

September 26, 2022

Drought Report

Summary: September 20 – September 26

Preface

This report summarizes the various indicators utilized in drought monitoring; it is current to noon on September 26th, 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.

Drought Report

Precipitation – Over the past week, there was varying precipitation across the state, ranging from zero to 1.8 inches. The 90-day precipitation departures shows counties ranging from 50% below up to 75% above normal precipitation.

Despite a general trend of improvement in precipitation conditions over the last few weeks, this last week saw some decline in indicators along the eastern edge of the state as well as a few central counties. These lingering precipitation deficits, particularly with 90-day departures, indicate a need for more consistent rains to fully overcome county deficits.

Surface Water – For this date, there are no gages that show instantaneous flow at less than the 10th percentile. This indicator appears to be reaping the benefits of recent rain and continues to improve statewide with all county indicators reading ‘Normal’ conditions.

Groundwater – Groundwater has continued to improve throughout the commonwealth with several county indicators improving in condition. This is typically a lagging indicator and reflects the recent rains reflected in prior reports. The well in Butler County is currently offline as it was impacted by pumping. The transducer has since been repositioned. In addition, it should be noted that several wells have reached maturity in their data collection, meaning that fewer counties reference another county’s observation well. This increases the granularity and accuracy of the data received from each county.

Palmer Drought Severity Index – The Palmer Drought Severity Index (PDSI) yielded no changes between this report and the prior week’s report showing drier conditions on the western portion of the state. This indicator is currently viewed with some skepticism, as a result, complex data such as precipitation, groundwater, and surface water data are the favored drought indicators in decision making.

Public Water Supply Agencies (PWSAs) – Presently, DEP is aware of nine PWSs on voluntary water use restrictions and five on mandatory water use restrictions. There have been no changes since the last report.

The following PWSs implementing voluntary measures:

- BCI Municipal Authority (PWSID 6170052), Clearfield County

- Duncannon Water System (PWSID 7500019), Perry County
- Driftwood Borough (PWSID 6120001), Cameron County
- Jersey Shore Area Joint Water Authority (PWSID 4410156), Lycoming County
- Lock Haven (PWSID 4180048), Clinton County
- Palmerton Municipal Water Authority (PWSID 3130012), Carbon County
- Pennsylvania American Water Company – Bangor District (PWSID 3480038), Carbon County
- Tower City Borough Authority (PWSID 3540045), Clinton County
- South Renovo Water System (PWSID 4180059), Clinton County

The following PWSs are implementing mandatory measures:

- Galeton Borough Water Authority (PWSID 6350010), Potter County
- Hazleton City Authority (PWS 2408001), Luzerne County
- Porter Township Municipal Authority (PWSID 4180055), Clinton County
- Veolia Water Pa Overbrook (PWSID 2400082), Luzerne County
- Waterville Water Association (PWSID 4410187), Lycoming County

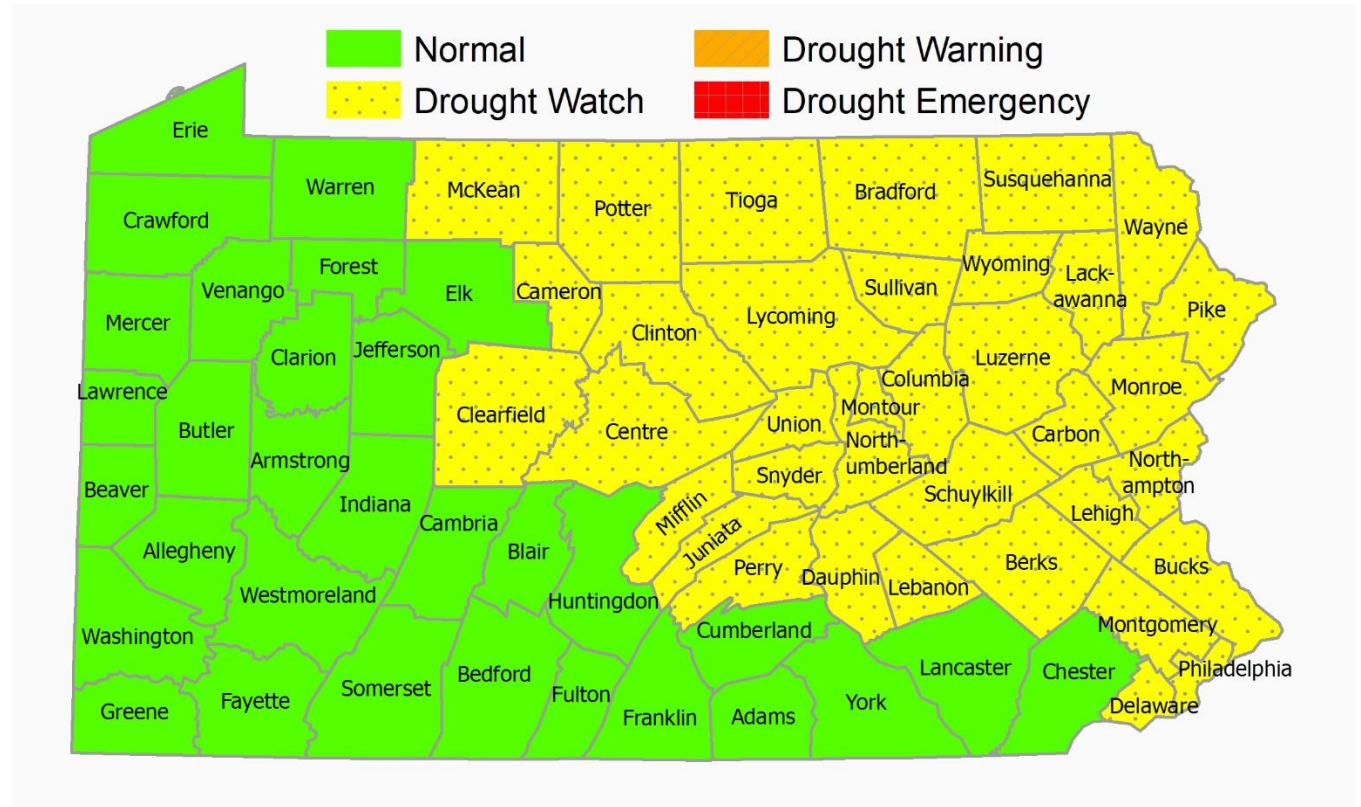
Forecast – The 7-day forecast indicates approximately 0.02 to 2.3 inches of precipitation for the state, with the highest amounts in the northwestern portion of the state and the lowest in the southeastern portion. The 8 to 14-day forecast indicates 0.83 to 2.3 inches of precipitation for the state, with the highest amounts in the northwestern portion and the lowest values in the central part of the state.

Summary – Though precipitation values have fallen in the last week the surface water and groundwater indicators continue to reap the benefits of precipitation earlier this month. Forecasts indicate that though the coming week may not receive much rain, the following week should yield higher quantities of rain throughout the state. Public water suppliers (a key drought information resource) have not altered their restrictions at present. More consistent rains will be needed to fully remove the specter of drought on the state.

A set of slides, including maps and a summary of the data contained in this report, is attached.

A Drought Task Force meeting has been scheduled for Monday, September 26th at 1pm. Conditions will continue to be closely monitored.

Below is a map of the current drought declarations:



**Susan K Weaver, PE, 717.783.8055
Commonwealth Drought Coordinator**