# September 06, 2011 Drought Report

# **Precipitation**

This past week has seen greater than normal precipitation extending from Mercer County south and eastward to Schuylkill County with lesser amounts in the Upper Tier of PA and little to no precipitation in the lower Delaware Valley. Despite the significant rainfall events over the past several weeks, the 90-day precipitation deficit indicators remain in "watch" or "warning" for the northwestern area of the state (Elk, Cameron, McKean, Potter, and Tioga).

### Surface Water

A review of the US Geological Survey (USGS) County monitoring gages indicates that the 30-day average streamflow values reflect the rainfall that has fallen over the past several weeks. Bedford and Fulton, the counties that are still in drought "watch", continue to show improvement as their 30-day average flows continue to increase.

The snapshot of instantaneous streamflows indicates above normal flows across the Susquehanna and Delaware River Basins where flows range from above normal to much above normal. In the northwest portion of the Allegheny River Basin, flows range from normal to above normal.

## Groundwater

The 30-day moving average Groundwater indicators have not changed except for Huntingdon County, which has moved from "normal" into "watch". While the Juniata County groundwater 30-day moving average value continues to decline and remains in "emergency", the observation well is being examined by the USGS for possible impact by the recent earthquake on August 23.

#### Palmer Drought Severity Index

The drought indicator for Region 8, which includes 5 counties (Bedford, Blair, Cambria, Fulton, and Huntingdon) is now in "watch" status. All other regions are normal.

# **Forecast**

The short term forecast indicates heavy rain and significant flooding to the area through late in the week. Drier conditions are forecast for time period between September 14 through 22.

#### Summary

DEP lifted drought watch declarations for 40 counties and reclassified 4 counties to drought watch status on September 2 following a PA Drought Task Force meeting. Recent rainfall has returned most stream flows, groundwater levels and soil moisture levels to normal in the eastern and several southern portions of the state.

The 40 counties for which the drought watch was lifted are Allegheny, Armstrong, Beaver, Bedford, Berks, Blair, Bradford, Bucks, Butler, Cambria, Centre, Chester, Clarion, Clearfield, Clinton, Crawford, Dauphin, Delaware, Erie, Forest, Fulton, Huntingdon, Indiana, Jefferson,

Juniata, Lancaster, Lawrence, Lebanon, Lycoming, Mercer, Mifflin, Montgomery, Perry, Philadelphia, Schuylkill, Sullivan, Tioga, Venango, Warren, and Wyoming. The counties changed from drought warning to drought watch are Cameron, Elk, McKean, and Potter.