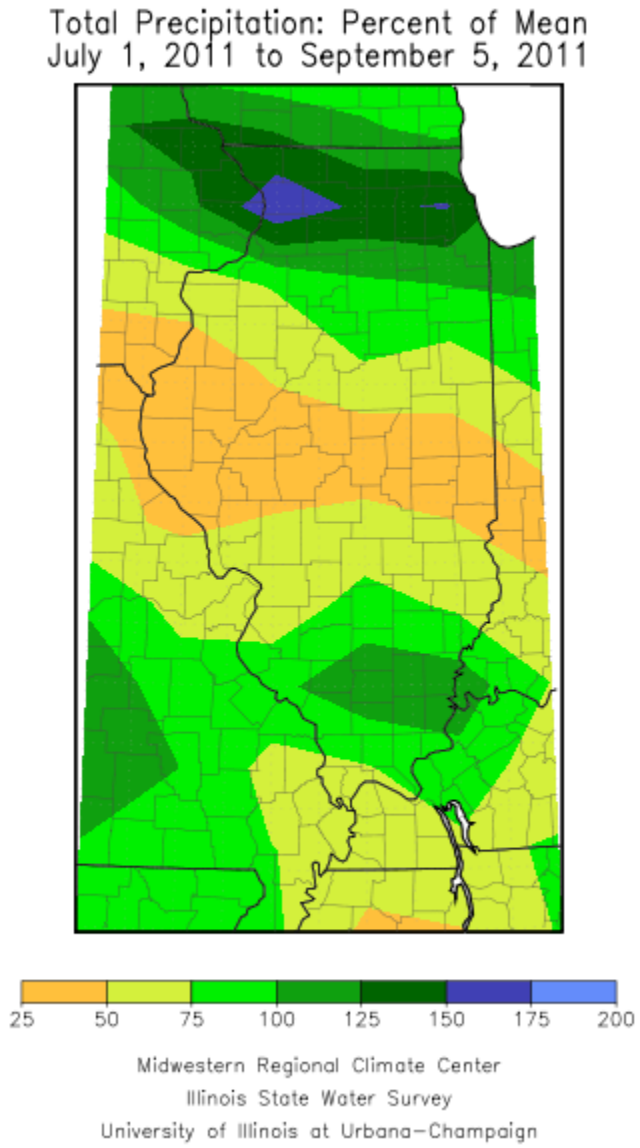
Illinois Drought Update – September 7, 2011

After a wet spring and early summer, a significant portion of western and central Illinois has gone with little rain since July 1. The region of greatest concern is a swath through central Illinois where precipitation has been less than 50% of normal over the past 2 months (see figure below). Rainfall totals for the period from July 1 to September 5 for selected sites are as follows:

Quincy: 1.29 inches
Springfield: 1.40 inches
Decatur: 1.64 inches
Champaign: 3.56 inches
Bloomington: 3.60 inches
Peoria: 4.25 inches



Right now the US Drought Monitor http://droughtmonitor.unl.edu/ has much of western and central IL in a D2 “severe drought” with agricultural impacts. Damage to corn and soybean crops appears to be significant in places, but conditions are also highly variable. The full extent of the damage will not be known until harvest. Crop conditions are reported in the Illinois Department of Agriculture’s weeekly update: http://www.agr.state.il.us/news/markets/cropreport.pdf

Water levels in streams and shallow groundwater have fallen substantially in the past two months; however, in late June they were at very high levels. A number of streams in western Illinois, for example, experienced record high streamflow amounts for that time of the year. After 2 months of dry weather, streams in western Illinois have fallen, but only to normal rates for this time of year. With a few exceptions, current streamflow and shallow groundwater conditions are below-normal only in the eastern half of the swath of lower precipitation, essentially for locations near Springfield and farther to the east. Below normal levels are those that fall into the lowest 25 percent of expected conditions as based on historical records.

Among community water supply systems, only the Decatur system is reported to be experiencing impacts at this time. At the end of August, water levels in Lake Decatur were 1.5 feet below its normal pool level, and the City issued a request for voluntary restrictions on water use. An evaluation of drought vulnerability by the ISWS (www.isws.illinois.edu/data/ilcws/drought.asp) classifies the Decatur system as "at-risk," indicating that there is a reasonable risk that the water supply would not be sufficient during a drought similar to the worst historical drought of the past 100 years. Compared to other water supply reservoirs in the State, Lake Decatur is one of the most susceptible to short-term droughts, so it is prudent that they respond quickly to impending drought conditions. However, it will potentially take another 4-6 months of continued dry conditions for this water supply to reach a critical status. Water levels in most community water supply reservoirs in the swath of low precipitation are at normal or slightly below normal levels at this time. Considerably longer drought conditions will be needed to raise concerns for these other community systems.

The ISWS will continue to monitor and report conditions as dry conditions persist.