

## **Drought Report** **April 25, 2017**

### **Preface**

This report summarizes the various indicators used in drought monitoring. Each parameter (groundwater, surface water, precipitation, and palmer index) has its 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: April 18 – April 25, 2017**

Overall, the Commonwealth has been seeing gradual recovery of drought indicators with a potential for moving certain counties with indicators in a stable normal range from the current “watch” status to “normal”. Department staff are evaluating indicators to render recommended changes in drought status for the next upcoming Commonwealth Drought Task Force meeting on May 4, 2017.

Precipitation during the last seven days was below normal in the middle and lower Susquehanna and Delaware River Basins with the remainder of the state above normal. Groundwater and surface water recovery was limited to those areas with above normal precipitation. The 30-day streamflow plots remained in the “Normal” range during the last week; also, the status of the 30-day groundwater plots did not change during the last week. However, groundwater levels in the southcentral and southeast have begun to drop as vegetation and evaporation begins to affect the ability of water to percolate into the ground. At current precipitation levels, groundwater depths in the southcentral and southeast portions of the state would be expected to remain at below normal levels in watch, warning and emergency indicator status during the summer months.

**Commonwealth Drought Task Force:** The next Commonwealth Drought Task Force meeting is scheduled to be held at 11 a.m. on May 4, 2017, at PEMA Headquarters at which time the members will review conditions and recommend any changes to the counties which remain in drought “Watch” status.

### **Drought Report Details**

*Precipitation* – Over the last seven days, precipitation ranged from 0.3 to 1.6 inches in the east; 0.3 to 2.0 inches in the central part of the state; and 1.1 to 2.4 inches in the west; with precipitation in all regions increasing from south to north. The 90-day precipitation deficit shows counties ranging from 25% below normal in the east to greater than 75% above normal in the west which results in the 90-day average county precipitation indicators remaining in “Normal” status with one county in drought “Watch” (Montgomery).

*Surface Water* – Instantaneous flows range from normal to much above normal in the west; much below normal to above normal in the central and eastern part of the state, with the gauge at record low flow in

the southcentral region of the state. The 30-day running average streamflow indicators show all counties in “Normal” drought trigger status.

*Groundwater* – There is no change in the drought trigger status for groundwater. The 30-day moving average indicators for groundwater levels are showing seven counties in drought “Watch” (Berks, Chester, Delaware, Lancaster, Lehigh, Northampton and Philadelphia); one county in “Warning” (Centre) and two counties in “Emergency” (Cumberland and Franklin).

*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 (PWSAs)* – Public water suppliers are requested to continue to follow the county-wide declarations unless there is a need for more stringent restrictions, at which point water suppliers may initiate their own voluntary or mandatory water use restrictions. The following public water suppliers continue to implement voluntary restrictions:

- Bloomfield Borough Water Authority, Perry County
- Mahanoy Township Authority, Schuylkill County
- Mary D Community Association, Schuylkill County
- Richfield Area Joint Authority, Juniata County
- Schuylkill County Municipal Authority, Schuylkill County
- Schuylkill Haven Borough, Schuylkill County

*Forecast* – The 7-day forecast indicates precipitation will range from 1.25 to 1.50 inches in the southeast and southcentral part of the state and 1.5 to 3.0 inches in the remainder part of the state increasing from east to west.

### Current Drought Status

