

August 15, 2022

Drought Report

Summary: Initial Conditions - August 15

Preface

This report summarizes the various indicators utilized in drought monitoring; it is current to noon on August 15, 2022. Each parameter (precipitation, surface water, groundwater, 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 “Watch,” and “Warning” declarations are determined by the Commonwealth Drought Coordinator and the Department of Environmental Protection (DEP), with support of the Drought Task Force; “Emergency” declarations follow a similar process but are given final approval by the Governor.

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Precipitation – Over the past week, there was varying precipitation across the state, ranging from 0.0-1.3 inches. The 90-day precipitation departures show counties ranging from 50% below to 25% above normal precipitation.

The precipitation indicators based on a 90-day departure show 15 counties in drought “Watch” (Bradford, Centre, Clearfield, Dauphin, Elk, Jefferson, Juniata, Lebanon, McKean, Mifflin, Montgomery, Perry, Philadelphia, Schuylkill, and Wyoming) and six counties in “Warning” (Clarion, Clinton, Lycoming, Potter, Sullivan, and Tioga) and five counties in “Emergency” (Cameron, Montour, Northumberland, Snyder, and Union) condition.

Surface Water – 39 gages show instantaneous flow at less than the 10th percentile for this date. The 30-day moving average streamflow indicators show 20 counties in drought “Watch” (Cameron, Montour, Northumberland, Snyder, and Union), five counties in “Warning” (Lycoming, Northumberland, Potter, Snyder, and Union), and no counties in “Emergency” condition.

Groundwater – The 30-day moving average indicators for groundwater levels are showing 12 counties in drought “Watch” (Bradford, Columbia, Dauphin, Juniata, Lebanon, Luzerne, Montour, Perry, Schuylkill, Sullivan, Union, and Wyoming), no counties in “Warning”, and five counties in “Emergency” (Huntingdon, Lawrence, McKean, Mercer, and Potter) condition for this indicator.

Palmer Drought Severity Index – The Palmer soil moisture indicator is displaying 17 counties in drought “Watch” (Adams, Berks, Bucks, Carbon, Chester, Cumberland, Dauphin, Delaware, Franklin, Lancaster, Lebanon, Lehigh, Montgomery, Northampton, Philadelphia, Schuylkill, and York), 35 counties in “Warning” (Allegheny, Armstrong, Beaver, Bedford, Blair, Butler, Cambria, Cameron, Centre, Clearfield, Clinton, Elk, Fayette, Fulton, Greene, Huntingdon, Indiana, Juniata, Lackawanna, Lawrence, Luzerne, Lycoming, Mifflin, Monroe, Montour, Northumberland, Perry, Pike, Snyder, Somerset, Union, Washington, Wayne, and Westmoreland), and 15 counties in “Emergency” (Bradford, Clarion, Crawford, Erie, Forest, Jefferson, McKean, Mercer, Potter, Sullivan, Susquehanna, Tioga, Venango, Warren, and Wyoming) condition.

Public Water Systems (PWSs) – Presently, DEP is aware of two PWSs on voluntary water use restrictions.

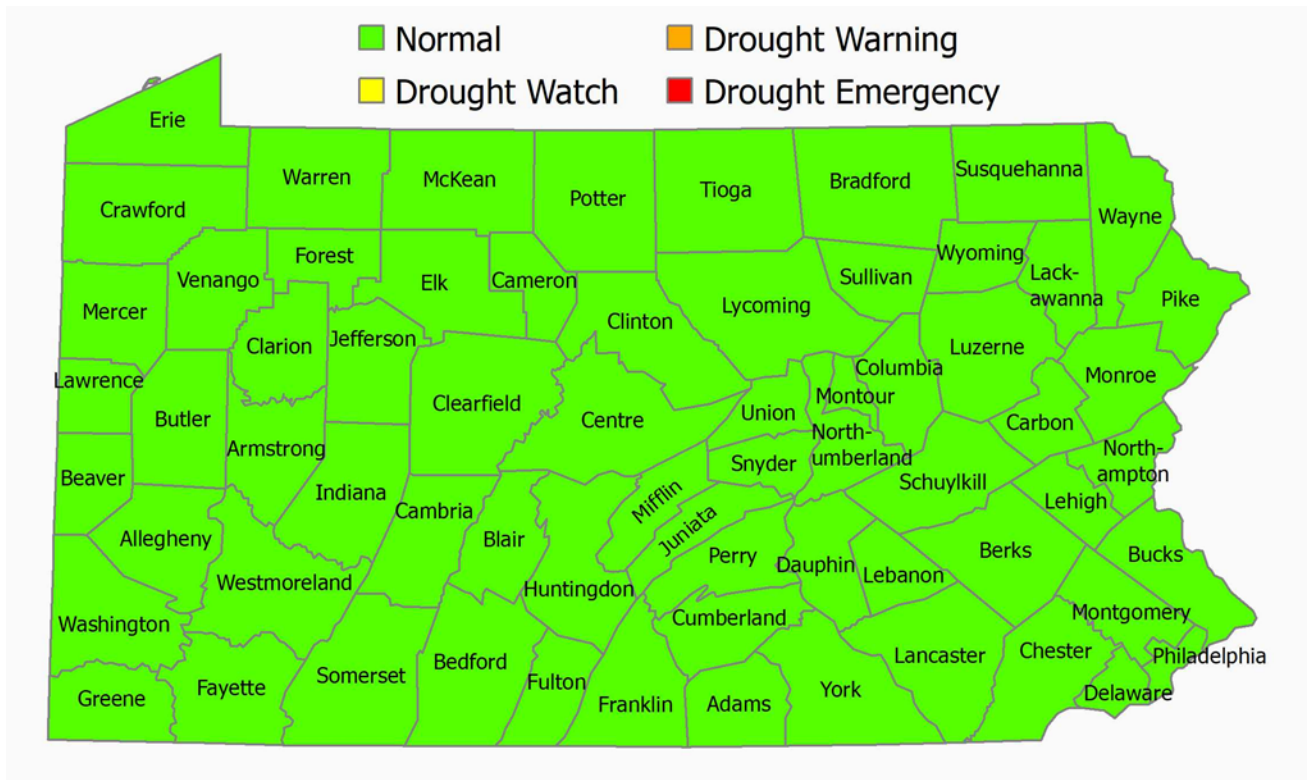
The following PWSs implementing voluntary measures:

- Driftwood Boro (PWSID 6120001), Cameron County
- Palmerton Municipal Water Authority (PWSID 3130012), Carbon County

Forecast – The 7-day forecast indicates approximately 0.66 to 1.5 inches of precipitation for the state, with the highest amounts in the northcentral and southcentral portions and the lowest values in the central-western part of the state. The 8 to 14-day forecast indicates 0.5 to 2.0 inches of precipitation for the state, with the northcentral and northeast portions receiving the most precipitation and the southeastern part receiving the least.

Summary – Instantaneous streamflow varies across the Commonwealth. However, approximately 39 gages are showing instantaneous flow at less than the 10th percentile. The 30-day moving average streamflow indicators show 20 counties in “Watch”, 5 counties in “Warning” and no counties in “Emergency” status. The 90-day precipitation departures show 15 counties in “Watch” and nine counties in either “Warning” and five counties in “Emergency” condition. The 30-day moving average groundwater well levels are showing 12 counties in “Watch”, no counties in “Warning”, and five counties in “Emergency” condition. The 12 counties showing “Watch” indicators for groundwater are based on seven wells, and the five counties in “Emergency” are based on three wells.

A Drought Task Force is tentatively being scheduled for Sept. 6, 2022.



Susan K. Weaver, P.E., 717.783.8055
Commonwealth Drought Coordinator