

Drought Report **August 30, 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

Below normal precipitation across most of the state has resulted in instantaneous stream flows declining in the central and eastern part of the state with remnants of the much above normal precipitation from two weeks ago resulting in increases in 30-day moving average stream flows for 5 counties. Minimal change in 90-day precipitation departures occurred during the past week. In Potter County as an example, the 90-day precipitation departure went from -3.7 inches down to -4.0 inches. Groundwater levels also slightly improved over the last seven days due to the above normal precipitation from two weeks ago with the 30-day moving averages showing improvement in 5 counties.

7-day forecasts call for approximately 0.1 to 0.5 inches of precipitation with the highest rainfall amounts within the eastern 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 0.0 to 2.1 inches for the period August 22 to August 28. The more significant rainfall occurred in the western 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 9 counties in “Watch” (Cameron, Centre, Clinton, Juniata, Mifflin, Montgomery, 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 in the west to below normal in the central and eastern part of the state. For this date there

are 19 gages with instantaneous flow at less than the 10th percentile, compared to 5 gages last week. There are no gages reporting record low instantaneous flows.

The 30-day running average streamflow indicators are showing 10 counties in drought “Watch” (Berks, Carbon, Clinton, Cumberland, Franklin, Northampton, Philadelphia, Potter, Snyder and Union), one county in “Warning” (Tioga) and no counties in “Emergency”. Since our last report, 5 counties showed improvement.

Groundwater – The 30-day moving average indicators for groundwater levels are showing 21 counties in drought “Watch” (Bedford, Berks, Carbon, Chester, Clinton, Columbia, Cumberland, Delaware, Elk, Erie, Franklin, Fulton, Lackawanna, Lancaster, Lehigh, Luzerne, Monroe, Montour, Northampton, Philadelphia, Pike, Potter and Union); 2 counties in “Warning” (Dauphin and Lebanon) and 2 counties in “Emergency” (Lawrence and Mercer). Since our last report, 5 counties showed improvement with 1 returning to “Normal”.

Palmer Drought Severity Index – The Palmer soil moisture indicator is showing 14 counties in “Watch” (Cameron, Centre, Clearfield, Clinton, Columbia, Elk, Forest, Juniata, Lycoming, Mifflin, Montour, Northumberland, Perry, Snyder, and Union) and 25 counties in “Warning” (Allegheny, Armstrong, Beaver, Bedford, Blair, Butler, Cambria, Clarion, Crawford, Erie, Fayette, Forest, Fulton, Greene, Huntingdon, Indiana, Jefferson, Lawrence, McKean, Mercer, Potter, Somerset, Venango, Warren, Washington and Westmoreland). Ten counties declined from “Watch” to “Warning” status in the past week.

Public Water Supply Agencies (PWSA 's) – The following water suppliers are on water use restrictions:
 Albion Borough Water System, Erie County
 Bedford Borough Water Authority, Bedford County
 Dubois Water Department, Clearfield County
 Galeton Borough Water Authority, Potter County
 Huntingdon Borough Water Department, Huntingdon County
 Petersburg Commons Water System, Huntingdon County
 Shinglehouse Borough Water Department, Potter County
 Wellsboro Municipal Authority, Tioga County

Forecast – The 7-day forecast indicates approximately 0.1 to 0.5 inches of precipitation for the state, with the highest rainfall amounts forecasted to be in the eastern half of the state.



