

# Drought Report February 22, 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: February 15 – February 22, 2017

With only about 0.0 to 0.6 inches of rain falling across the state during the last 7 days, there was generally little change to drought indicators except for the lowering of groundwater levels. But we may see improvement in indicators next week as projected rainfall for the next seven days will range from up to 1.0 inch in the Delaware River Basin, from 0.5 to 1.5 inches in the Susquehanna River Basin, and 0.75 to 2.5 inches in the Ohio River Basin.

**Precipitation:** The 90-day precipitation departures ranged from 25% below normal in the central part of the state to 25% above normal in some western and northern tier counties. Precipitation departures mostly ranged from 11 to 25% below normal in the Delaware River Basin. Departures values ranged from -2.2 inches in Snyder County to +3.1 inches in Mercer County.

**Groundwater:** The instantaneous groundwater levels have begun to drop again due to the lack of rainfall during the last 7 days.

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

**DRBC:** The Delaware River Basin Commission is not imposing at drought condition at this time. The salt front is at RM 74, which is 3 miles upstream of the normal location for February.

**Commonwealth Drought Task Force**: The Commonwealth Drought Task Force is scheduled to meet at 11 a.m. on March 16, 2017, at PEMA Headquarters

## **Drought Report Details**

*Precipitation* – Over the last 7 days, county rainfall ranged from 0.0 to 0.6 inches across the state. The 90-day precipitation deficit shows counties ranging from 25% below normal to 25% above normal.

The precipitation indicators based on a 90-day departure are all in normal status for this date.

*Surface Water-* Instantaneous streamflow across the Commonwealth ranged from normal to below normal in the west and normal to much below normal across the eastern part of the state. For this date there were 21 gages reporting instantaneous flow at less than the 10th percentile and 3 gages were reporting record low instantaneous flows.

The 30-day running average streamflow indicators are showing 9 counties in drought "Watch" (Chester, Delaware, Lancaster, Lehigh, Mifflin, Northampton, Philadelphia, Snyder and Union) and 1 county in "Warning" (Berks) and no counties in "Emergency".

*Groundwater* – The 30-day moving average indicators for groundwater levels are showing 6 counties in drought "Watch" (Berks, Bucks, Lehigh, Montgomery, Northampton and Northumberland); 5 counties in "Warning" (Centre, Chester, Cumberland, Franklin and Lancaster) and 7 counties in "Emergency" (Dauphin, Delaware, Lebanon, Mifflin, Montour, Philadelphia 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)* - 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 many initiate their own voluntary or mandatory water use restrictions. The following public water suppliers continue to implement voluntary restrictions:

- Bloomfield Boro Water Authority, Perry County
- Mahanoy Township Authority, Schuylkill County
- Mary D Community Assn, Schuylkill County
- Richfield Area Joint Auth, Juniata County
- Schuylkill County Muni Auth, Schuylkill County
- Schuylkill Haven Boro, Schuylkill County

*Forecast* – The 7-day forecast projects precipitation to range from up to 1.0 inch in the Delaware River Basin, from 0.5 to 1.5 inches in the Susquehanna River Basin, and 0.75 to 2.5 inches in the Ohio River Basin.

### **Current Drought Status**

