

Weekly Drought Report October 19, 2010

Precipitation

Over the last 7 days, the eastern half of the state accumulated the most precipitation ranging from 0.5 inches up to over an inch with a few small cell areas receiving over 2 inches. In the western half of the state, precipitation ranged from negligible amounts of 0.01 inches up to about 0.5 inches. The Erie coastline and pockets in and above Pittsburgh area received up to 1.5 inch accumulations.

The 90-day precipitation indicators are normal or above for counties except for the southwest corner. A lesser amount of precipitation in the west has dropped a few counties having normal 90-day precipitation indicators into watch and warning.

Surface Water

Instantaneous stream flow conditions remain at or above normal across the Central and Eastern portions of the state with the Western portion still at or below normal. All counties are now at Normal status for 30-day average streamflow except for Raccoon Creek in Beaver County, which just went into drought watch status.

A review of eight county drought monitoring stream gages scattered across the state (Armstrong, Beaver, Clearfield, Fulton, Luzerne, Monroe, Somerset and Tioga) indicates that even though the 30-day moving average in 7 out of 8 gages are in normal status, the values are either declining or peaking and suggests that more meaningful precipitation (longer duration and/or increased frequency) will be needed to recover from the drought.

Groundwater

As a result of precipitation over the past few weeks, the 30-day moving averages ground water levels generally are improving for most monitoring well locations. Those remaining in watch, warning or emergency status show an improvement, but not enough to bring them into the next lower status. Those wells should continue to improve if the precipitation forecasted for the next two weeks occurs.

Palmer Drought Severity Index

At this time, the drought indicators remain at “normal or above” status.

Precipitation forecast

Precipitation accumulations over the next 7 days are expected to range from about 0.5 inches to up to 2.5 inches predominately in the southern end of the Commonwealth.

NOAA is calling for higher precipitation accumulations in the western part of the Commonwealth during the week of Wednesday October 27th through Thursday November 4th with a range of about an 1.0 inches in the east up to 4 inches in the west.

Precipitation of those amounts should significantly reduce the departures from normal that remain in the western half of the state as well as immediately raise streamflows levels and over time, groundwater levels.

Although conditions have improved in eastern and central portions of the state with the reduction of precipitation deficits and higher stream flows, it is unknown at this point on whether improved conditions will be sustained. The 9/16/10 Drought Watch and Warning declarations remain in effect.