



Water levels fall; drought fears on rise

By Connie Paige

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The lawn is scorched, the saplings are shriveled, and the local ponds and streams are lower than usual.

It's not as bad as Malibu, Calif., Atlanta, or the Great Lakes, but Massachusetts is suffering from drought.

"It's a developing drought," said Linda Hutchins, a hydrologist for the state Department of Conservation and Recreation. "I'm concerned where we would be in the spring if it does continue. While it's not a real big water-supply crisis now, if we go through the winter dry and start next spring and summer like this, we're going to be sorry."

Throughout the area, even communities that restricted outside water use this summer still show signs of drought, specialists say. The consequences of scant precipitation well into next year could be shrinking water supplies for residents, industry, and agriculture, as well as forest and brush fires.

"Hopefully the situation will ease," said Kerry Mackin, executive director of the Ipswich River Watershed Association, a nonprofit working to protect and restore the chronically low watershed and river, which provides water supplies to 13 communities, including North Reading and Wilmington.

"Obviously nobody knows what the weather's going to be," Mackin said. "Hopefully we'll see sometime in the spring that the flow conditions will get better. Certainly there's still a need for people to conserve water."

While the spring was wet, the lack of rainfall in August and September set back water supplies for the year in the state's northeast region, stretching from Belmont north to the New Hampshire border and from Westford east to the coast. In August, the region got only 1.07 inches of rain, compared with the normal 3.6 inches; in September, while the norm is 3.57 inches, actual rainfall was 2.22



inches, according to measurements taken by the state conservation and recreation agency.

On Oct. 12, the Massachusetts Department of Environmental Protection issued a drought alert, citing a drop in river and lake levels as well as stream flows less than 5 percent of normal in some parts of the state. That put the state in the "advisory" stage on a five-step scale - just above "normal" but three steps below "emergency."

The occasional downpours since then have not eased the parched conditions, Hutchins said. Officials in a Drought Task Force will reassess the state's status again in November.

Conditions may not improve in the short term, according to the National Weather Service.

Neal Strauss, meteorologist at the weather service's office in Taunton, said the agency is predicting drier weather and higher temperatures than usual through January.

"Chances are, we'll probably see a milder than normal winter," he said.

The good news is that the US Seasonal Drought Outlook, prepared by the National Weather Service, calls for likely improvement in precipitation in the Bay State after January, with drought impacts easing through the spring, Strauss said.

Still, no one can predict with certainty. "Sometimes they're right," Hutchins said. "Sometimes they're wrong."

To guard against drought, many communities have adopted water conservation measures, with mixed results.

Eleven area suburbs have reported to the state environmental agency that they impose outside watering bans or partial bans during the summer months. Those communities are Acton, Ayer, Burlington, Chelmsford, Groton, Littleton, North Reading, Pepperell, Shirley, Westford, and Wilmington.

In Groton, mandatory restrictions have kept town wells brimming, according to Thomas Orcutt, superintendent at the Groton Water Department, supplier of about 60 percent of the town's water.



The restrictions ran from June 1 to Sept. 30. They prohibited outside watering on Mondays and limited it to odd or even days the rest of the week based on a person's address.

"We don't have any problems with the drought," Orcutt said recently.

But in Wilmington, the drought strained reserves that have already been diminished after toxic chemicals fouled part of the local water supply.

Wilmington received approval this month to join the Massachusetts Water Resources Authority, which supplies water or sewer services, or both, for all or part of 61 communities, according to the agency's website.

Wilmington made the request after five of its town wells - two-thirds of its water supply - were found to be polluted from a site now on the US Environmental Protection Agency's Superfund list, said Michael Woods, superintendent of water and sewer. Woods said the town is negotiating with Olin Corp., the principal party determined responsible for the contamination, to help pay the cost of making the switch to the Massachusetts Water Resources Authority.

Rapid housing development has also contributed to this year's seasonal water woes in some communities.

"With all the new homes being built in town, they're all installing lawn irrigation systems," said Brian Goodman, superintendent of the Shirley Water District. "Unfortunately, water systems aren't designed to keep up with the capacity of lawn irrigation. It really, really strains the system."

Still, the town's water supply is "in fairly good shape" for now, Goodman said.

Many communities not on the state list also have outside watering restrictions.

Reading's restrictions are year-round, according to Peter Tassi, water quality and supply supervisor, even though the town recently joined the Massachusetts Water Resources Authority.

Concord and Lexington recently received grants of \$34,375 and \$22,500, respectively, from the state environmental agency to help boost water conservation.

The grants will support education and outreach programs, water audits, leak detection surveys of drinking water systems, and rebates for new low-flow devices, according to the agency.



If the drought continues into next spring and summer, it could heighten the risk of forest and brush fires, Hutchins said.

"Once the leaves turn and fall off the trees, there's a lot of fuel on the ground. If the soil is dry, if a fire starts, it can burn into the ground and spread via the roots, and it becomes very difficult . . . to put it out, and it can spread rapidly, especially on a windy day."

