

## **Drought Report**

## July 14, 2015

This report summarizes the various indicators utilized in drought monitoring. Each parameter (groundwater, surface water, precipitation, and palmer index) has their own individual indicator for each county. When readings hit a pre-determined trigger level, the indicator is coded as "Normal", "Watch", "Warning", or "Emergency" for that county. These indicators are used to evaluate the drought status of a particular county; they are not, themselves drought declarations. Drought declarations are determined by the Commonwealth Drought Coordinator, with support of the Drought Task Force, and given final approval by the Governor.

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*Precipitation* – Over the past week, the western part of the state received approximately 0.8 to 3.5 inches of precipitation. The rest of the state received trace amounts to 1.7 inches of precipitation. The 90-day precipitation deficits have recovered across the state, with all counties showing normal or above average departures.

The precipitation indicators based on a 90-day departure remain the same as the previous week with all counties in "Normal" status.

*Surface Water*- Instantaneous streamflow varies across the Commonwealth with most gages above normal flow. For this date there are zero gages with instantaneous flow at less than the 10th percentile.

The 30-day running average streamflow values remain the same as the previous week with all counties in "Normal" status.

Groundwater – The 30-day moving average indicators for groundwater levels show improved conditions to the previous week, with 5 counties moving into a less severe status. The indicators are as follows: zero counties in drought "Watch", one county in drought "Warning" (Berks), and zero counties in drought "Emergency". The following changes have occurred since the last report: Bedford, Bradford, Delaware, Fulton and Philadelphia from "Watch" to "Normal". Real-time data is currently showing either similar or higher groundwater levels than the 30-day moving average. The higher groundwater level real-time data indicates an upward trend in the 30-day moving average groundwater levels.

Palmer Drought Severity Index – The Palmer soil moisture indicator is displaying all counties in "Normal" status.

*Public Water Supply Agencies (PWSAs)* –There are no PWSAs on voluntary or mandatory restrictions related to drought at this time.

Forecast – The 7-day forecast indicates approximately 0.5 to 2.5 inches of precipitation for the state, with the highest rainfall amounts in the western and northern portions of the state. The 8 to 14-day forecast indicates 0.5 to 2.33 inches of precipitation for the state, with highest rainfall totals in the eastern portion of the state.

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Summary – Overall conditions have improved from the previous week. Instantaneous streamflows statewide show most gages above normal flow. The 30-day moving average streamflow indicators continue to show all counties in "Normal" status. The 90-day precipitation deficit shows improved conditions from the previous week, with the entire state showing normal to above average precipitation. The 30-day moving average groundwater well levels show improved overall conditions to the previous week with 5 additional counties moving to a less severe status, and zero counties in "Emergency" status. The Berks County monitoring well remains in warning status. After consultation with USGS it was determined that the Berks County monitoring well is experiencing an anomaly and it was discovered that there may be some activities taking place near this well. USGS will be conducting further investigations on this well. Overall real-time data is showing equal or higher groundwater levels than the 30-day moving average in many cases.

DEP issued a press release on July 10, 2015, removing all 37 counties from the drought watch declaration per the Drought Task Force recommendations from the meeting on July 9, 2015. Twenty-seven (27) counties were placed under drought watch on March 24, 2015. Those counties were: Berks, Bradford, Cambria, Carbon, Clinton, Columbia, Indiana, Lackawanna, Lawrence, Luzerne, Lycoming, McKean, Mercer, Monroe, Montour, Northumberland, Pike, Potter, Schuylkill, Snyder, Sullivan, Susquehanna, Tioga, Union, Wayne, Westmoreland, and Wyoming. Ten (10) counties were placed under the drought watch on June 17. These counties were: Bedford, Blair, Centre, Franklin, Fulton, Huntingdon, Juniata, Lehigh, Mifflin, and Northampton.

No further Drought Task Force meetings are scheduled at this time and unless conditions decline, no further drought reports will generated.

