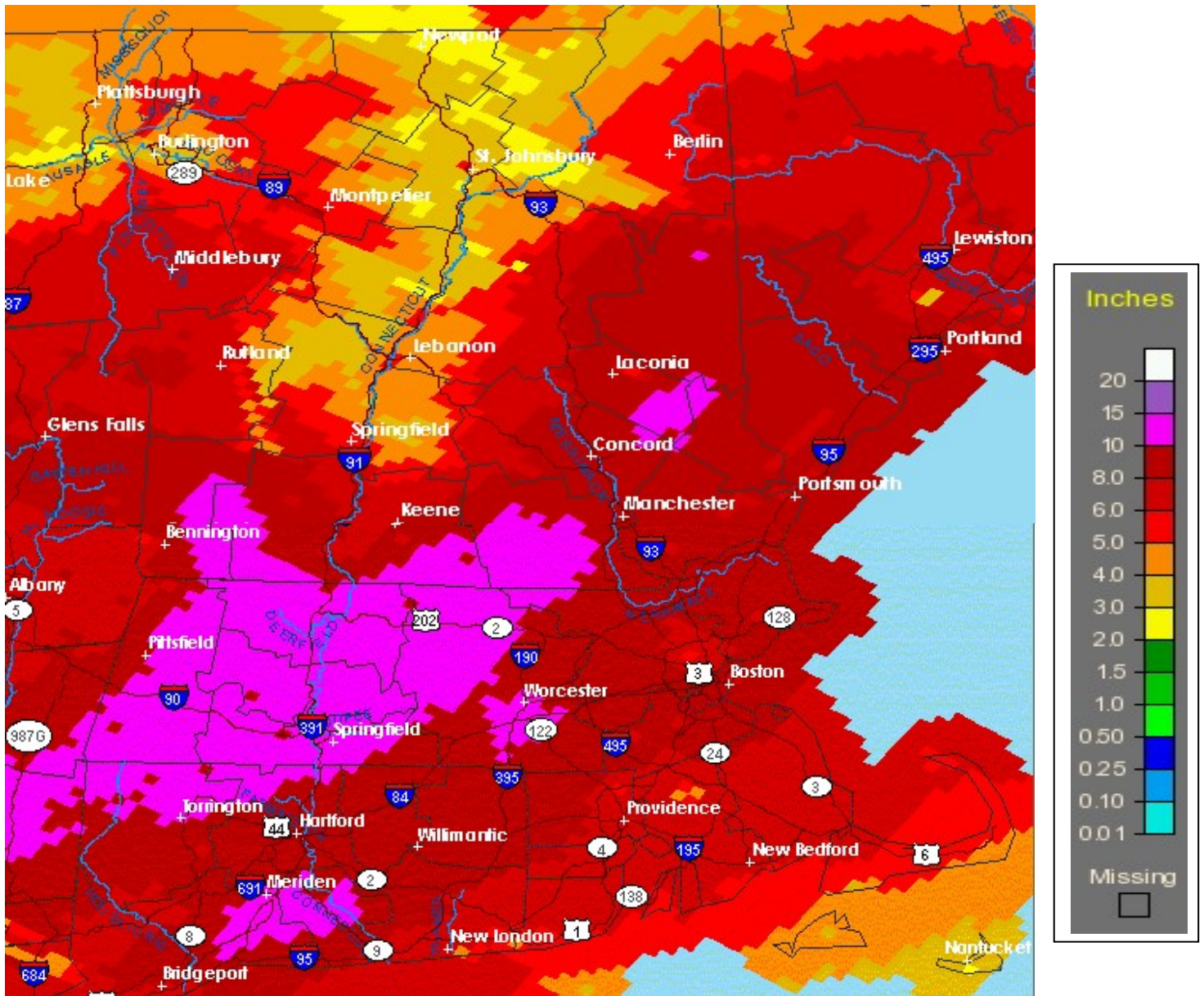
NWS/NOAA's Climate Prediction Center: The U.S. Seasonal Drought Outlook dated March 6, 2008 shows normal conditions through May 2008.

Extended Forecasts

There is a slight possibility of light snow or rain showers across the State during late Thursday afternoon and evening. Late Friday and early Saturday there is a 70% possibility of 1/4 to 1/2 inch of rain. Saturday night and Sunday there will again be a chance of light snow and rain. Another low pressure system may affect the area during the middle of next week.

The National Weather Service Climate Prediction Center's extended 6-10 and 8-14 day forecasts both predict below normal temperature and above normal precipitation. The 1-month extended forecast predicts normal temperature and precipitation.





http://www.srh.noaa.gov/rfcshare/precip_analysis_new.php



**TOTAL RAINFALL
FEBRUARY 2007**

This report was prepared by the Massachusetts Department of Conservation and Recreation. Data were obtained from the sources described in the report and February may be preliminary in nature. Additional information, previous and future water conditions reports can be found on our web site:

<http://www.mass.gov/dcr/waterSupply/rainfall/>

