

Current Water Conditions in Massachusetts

September 20, 2007



- August precipitation was below normal
- August streamflows were below normal and normal
- August ground water levels were normal and below normal
- Reservoir levels are generally normal

Precipitation Conditions

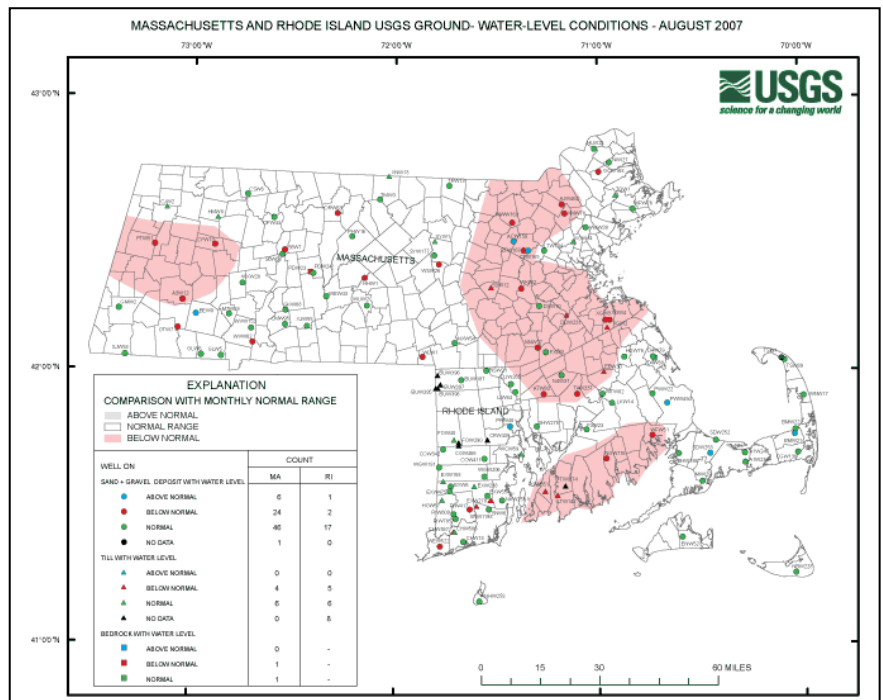
A table of August 2007 estimated precipitation statistics, based on precipitation data from the Department of Conservation and Recreation and National Weather Service precipitation monitoring networks is attached. The statewide average precipitation for August 2007 is estimated as 1.38 inches, about 36 percent of normal. The regions of Massachusetts received between 30 percent (Northeast) and 45 percent (Western) of normal precipitation during August. Almost no rain occurred during the later two thirds of the month. A map at the back of this report shows the distribution of August total rainfall in New England.

September rainfall as of September 20th has ranged from about 1.4 inches on the Cape and Islands to 4.5 inches in Northwestern MA. In general the northern third of the State has received above normal to normal rainfall but the southern third of the State has received only 50 to 90 percent of normal for this time of month. Several small rain events have helped to alleviate the generally dry soil conditions that existed at the beginning of September. Maps showing total and percent of normal rainfall to date in September are shown at the rear of this report.

Ground Water Levels

Ground-water levels reported by the United States Geological Survey (USGS) at the end of August 2007 were generally below normal (pink area on map) in the west central, east central and south coastal areas and normal (white areas on map) in the rest of the State. The USGS assessment of ground-water levels in the State is based on the evaluation of ground-water level data from 89 wells with 10 or more years of record. The USGS ground water level map and a Water Conditions Statement for the end of August 2007 can be viewed at the web site:

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



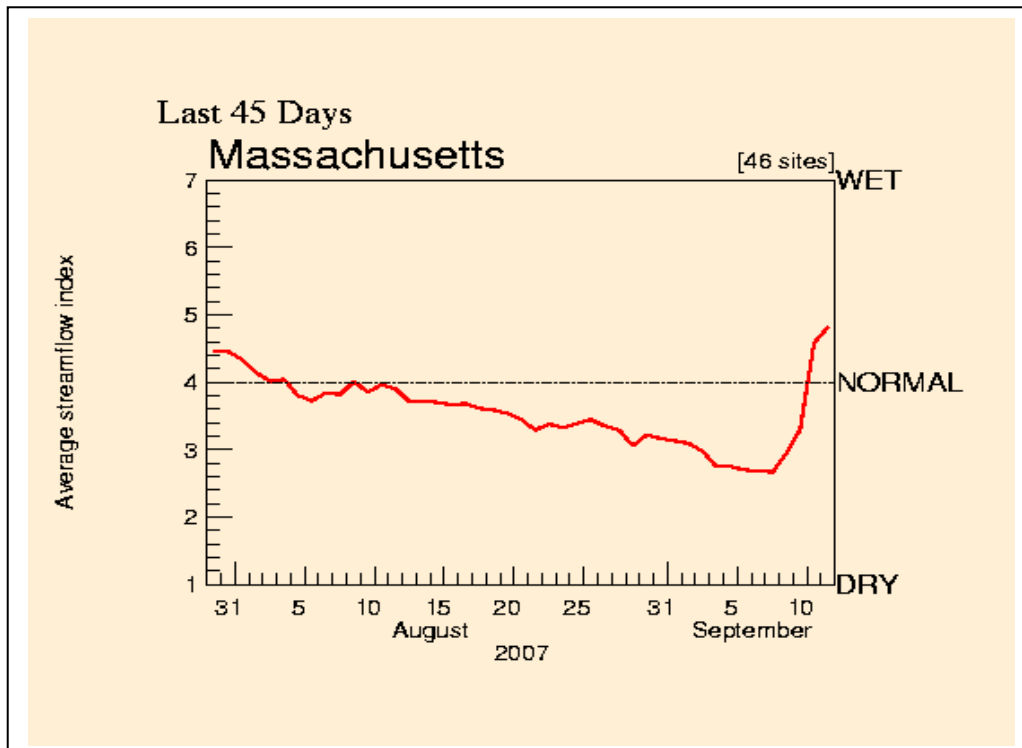
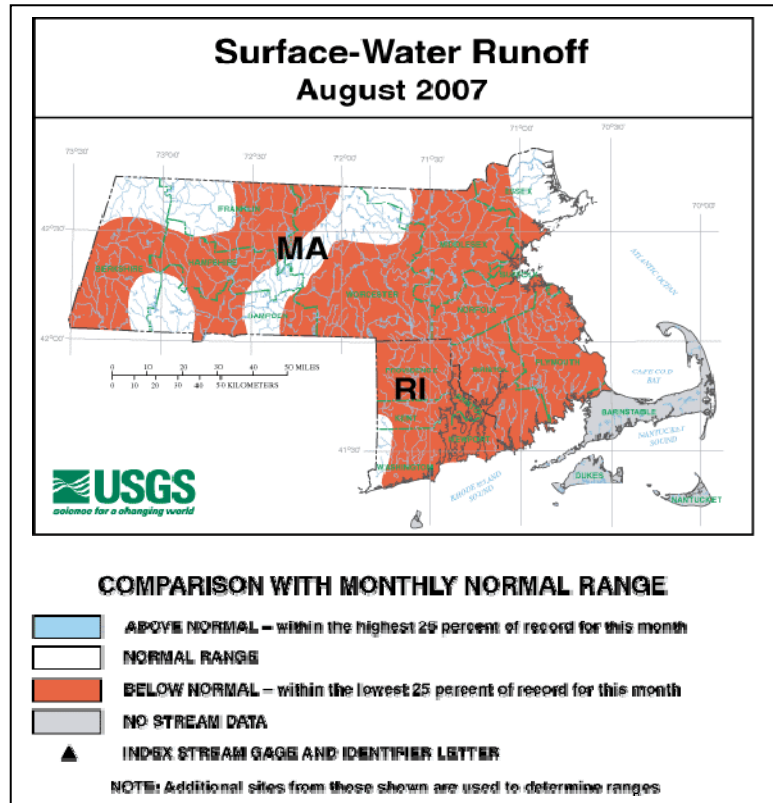
Stream Flow

At the end of August stream flows in the State that are monitored by the United States Geological Survey (USGS) were generally normal (white areas) in the river basins in northeastern and northwestern areas. Streamflow was below normal (orange area on map) in the rest of the State.

The graph below depicts a composite streamflow for Massachusetts as of September 12, 2007. The graph is a composite of 46 gages across the state with a long period of record. Slightly above normal streamflow at the beginning of August declined to below normal at the end of the month. Composite streamflow recovered to slightly above normal as a result of rainfall events in early September.

Additional information on streamflow is available from the USGS web page:

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



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 be normal or a little below normal for this time of year. Sixty water suppliers shown on a map at the back of this report have instituted mandatory and voluntary water use restrictions.

August /September 2007 Massachusetts Reservoir Status

Reservoir/City or Town	Percent Full	Reservoir/City or Town	Percent Full
Quabbin	93	Beverly/Salem	77.3
Worcester	75	Lynn	65.6
Cobble Mt./ Springfield	81	Taunton/New Bedford/Assawompsett	87.6

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

Fire Danger

During August and up until September 9th fire danger levels had generally increased to a level 4 and a level 5 in some fire districts. This period also had a greatly increased number of wild fires. The cooler weather and rain events have resulted in a lowering of the fire danger and number of fires.

Drought Indices/Forecasts

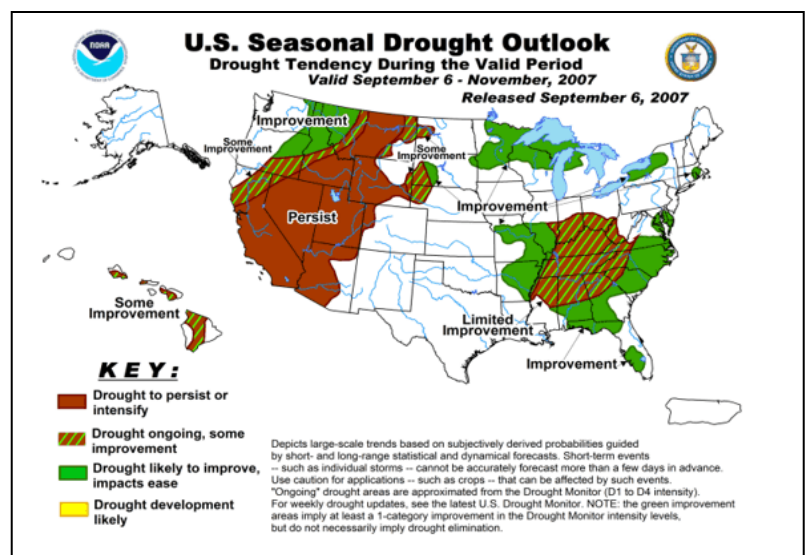
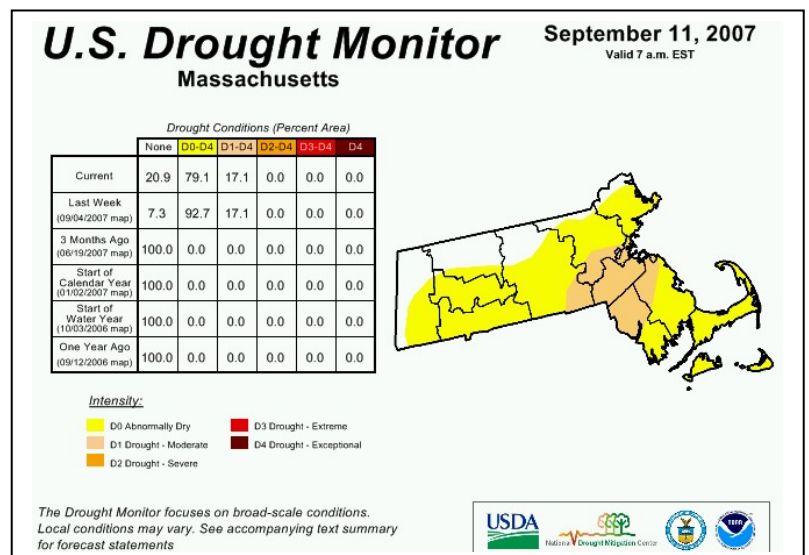
The National Drought Mitigation Center's (NDMC's) September 11, 2007 Drought Monitor Map of Massachusetts shown at right indicates that about 17 percent of the east-central part of the State is in moderate drought conditions and another 63 percent is abnormally dry.

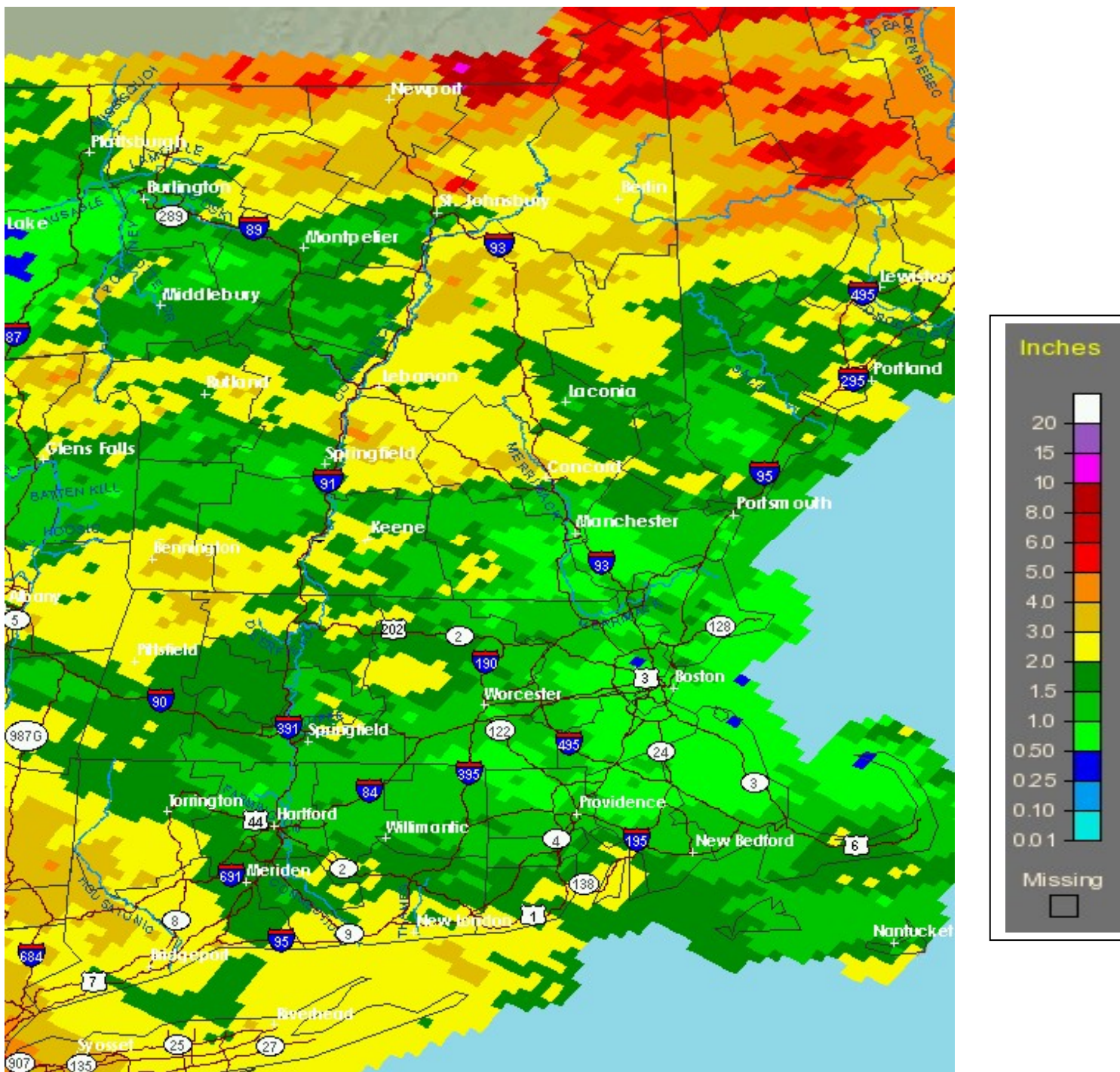
Standardized Precipitation Index: The Western Regional Climate Center's (Desert Research Institute, University and Community College System of Nevada) 1, 3, 6, and 12-Month Standardized Precipitation Index through the end of August shows very dry, moderately dry, moderately/very wet, and moderately wet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

NWS/NOAA's Climate Prediction Center: The U.S. Seasonal Drought Outlook dated September 6, 2007 shows that the drought in the southeast area of the State is expected to improve and impacts should ease through November 2007.

Extended Forecasts

There is no rain forecast in Massachusetts for the next 7 days. The National Weather Service Climate Prediction Center's extended 6-10 and 8-14 day forecasts both indicate below normal rainfall and above normal temperature.





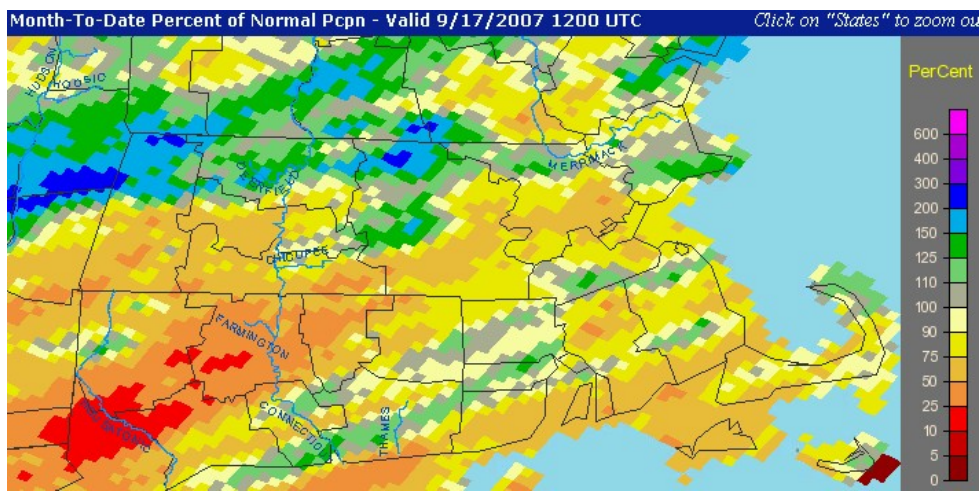
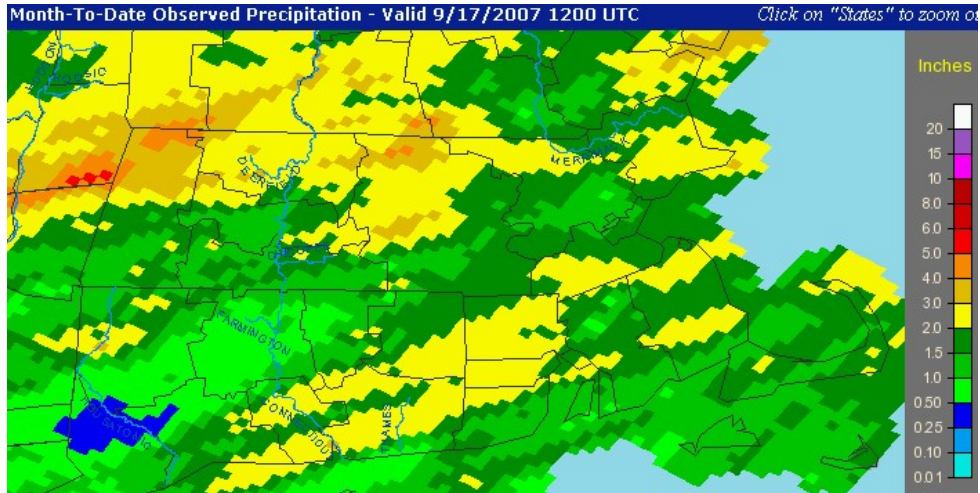
http://www.srh.noaa.gov/rfcshare/precip_analysis_new.php



**TOTAL RAINFALL
AUGUST 2007**

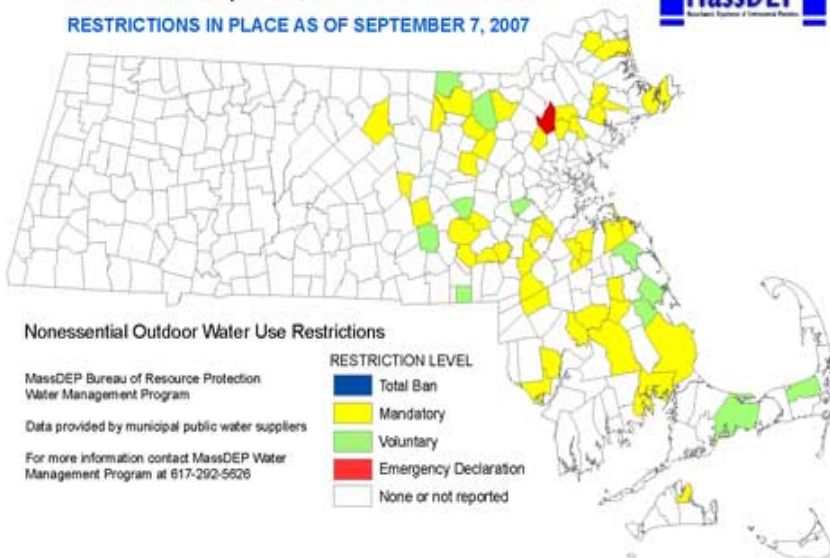
This report was prepared by the Massachusetts Department of Conservation and Recreation. Data were obtained from the sources described in the report and August may be preliminary in nature. Additional information, previous and future water conditions reports can be found on our web site:

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



Current Municipal Water Use Restrictions

RESTRICTIONS IN PLACE AS OF SEPTEMBER 7, 2007



<http://www.mass.gov/dep/water/resources/wateruse.htm>