

Drought Report March 28, 2017

Preface

This report summarizes the various indicators used in drought monitoring. Each parameter (groundwater, surface water, precipitation, and palmer index) has its 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: March 22 – March 28, 2017

Streamflows and groundwater levels have begun to drop in the western part of the state. The lack of significant precipitation during the last seven days was evident in the central and eastern counties of the state. Although the southcentral and southeastern parts of the state continue to show below normal 30-day average streamflows and below normal 30-day average groundwater levels, their 30-day plots indicate some improvement due to snow melt and runoff during the last seven days, however no counties are expected to have their trigger status downgraded.

DRBC: The salt front is at RM 74, which is four miles upstream of the normal location for March. This is an increase upstream of three miles from last week.

Commonwealth Drought Task Force: To weigh the effects of melting snow and forecasted rainfall, the next Commonwealth Drought Task Force meeting was rescheduled to 11 a.m. on April 6, 2017, at PEMA Headquarters

Drought Report Details

Precipitation – Over the last seven days, liquid equivalent precipitation ranged from 0.0 inches in the southeast to 1.1 inches in the west. The 90-day precipitation deficit shows counties ranging from 50% below normal in the southeast to greater than 75% above normal in the west.

The precipitation indicators based on a 90-day departure are now showing four counties in drought "Watch" (Chester, Delaware, Montgomery and Philadelphia). No county indicators are in drought "Warning" or "Emergency".

Surface Water – Instantaneous flows range from much below normal to much above normal in the west: below normal to much above normal in the east with most gages in the northeast at above normal flows as snow melt continues to add to runoff in those streams.

The 30-day running average streamflow indicators are showing twenty-five counties in drought "Watch" (Adams, Armstrong, Bradford, Cameron, Carbon, Centre, Clarion, Clearfield, Cumberland, Elk, Franklin, Huntingdon, Jefferson, Juniata, Lycoming, McKean, Monroe, Montgomery, Perry, Pike, Potter, Snyder, Sullivan, Union and York); eight counties in "Warning" (Berks, Bucks, Chester, Delaware, Lancaster, Lehigh, Mifflin and Northampton) and one county in "Emergency" (Philadelphia).

Groundwater – The 30-day moving average indicators for groundwater levels are showing eleven counties in drought "Watch" (Adams, Bucks, Erie, Lawrence, Mercer, Mifflin, Montgomery, Northumberland, Sullivan, Wyoming and York); four counties in "Warning" (Berks, Centre, Lehigh and Northampton) and eight counties in "Emergency" (Chester, Cumberland, Dauphin, Delaware, Franklin, Lancaster, Lebanon and Philadelphia).

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 (PWSAs) – 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 1.25 to 2.5 inches throughout the state with higher precipitation across the eastern part of the state.

Current Drought Status

