

Drought Report **August 23, 2016**

Preface

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.

Summary

As with the previous week, above normal precipitation across the state over the past seven days resulted in improvements in instantaneous stream flows, increases in 30-day moving average stream flows for 15 counties as well as decreases in 90-day precipitation departures within the northcentral part of the state. In Potter County as an example, the 90-day precipitation departure went from -4.3 inches down to -3.7 inches. Groundwater levels also improved over the last seven days with the 30-day moving averages showing improvement in 11 counties.

7-day forecasts call for approximately 0.5 to 1 inch of precipitation with the highest rainfall amounts within the western half of the state.

The drought declarations issued by DEP in a press release on August 2, 2016 remain in effect at this time. Drought warning: Potter County; Drought watch: the counties of Armstrong, Bedford, Berks, Blair, Bradford, Cameron, Carbon, Center, Clarion, Clearfield, Clinton, Dauphin, Elk, Forest, Fulton, Huntingdon, Indiana, Jefferson, Juniata, Lawrence, Lebanon, Lehigh, Lycoming, McKean, Mercer, Mifflin, Northampton, Perry, Schuylkill, Snyder, Sullivan, Tioga, Union, and Venango.

A Drought Task Force meeting remains scheduled for September 6th at PEMA for reviewing conditions and discussing proposed changes, if any, to declarations made on August 2nd.

Drought Report Details

Precipitation –Over the last 7 days, there was varying precipitation across the state, county average rainfall was from 0.4 to 2.3 inches for the period August 15 to August 21. The more significant rainfall occurred in the northern half of the state. The 90-day precipitation deficit shows counties ranging from greater than 50% below up to 25% above normal precipitation.

The precipitation indicators based on a 90-day departure are showing 8 counties in “Watch” (Cameron, Centre, Clinton, Juniata, Mifflin, Potter, Snyder and Tioga) and no counties in “Warning” or “Emergency” status. Five counties improved with 3 returning to “Normal” status.

Surface Water- Instantaneous streamflow varied across the Commonwealth with flows ranging from above normal to below normal. For this date there are 5 gages with instantaneous flow at less than the

10th percentile, compared to 7 gages last week. There are no gages reporting record low instantaneous flows.

The 30-day running average streamflow indicators are showing 11 counties in drought “Watch” (Bedford, Berks, Blair, Carbon, Clinton, Cumberland, Franklin, Huntingdon, Potter, Snyder and Union), no counties in “Warning” and 1 county in “Emergency” (Tioga). Since our last report, 15 counties showed improvement.

Groundwater – The 30-day moving average indicators for groundwater levels are showing 21 counties in drought “Watch” (Bedford, Berks, Carbon, Centre, Chester, Clinton, Cumberland, Delaware, Elk, Erie, Franklin, Fulton, Lackawanna, Lancaster, Lehigh, Monroe, Montour, Northampton, Philadelphia, Pike and Union); 6 counties in “Warning” (Columbia, Dauphin, Lebanon, Luzerne, McKean and Potter) and 2 counties in “Emergency” (Lawrence and Mercer). Since our last report, 4 counties showed improvement with 5 returning to “Normal”..

Palmer Drought Severity Index – The Palmer soil moisture indicator is showing 24 counties in “Watch” (Cameron, Centre, Clarion, Clearfield, Clinton, Columbia, Crawford, Elk, Erie, Forest, Jefferson, Juniata, Lycoming, McKean, Mercer, Mifflin, Montour, Northumberland, Perry, Potter, Snyder, Union Venango and Warren) and 16 counties in “Warning” (Allegheny, Armstrong, Beaver, Bedford, Blair, Butler, Cambria, Fayette, Fulton, Greene, Huntingdon, Indiana, Lawrence, Somerset, Washington and Westmoreland). There were no changes to any of the counties related to the Palmer indicator.

Public Water Supply Agencies (PWSA 's) – The following water suppliers are on water use restrictions: Albion Boro Water System, Bedford Boro Water Authority, Dubois Water Department, Huntingdon Boro Water Department, Petersburg Commons Water System, Shinglehouse Boro Water Department and Wellsboro Munic Authority.

Forecast – The 7-day forecast indicates approximately 0.5 to 1 inch of precipitation for the state, with the highest rainfall amounts forecasted to be in the western half of the state.