

## **Drought Report January 18, 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 11 – January 18, 2017**

Overall, drought conditions across the Commonwealth displayed improvement as shown in surface water, groundwater and precipitation indicators after receiving approximately 0.5 in the southeast to 2.8 inches in the northwest. Further improvement is expected over the next seven days with a precipitation forecast ranging from approximately 1.5 inches in the west to 2.5 inches in the east.

**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 -4.6 inches in Perry County to +5.2 inches in McKean County.

**Groundwater:** Groundwater levels continue to rise at many of the monitoring wells due to recent rainfall with 9 counties returning to “Normal” drought status this reporting period. It should be noted that in the southcentral part of the state groundwater levels are not rising at the rate to leave their current drought status as 2 counties moved from drought “Warning” to “Emergency” status.

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

**DRBC:** Today, January 18, 2017, the Delaware River Basin Commission (DRBC) lifted the Basin-wide Drought Watch Operations that was initiated on November 23, 2016.

[http://www.nj.gov/drbc/home/newsroom/news/approved/20170118\\_newsrel\\_end-drought-watch.html](http://www.nj.gov/drbc/home/newsroom/news/approved/20170118_newsrel_end-drought-watch.html)

"Due to recent precipitation and snow melt, combined storage in three large upper basin reservoirs has achieved and sustained a sufficient level for five consecutive days to result in automatic termination of the basinwide drought watch," said DRBC Executive Director Steve Tambini. The salt remained steady this past week at RM 73, which is 4 miles upstream of the normal location for January.

**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.

## **Drought Report Details**

*Precipitation* – Over the last 7 days, county rainfall ranged from 0.5 in the southeast to 2.8 inches in the northwest. 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 11 counties are now in “Watch” (Adams, Carbon, Fulton, Huntingdon, Lebanon, Lehigh, Monroe, Montour, Philadelphia, Schuylkill and York), 8 counties in “Warning” (Cumberland, Dauphin, Franklin, Juniata, Mifflin, Northumberland, Snyder and Union) and 1 county in “Emergency” (Perry). In the past week 12 counties had their trigger return to “Normal” drought status.

*Surface Water*- Instantaneous streamflow across the Commonwealth ranged from normal to much above normal in the Ohio River Basin to from much above normal to below normal across the Susquehanna and Delaware River Basins. For this date there were no gages reporting instantaneous flow at less than the 10th percentile.

The 30-day running average streamflow indicators are showing 13 counties in drought “Watch” (Bucks, Chester, Cumberland, Dauphin, Delaware, Franklin, Juniata, Lebanon, Lehigh, Northampton, Perry, Schuylkill and York), 7 counties in “Warning” (Berks, Carbon, Mifflin, Northumberland, Philadelphia, Snyder and Union) and no counties in “Emergency”. Eight counties returned to “Normal” drought trigger status this reporting period.

*Groundwater* – The 30-day moving average indicators for groundwater levels are showing 16 counties in drought “Watch” (Adams, Bedford, Berks, Bucks, Clinton, Elk, Fulton, Juniata, Lehigh, Montgomery, Northampton, Northumberland, Perry, Susquehanna, Wayne and York); 9 counties in “Warning” (Centre, Chester, Delaware, Lackawanna, Lancaster, Monroe, Philadelphia, Pike and Schuylkill) and 8 counties in “Emergency” (Carbon, Cumberland, Dauphin, Franklin, Lebanon, Mifflin, Montour and Union). Nine counties had their trigger return to “Normal” status for this reporting period.

*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)* – No changes to counties reporting water conservation measures.

The following 18 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  
Franklin County General Authority, Franklin County  
Galeton Borough Water Authority, Potter County  
Hanover Boro Water Department, York County

Huntingdon Borough Water Department, Huntingdon County  
 Kutztown Municipal Waterworks, Berks County  
 Mahanoy Township Authority, Schuylkill County  
 Mary D Community Association, Schuylkill County  
 North Heidelberg Water, Berks County  
 Petersburg Borough Water Department, Huntingdon County  
 Richfield Area Joint Authority, Juniata County  
 Schuylkill Haven Borough, Schuylkill County  
 Schuylkill County Municipal Authority, Schuylkill County  
 Shinglehouse Borough Water Department, Potter County  
 Timeless Towns, Adams County  
 Wellsboro Municipal Authority, Tioga County

*Forecast* – The 7-day forecast indicates approximately 0.25 inches of precipitation will occur in the southeast to 2.0 inches in the northwest.

**Current Drought Status**

