

**State of Maine  
Drought Task Force  
Report on Current Conditions  
August 13, 2002**

The Drought Task Force issued previous reports in August, September, November and December, 2001, and January, March and May, 2002. All previous reports are available on the Internet at [maine.gov/mema/drought](http://maine.gov/mema/drought)

The Drought Task Force met on Tuesday, August 13, 2002 to assess current conditions in the State.

The Drought Task Force was convened in August of 2001, and held additional meetings throughout the fall and spring. The Task Force is composed of state, federal and private sector agencies who deal with water resource issues.

Throughout this report, references are offered for further information.

**Overview:**

Surface water conditions (streams, lakes and reservoirs) remain at near normal levels across the state. However, ground water levels in southern and western Maine continue below normal.

Normal water levels in lakes and streams have supported recreational interests, and farms have received adequate rainfall and/or have had water available with which to irrigate.

However, continuing low groundwater in southern Maine puts at least that part of the State at risk of slipping back into severe drought conditions if the usual fall recharge does not occur.

**Current Conditions:**

*Streamflows and Runoff:*

Streamflows were in the normal range throughout the state, except in northern Maine where runoff was in the above-normal range.

JULY RUNOFF	
	% of Median
St. John River at Fort Kent	271
Narraguagus River at Cherryfield	93
Mattawamkeag River near Mattawamkeag	97
Piscataquis River near Dover-Foxcroft	75
Carrabassett River near North Anson	82
Little Androscoggin River near South Paris	132
Saco River at Cornish	75

*Storage*

The total amount of water in usable storage in the five reporting basins at the end of July was 82 percent of capacity, which is slightly above the long-term end-of-July average of 79 percent.

The following table shows conditions in the five reporting systems at the end of July, as reported by the river basin managers, expressed in percent of reservoir capacity.

Reservoir System	Reservoir Capacity (mcf)*	This Month (% Full)	This Month Last Year (% Full)	Long-term Average (% Full)
St. Croix River Basin	26,845	83	70	73
West Branch Penobscot River Basin	58,700	76	57	75
Kennebec River Basin	44,730	87	86	87
Androscoggin River Basin	28,100	89	81	83
Sebago Lake	9,700	79	77	73
TOTAL OF FIVE SYSTEMS	168,075	82	72	79
* mcf-millions of cubic feet				

Reports from storages in the Androscoggin and Kennebec basins indicate that levels are slightly above (+5.4% for the Androscoggin and +0.9% for the Kennebec) long-term averages for the time of year. These levels have been managed by keeping flows at lower summer levels through spring and early summer. Normally, flows are not dropped to summer levels on these rivers until around August 1.

Streams flows derive partially from rainfall and runoff and partially from groundwater. Stream flows in southern Maine have been dropping during the current period of low rainfall. This seems to indicate low groundwater maintaining these streams, making them very reactive to the amount of rainfall.

#### *Ground Water*

Ground-water levels were in the normal range, except in northern Maine where levels were in the above-normal range and in portions of southern and eastern Maine where levels were in the below-normal range. Ten wells showed water-level decreases during the month. Water levels in five wells had increased and water levels in five wells had decreased when compared to water levels at the end of July 2001.

It is difficult to project specific well status and prognosis across the state on the basis of monitoring wells alone. However, the status of these wells represents an indicator of statewide conditions.

The USGS Monthly Current Conditions Report for July is online at: <http://me.water.usgs.gov/02.jul.html>

#### *Weather and Climatology:*

The US Drought Monitor, issued by the Climate Prediction Center, shows central and southern Maine in moderate drought, and far northern and downeast Maine in abnormally dry conditions. Between 3 and 6 inches of rain in a one week period would be needed in one week to bring the index up to normal. A tropical system could supply this type of high rainfall. Maine typically experiences a tropical system about every two years. The National Hurricane Center recently downgraded its prediction for the number of Atlantic tropical systems expected this year.

The eight to fourteen day forecast shows little precipitation other than possible thundershowers. The outlook through November also shows a trend to below normal precipitation. Longer term predictions show equal chances of above or below normal precipitation.

*Weather/climate sites:*

<http://www.nws.noaa.gov/er/gyx>  
<http://www.nws.noaa.gov/er/car>  
<http://maine.gov/mema/weather/genweath.htm>  
<http://enso.unl.edu/monitor/monitor.html>

*Background information:*

<http://www.umaine.edu/mainecclimate>  
[http://www.ncdc.noaa.gov/ol/climate/research/prelim/US/US\\_prelim.html](http://www.ncdc.noaa.gov/ol/climate/research/prelim/US/US_prelim.html)  
<http://lwf.ncdc.noaa.gov/oa/climate/research/prelim/drought/spi.html>  
<http://lwf.ncdc.noaa.gov/oa/climate/research/prelim/drought/palmer.html>  
[http://www.cpc.ncep.noaa.gov/products/analysis\\_monitoring/cdus/palmer\\_drought/](http://www.cpc.ncep.noaa.gov/products/analysis_monitoring/cdus/palmer_drought/)  
<http://enso.unl.edu/ndmc/enigma/indices.htm#palmer>

**Fire Potential:**

The fire season thus far has not been as busy as last year. However, very recently fire activity seems to be increasing, which trends with the drop in precipitation in recent weeks. Dry weather can change fire potential quickly, and conditions will be monitored closely.

**Agriculture:**

Farmers have seen adequate rainfall for crops, or have had water available to irrigate. In northern Maine, where more rain has been received, irrigation has been less. In central to southern Maine, use irrigation has been heavier. It is reported that soil moisture is good in the first few inches, but 6 to 12 inches below the surface the ground is dry.

Grant funds have allowed the development of new resource development; 11 ponds and 9 wells have so far been installed across the state.

Blueberry crops in some areas have been affected by last year's dry weather; last year's drought caused a lower amount of buds to be set last fall. This can happen to many fruit crops but it is as yet unknown whether other Maine crops will be affected.

Almost too much rain was received early in the season, which delayed haying. However, first cuttings of hay were generally good, and second cuttings have been possible in some areas. Dry weather in central to southern Maine has begun to dry out pastures and may produce a lower yield in second hay crops. This could affect dairy farms already struggling with production costs.

**Public Water Supplies:**

Two water systems, Winter Harbor and Castine, have requested voluntary conservation measures at this time. Winter Harbor is working on detecting and repairing a leak which is causing them to lose water. One system, Alfred, has instituted mandatory restrictions that will remain effective until the District's new wells come on line (estimated for September). The Drinking Water Program (DWP) reports that they have received no new requests for emergency well permits since the last Task Force meeting (early May).

The Maine Rural Water Association (MRWA) has received a donation of water conservation kits and is making them available to customers in Alfred, and plans to do the same in New Portland and Boothbay. This initiative is serving as an opportunity to raise awareness about water conservation. MRWA is also assisting many districts in leak detection.

It is still critical that water systems pay close attention to drought conditions. The water associations, the DWP and the PUC will continue to keep the issues of drought potential and sound water management before public water system managers.

### **Private Water Supplies:**

Failure of private rural wells has represented a greater problem for the public than possible shortages from public water supplies. Because of spring and early summer rainfall, the number calls from individuals with dry wells dropped in June and July. Recently, however, the number of calls has begun to increase. MEMA has been receiving approximately 2 to 3 calls a week; in that last week that number has escalated. Calls are coming from across the southern part of the State. County Emergency Management Agencies and the DWP are also receiving some calls.

#### *Well Drilling*

Because spring recharge refreshed a number of wells, well-drillers generally are caught up with emergency cases. Anecdotal evidence suggests that there is still a demand for replacement wells.

### **Other Issues**

#### *Information for Homeowners:*

General information about wells and well-drilling is available on the web site of the State Drinking Water Program. Homeowners can determine if the driller they are thinking of hiring is licensed and in good regulatory standing by contacting the Maine Well Drillers and Pump Installers Commission (207-287-5699)

Individuals should let their towns know if they are having water supply problems. This will lead to better information about the magnitude of the problem; in addition, the town may be able to offer some emergency assistance. Individuals may also call MEMA at 800-452-8735 for information.

Water quality can be affected by lowered water levels. It is recommended that homeowners get their water tested if the water supply was low or dry, and the water level has rebounded. A test would determine if contamination has entered the well or water system.

In addition, since low water levels can cause any contaminants to become more concentrated, it is recommended that those with low wells either have a comprehensive water test done, or use other sources of drinking water.

#### *Not Recommended:*

**Homeowners should not have wells refilled.** Water dumped into a well will last perhaps 3 days before it completely drains away. More of the water will drain into the ground in this time frame than can usually be used by the household. In addition, contamination of water systems

can result by opening the well and introducing water of outside origin. Contamination of the area surrounding the well or the aquifer can also result.

**Sources of Assistance:**

The Governor's request for FEMA assistance has been denied. His subsequent appeal was also denied. A request to the Army Corps of Engineers for assistance for public water supplies has also been denied.

A new piece of Federal legislation, the Drought Preparedness Act of 2002, has been introduced and is supported by Maine's Congressional delegation. This bill would mandate a study of federal drought assistance programs and coordination of those programs.

Farmers can contact their Farm Service Agency for information on available programs.

*USDA, Rural Development:* The 504 Loan and Grant Programs are available to qualified individual homeowners. Applicants must live in an area designated as rural, must own the house and the land it is built on, and income-qualify for the assistance. Loans are 1%, and can be written for as long as a 20-year term. Grants are available to qualified applicants at least 62 years of age.

More information on this program is available from USDA, Rural Development, at:

- Presque Isle (serves Aroostook and Washington Counties): 764-4155/4157.
- Bangor (serves Hancock, Knox, Lincoln, Penobscot, Piscataquis, Somerset and Waldo Counties): 990-3676
- Lewiston (serves Androscoggin, Cumberland, Franklin, Kennebec, Oxford, Sagadahoc, and York Counties): 753-9400

**General Assistance:**

Individuals should check with town General Assistance (GA) Administrators to determine if their situation qualifies for assistance.

**Public Information:**

Public information continues to be posted on the Internet at <http://maine.gov/mema/drought>. The site will continue to be updated with new information as long as drought conditions persist. Information has also been available through County Emergency Management Agencies, water utilities, etc.

All agencies represented on the Task Force continue to respond to public and media inquiries, and to do outreach to their constituents.

**Action Steps:**

The Task Force has begun work on an After Action report, which will document opportunities for improvement in how the state continues to respond to drought, as well as in the operation and activities of the Task Force itself. It is anticipated that the report will be published after the next Drought Task Force meeting.

Conditions will continue to be closely monitored, and requests for assistance from individuals, communities and public water supplies will continue to be responded to by the appropriate agencies.

**Conclusion:**

The State of Maine is at a balancing point between continuing improvement in drought conditions, and possible recurrence of severe drought if fall rainfall does not occur at normal levels.

Surface water conditions (streams, lakes and reservoirs) remain at near normal levels across the state. However, ground water levels in southern and western Maine continue below normal. If recharge does not occur this fall, there is potential for severe drought conditions to return.

In general, sufficient rainfall and runoff have created a good year for recreation and agricultural interests.

It is recommended that homeowners and public water supplies alike, particularly those who have experienced water supply problems, should continue to practice sensible water management and look for improvements in their systems (repairing leaks, etc.).

All agencies involved in water resources issues, as well as those who respond to community problems and human needs, will need to continue to monitor the situation closely, and work in their areas of expertise to support Maine citizens.

The next meeting of the Drought Task Force is scheduled for mid-October, 2002. All or selected members of the Task Force will come together sooner if conditions warrant.

**Information Resources:**

U.S. Geological Survey  
207-622-8201  
<http://me.water.usgs.gov>

National Weather Service, Gray, Maine  
207-688-3216  
<http://www.nws.noaa.gov/er/gyx>

National Weather Service, Caribou, Maine  
207-496-8931  
<http://www.nws.noaa.gov/er/car>

Maine Department of Conservation, Maine Geological Survey  
207-287-2801

Maine Emergency Management Agency  
207-626-4503  
<http://www.state.me.us/mema>

Maine Department of Human Services, State of Maine Drinking Water Program  
207-287-2070  
<http://www.state.me.us/dhs/eng/water>

Maine Department of Economic and Community Development (CDBG information)  
207-624-9816