

Watershed MANAGEMENT



Drought Information Center

August 13, 2002

On August 9th, Governor Schweiker extended the drought emergency for 14 counties across Southcentral and Southeast Pennsylvania. The Governor also added 7 counties to drought-watch status. There are now 14 counties in drought emergency, 3 in drought warning and 14 counties in drought watch. These counties are indicated on the drought status map and in the news release at <http://www.dep.state.pa.us/dep/subject/hotopics/drought>.

Through the first 13 days of August, county precipitation totals range from 0.1 inches (Columbia, Cumberland and Perry Counties) to 1.5 inches (Bedford County). Departures from normal for the first 13 days of August range from 0.2 inches (Bedford County), with Bedford being the only county above normal for the month, to -1.5 inches (Carbon County). The average statewide departure from normal for the period was -0.96 inches and the average rainfall for the period was 0.51 inches. For the past 365 days, precipitation departures range from -16.8 inches (Philadelphia County) to +5.8 inches (Forest County). There are now a total of 17 counties that in the last 365 days either exceed or equal -10.0 inches. It should be noted that on July 18, 2002, the Climate Prediction Center released its most recent 3-month outlook and predicts below normal precipitation and normal temperatures for the period August through October 2002.

As of 11:00 a.m., August 12th, the daily streamflow readings were below normal across the entire state. Daily streamflow readings range from 7% of normal to near normal. Instantaneous streamflow readings of 162 gages for August 12th at 9:45 a.m. indicate that there was 50 gages with flows less than the 25th percentile and 50 at less than the 10th percentile and 14 at record low. This constitutes a significant decrease in below normal flows from the previous week.

The 30-day streamflow duration graphs for August 12th reflect the affects that the lack of precipitation in combination with evaporation and transpiration continues to have on streamflows. More gages are now falling in to the drought watch stage and the 30-day values continue to drop at a significant rate. The lowest flows continue to occur in the southeastern and south-central portions of the state, however low flows can now be found moving north and west from the current drought emergency area. In the Delaware Basin all 18 stream gages are decreasing, with 5 gages in watch, 3 in warning and 5 in emergency. In the

Susquehanna River Basin, all of the 31 gages also show decreases in their 30-day average, with 5 duration graphs in emergency, 6 in warning and 10 in watch. Of the 3 Potomac River Basin gages 1 was in watch and 1 in emergency. In the Ohio River Basin, all 22 gages are decreasing with 6 gages now in watch, 2 in warning and 1 in emergency. Out of these gages statewide, 4 of the Delaware gages are at record lows for the day, along with 2 gages in the Susquehanna and 1 in the Potomac River Basins.

The 30-day groundwater duration graphs for August 12th indicate that groundwater levels continue to drop as evaporation, transpiration and minimal rainfall affect groundwater recharge. In the Delaware Basin, all 14 groundwater-monitoring gages are decreasing, with 6 in emergency, 1 in warning and 2 in watch. In the Susquehanna Basin, all 20 gages continue to decrease with 2 wells in emergency and 8 in watch. In the Ohio River Basin, all 13 gages are dropping with 3 wells in watch and 1 in emergency. Out of the groundwater gages statewide, record lows are found in the Berks, Chester and Schuylkill County monitoring wells.