

Drought Report January 11, 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 4 – January 11, 2017

Overall, drought conditions across the Commonwealth displayed improvement after receiving approximately 0.5 to 1.3 inches of precipitation. The lowest amounts were recorded in the east with the highest in the southwest corner of the state. Precipitation for the next 7 days is forecast to range from approximately 0.25 inches in the southeast to 2.0 inches in the northwest corner of the state.

Precipitation: The 90-day precipitation departures ranged from greater than 75% below normal in the central part of the state to 50% above normal in some western and northern tier counties. Departures ranged from -5.3 inches in Perry County to +4.2 inches in McKean County. The National Weather Service has at the Commonwealth Drought Task Force meeting that there is minimal snow pack with the northwestern counties reporting snow on the ground with a water equivalent of approximately 1.0 inch.

Groundwater: Groundwater levels continue to rise in some monitoring wells due to recent rainfall with 1 county 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 normal to below normal across the eastern part of the state.

DRBC: On November 23, 2016, the Delaware River Basin Commission (DRBC) placed the Delaware River Basin on a “Drought Watch” stage and issued a special permit for coordinated operation of regional reservoirs, out-of-state diversions, and Delaware River flow objections in response to persistent dry conditions. http://www.nj.gov/drbc/home/newsroom/news/approved/20161123_newsrel_drought-mgt-special-permit.html. The DRB continues to operate under these conditions. The salt remained steady this past week at RM 73, which is 4 miles upstream of the normal location for January.

Commonwealth 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 east to 1.3 inches in the southwest. The 90-day precipitation deficit shows counties ranging from greater than 75% below normal to 50% above normal precipitation.

The precipitation indicators based on a 90-day departure indicate 15 counties are now in “Watch” (Adams, Bedford, Berks, Bucks, Chester, Delaware, Lackawanna, Lancaster, Lehigh, Luzerne, Montgomery, Northampton, Philadelphia, Pike and Wayne), 12 counties in “Warning” (Carbon, Cumberland, Franklin, Fulton, Huntingdon, Lebanon, Monroe, Montour, Northumberland, Schuylkill, Union and York) and 5 counties in “Emergency” (Dauphin, Juniata, Mifflin, Perry and Snyder). In the past week 2 counties returned to “Normal” status.

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

The 30-day running average streamflow indicators are showing 21 counties in drought “Watch” (Adams, Berks, Bucks, Chester, Cumberland, Dauphin, Franklin, Fulton, Huntingdon, Lackawanna, Lancaster, Lebanon, Lehigh, Luzerne, Monroe, Montgomery, Northampton, Northumberland, Philadelphia, Schuylkill and York), 5 counties in “Warning” (Juniata, Mifflin, Perry, Snyder and Union) and 1 county in “Emergency” (Carbon). One county returned to “Normal” status this reporting period.

Groundwater – The 30-day moving average indicators for groundwater levels are showing 23 counties in drought “Watch” (Adams, Armstrong, Berks, Bucks, Butler, Clarion, Clinton, Columbia, Elk, Huntingdon, Juniata, Lehigh, Luzerne, Montgomery, Northampton, Northumberland, Perry, Sullivan, Susquehanna, Venango, Wayne, Wyoming and York); 13 counties in “Warning” (Bedford, Centre, Chester, Dauphin, Delaware, Fulton, Lackawanna, Lancaster, Lebanon, Monroe, Philadelphia, Pike and Schuylkill) and 6 counties in “Emergency” (Carbon, Cumberland, Franklin, Mifflin, Montour and Union). One county returned to “Normal” status for this reporting period.

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

Public Water Supply Agencies (PWSA's) – No changes to counties reporting water conservation measures.

The following 18 water suppliers are on 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

