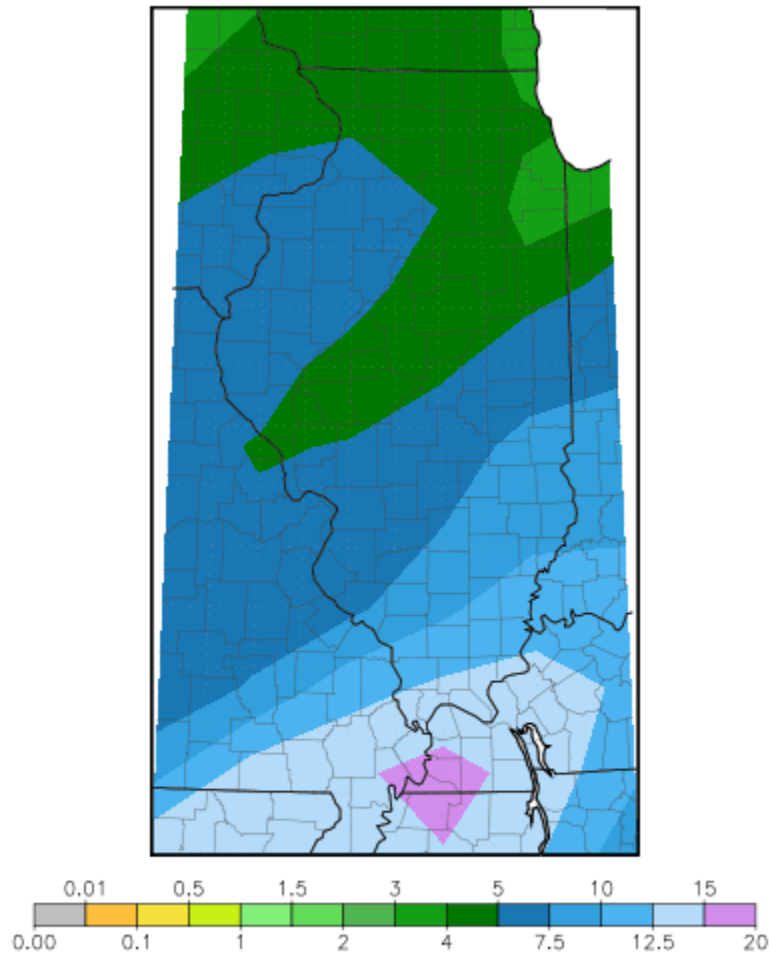


Illinois Drought Update – December 13, 2011

Illinois State Water Survey

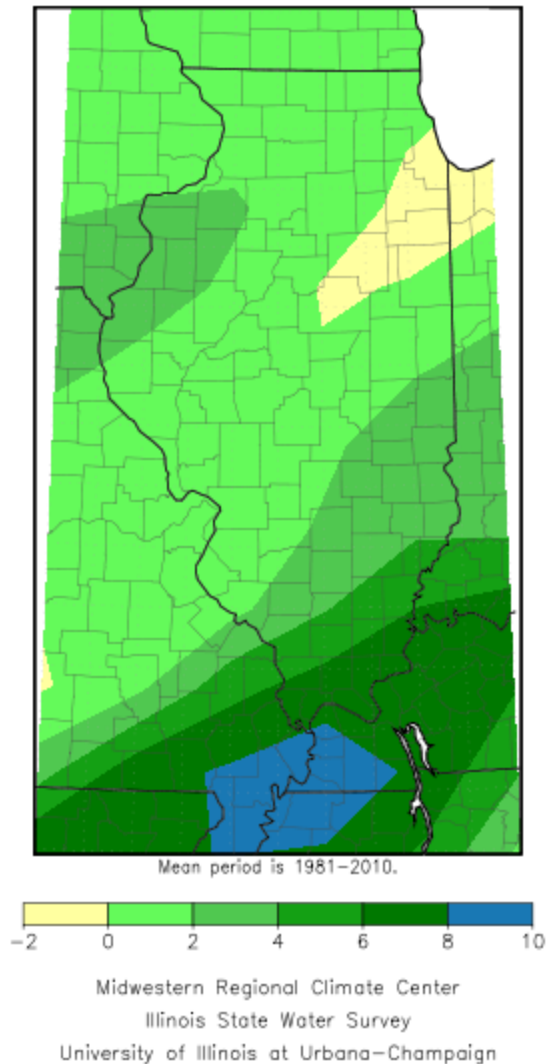
Precipitation totals since November 1, 2011, have been running above normal across much of the state. The statewide average precipitation was 6.07 inches, 1.6 inches above average. Precipitation totals since November 1 through central Illinois, where much of the problems occurred this summer, were in the range of 3 to 5 inches. Precipitation departures in this region were in the range of 0 to 2 inches above average. See figures below. Soil moisture measurements from the Illinois State Water Survey's WARM network indicate that soil moisture levels are within the normal range for this time of year down to 5 feet.

Total Precipitation (inches)
November 1, 2011 to December 12, 2011



Midwestern Regional Climate Center
Illinois State Water Survey
University of Illinois at Urbana-Champaign

Total Precipitation (inches): Departure from Mean
November 1, 2011 to December 12, 2011



The latest National Weather Service forecasts out to 14 days predict above normal precipitation for all of Illinois. The monthly outlook for December has all of Illinois south of Interstate 80 as having an increased chance of above normal precipitation. The outlook for December - February has all but far western Illinois as having an increased chance of above normal precipitation.

Hydrologic Conditions (Streams, Reservoirs, and Groundwater)

There remains a pocket of Central Illinois, in the vicinities of Springfield and Decatur, where streamflow amounts remain below normal for this time of year, in a range that might be expected to occur on average only once in 6 years. But for most of the remainder of the State, average streamflow amounts during November 2011 are characterized as normal to above normal.

As reported in previous updates, a primary drought concern is the water supply situation for the City of Decatur. As of December 13, the observed water level in Lake Decatur was 611.07 feet above mean sea level, only a few inches below the observed level as reported five weeks ago in our previous update. Over that time period the water level of the lake has been fluctuating; rising slightly after moderate rainfall events and falling when there has been no precipitation for several consecutive days. If rainfall amounts in the near future are in the normal to above normal ranges, as forecasted, the lake levels may be expected to continue to fluctuate slightly or perhaps begin their recovery back to the seasonal pool level. It is quite possible that the lake's water level will slowly decline over the next few months if dry weather patterns return; however, at this point we believe there is little chance that either the lake level will fall enough to cause critical water supply concerns for the City or that the lake will not recover to full pool by spring.

In the central part of the State there are a number of other water supply reservoirs (a selected set for which the ISWS maintains monthly lake level records) that continue to have below-normal pool levels for this time of year – most notably at Canton, Carlinville, Highland, Springfield, and Taylorville. For Carlinville and Highland, the end-of-month November levels were typical of dry conditions that might be expected to occur on average once in 10 years.

Shallow groundwater levels in 16 observation wells, which are remote from pumping centers, were above average for the month of November. Statewide levels were 1.8 feet above normal and ranged from 3.6 feet below to 5.3 feet above normal levels. The dry conditions over the last few months noticed through the central portion of the state did continue in November; however, only four wells reported declines this month, as opposed to seven in October, indicating the drier conditions are lessening in central Illinois.

Summary and Recommendation

Dry conditions in Central Illinois have been alleviated over the past 5 weeks by normal to above-normal rainfall amounts. Although some reservoirs remain below normal – with a few having low pool levels that might be expected to occur on average once in 10 years (for this season of year) – at this time we do not anticipate that their water supply concerns will become aggravated over the new few months. Rather, with the current hydrologic conditions and weather forecasts there is the expectation that their water levels will begin to recover over that time. If that recovery does not occur by the mid- to late-spring of 2012, we recommend that the State Water Plan Task Force may once again want to revisit drought concerns. In the meantime, the Illinois State Water Survey will continue with routine monitoring of the situation through the process of preparing its monthly Water and Climate Summaries.