pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Drought Report
January 25, 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 18 – January 25, 2017

Overall, drought conditions across the Commonwealth displayed improvement as shown in surface water, groundwater and precipitation indicators after receiving approximately 1.0 to 1.6 inches across the state. Projected rainfall for the next seven days will range from up to 0.10 inches in the lower Susquehanna and Delaware River Basin, from 0.10 to 0.5 inches in the upper Susquehanna River Basin, up to 0.75 inches in the Ohio River Basin with a maximum of 1.6 inches in the northwest 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 -3.8 inches in Snyder County to +2.2 inches in Greene and McKean Counties.

Groundwater: Groundwater levels continue to rise at many of the monitoring wells due to recent rainfall with 8 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 7 counties remain in "Emergency" status for this trigger.

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: On 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
"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 front moved up one mile from last week to RM 74, which is 5 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 1.0 to 1.6 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 6 counties are now in "Watch" (Dauphin, Juniata, Mifflin, Northumberland, Perry and Union) with one county in "Warning" (Snyder). In the past week 11 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 9 counties in drought "Watch" (Carbon, Chester, Cumberland, Juniata, Lehigh, Northampton, Northumberland, Perry and Philadelphia) and 4 counties in "Warning" (Berks, Mifflin, Snyder and Union) and no counties in "Emergency". Seven 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); 4 counties in "Warning" (Centre, Delaware, Mifflin and Philadelphia) and 7 counties in "Emergency" (Carbon, Cumberland, Dauphin, Franklin, Lebanon, Montour and Union). Eight 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) – The water suppliers listed below are being contacted to update their drought restriction status. Shinglehouse Borough Water Department lifted their restrictions on October 1, 2016 and Kutztown Municipal Waterworks, lifted their restrictions on January 22, 2017

The following 16 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

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
Timeless Towns, Adams County
Wellsboro Municipal Authority, Tioga County

Forecast – The 7-day forecast indicates 0.10 inches of precipitation will occur in the lower Delaware and Susquehanna River Basins to up to 1.6 inches in the northwest corner of the state.

(David Gordner, 772-1100)

Current Drought Status