

Drought Report **February 1, 2017**

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.

Drought Report

Summary: January 25 – February 1, 2017

Overall, drought conditions across the Commonwealth displayed modest improvement during the past week as shown in surface water, groundwater and precipitation indicators after several weeks of above normal rainfall. Approximately 0.0 to 1.0 inches of precipitation fell across the state during the last 7 days. Continued below normal precipitation will affect any improvements in the triggers. Projected precipitation for the next seven days will range from up to 0.25 inches in the southeast, from 0.25 to 0.5 inches in the central and northeastern part of the state and 0.75 to 1.1 inches in the Ohio River Basin with the maximum of 1.1 located in the southwest corner of the state.

Precipitation: The 90-day precipitation departures ranged from greater than 50% below normal in the central part of the state to 50% above normal in some western and northern tier counties. Departures ranged from -3.6 inches in Snyder County to +2.3 inches in Greene County.

Groundwater: Groundwater levels continue to rise at most of the monitoring wells. Three monitoring wells had their trigger status improve from “Emergency” to “Warning”.

Stream flows: Instantaneous flows ranged from normal to much above normal in the west and from much above normal to much below normal across the eastern part of the state.

Commonwealth Drought Task Force: The Commonwealth Drought Task Force met on January 5, 2017, at PEMA Headquarters and agreed to maintain the current drought status condition in the state. The next meeting is scheduled for February 7, 2017 at 11:00 a.m. at PEMA Headquarters where drought conditions will be discussed and consider possible changes in declarations.

Drought Report Details

Precipitation – Over the last 7 days, county rainfall ranged from 0.0 to 1.0 inches across the state. The 90-day precipitation deficit shows counties ranging from 50% below normal to 50% above normal.

The precipitation indicators based on a 90-day departure indicate 10 counties are now in “Watch” (Carbon, Dauphin, Juniata, Lycoming, Mifflin, Monroe, Montour, Northumberland, Perry and Union) with one county in “Warning” (Snyder).

Surface Water- Instantaneous streamflow across the Commonwealth ranged from normal to much above normal in the Ohio River Basin to from normal to much below normal across the Susquehanna and Delaware River Basins. For this date there were 7 gages reporting instantaneous flow at less than the 10th percentile.

The 30-day running average streamflow indicators are showing 9 counties in drought “Watch” (Carbon, Chester, Juniata, Lehigh, Mifflin, Northampton, Philadelphia, Snyder and Union) and 1 county in “Warning” (Berks) and no counties in “Emergency”. Three counties returned to “Normal” drought trigger status this reporting period.

Groundwater – The 30-day moving average indicators for groundwater levels are showing 14 counties in drought “Watch” (Bedford, Berks, Bucks, Chester, Fulton, Lackawanna, Lancaster, Lehigh, Monroe, Montgomery, Northampton, Northumberland, Pike and Schuylkill); 7 counties in “Warning” (Carbon, Centre, Dauphin, Delaware, Lebanon, Mifflin and Philadelphia) and 4 counties in “Emergency” (Cumberland, Franklin, Montour and Union).

Palmer Drought Severity Index – The Palmer soil moisture indicator is showing all counties in “Normal” drought trigger status for this reporting period.

Public Water Supply Agencies (PWSA’s) – The following 9 water suppliers have been identified as implementing water use restrictions:

Bedford Borough Water Authority, Bedford County
Bloomfield Borough Water Authority, Perry County
East Stroudsburg Water, Monroe County
Hanover Boro Water Department, York County
Mahanoy Township Authority, Schuylkill County
Mary D Community Association, Schuylkill County
Richfield Area Joint Authority, Juniata County
Schuylkill Haven Borough, Schuylkill County
Schuylkill County Municipal Authority, Schuylkill County

Forecast – The 7-day forecast indicates 0.25 inches of precipitation will occur in the Lower Delaware River Basin, 0.25 to 0.5 in the Upper Delaware and Susquehanna River Basins and 0.75 to 1.1 inches in the Ohio River Basin.

Current Drought Status

