

# Watershed MANAGEMENT



## Drought Information Center

**September 9, 2002**

On September 5th, Governor Schweiker added 5 counties to drought emergency, 3 in southeastern Pennsylvania (Bucks, Montgomery and Philadelphia) and 2 in the lower Susquehanna River Basin (Dauphin and Perry). The Governor also upgraded 5 counties to drought-warning status. In addition, 24 counties were added to drought watch, bringing a total to 31. 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 9 days of September, county precipitation totals range from 0.0 inches in 12 counties to 1.5 inches (Philadelphia County). Departures from normal for the first 9 days of September range from 0.4 inches (Philadelphia County to -1.2 inches (Indiana County). The average statewide departure from normal for the period was -0.76 inches and the average rainfall for the period was 0.32 inches. For the past 365 days, ending September 9th, precipitation departures range from -14.6 inches (Lancaster County) to +4.9 inches (Forest County). There are 14 counties that in the last 365 days either exceeded or equaled -10.0 inches. It should be noted that on August 15th, 2002, the Climate Prediction Center released its most recent 3-month outlook and predicts below normal precipitation and normal temperatures for the period September through November 2002.

As of 8:14 a.m., September 9th, the daily streamflow readings were below normal across the entire state. Daily streamflow readings range from 10% of normal to near normal. Instantaneous streamflow readings of 159 gages for September 9th at 1:45 a.m. indicate that there was 53 gages with flows less than the 25th percentile, 46 at less than the 10th percentile and 13 at record lows.

The 30-day streamflow duration graphs for September 9th 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 16 of 18 stream gages are decreasing, with 7 gages in watch, 4 in warning and 4 in emergency. In the Susquehanna River Basin, 29 of 31 gages also show decreases in their 30-day

average, with 10 duration graphs in emergency, 11 in warning and 8 in watch. Of the 3 Potomac River Basin gages 1 each was in watch and warning. In the Ohio River Basin, 21 of 22 gages are decreasing with 6 gages in watch and 1 in warning.

The 30-day groundwater duration graphs for September 9th indicate that groundwater levels continue to drop as evaporation, transpiration and minimal rainfall restricts groundwater recharge. In the Delaware Basin, 13 of 14 groundwater-monitoring gages are decreasing, with 6 in emergency, 2 in warning and 2 in watch. In the Susquehanna Basin, 19 of 20 gages are decreasing with 4 wells in emergency, 1 in warning and 8 in watch. In the Ohio River Basin, 12 of 13 gages are dropping with 3 wells in watch and 2 in emergency.