

Watershed MANAGEMENT



Drought Information Center

July 29, 2002

On June 14, Governor Schweiker lifted the drought emergency for six counties and restored 14 other counties to normal status. Dauphin, Perry and Wayne counties were upgraded to drought watch status and Bucks, Montgomery and Philadelphia counties were upgraded to drought warning status. 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 27 days of July, county precipitation totals range from 0.7 inches (Berks County) to 4.4 inches (Clarion County). Departures from normal for the first 27 days of July range from -3.1 inches (Berks County) to 0.5 inches (Clarion County). The average statewide departure from normal for the period was -1.81 inches and the average rainfall for the period was 1.76 inches. For the past 365 days, precipitation departures range from -15.5 inches (Philadelphia County) to +3.6 inches (Jefferson County). Eight other counties, Lancaster, Chester, Delaware, Montgomery, Franklin, Berks, Perry and Bucks, have departures for the last 365 days that 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 this morning, the daily streamflow readings were below normal across most of the Delaware and Susquehanna River Basins. Daily streamflows in the Ohio River Basin were above normal due to last weekend's storms that occurred in western Pennsylvania. Daily streamflow readings across the Delaware and Susquehanna River Basins range from 17% of normal streamflow to near normal streamflow. Instantaneous streamflow readings of 161 gages for July 29th at 1:45 a.m. indicate that there was 27 gages with flows less than the 25th percentile and 18 at less than the 10th percentile. This constitutes a slight decrease in below normal flows from the previous week. However, streamflows in the Delaware and Susquehanna Basins continue their downward trend.

The 30-day streamflow duration graphs for July 29th reflect the affects that the lack of precipitation in combination with evaporation and transpiration continues to have on streamflows. Most gages are still in the normal range, however 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. In the Delaware Basin all 18 stream gages are decreasing, with 6 gages in watch, 2 in warning and 2 in emergency. In the Susquehanna River Basin, all of the 31 gages also show decreases in their 30-day average, with 4 duration graphs in emergency, 4 in warning and 5 in watch. Of the 3 Potomac River Basin gages, 2 are in emergency. In the Ohio River Basin, 18 of 22 gages are decreasing with 9 gages now in watch and one in warning.

The 30-day groundwater duration graphs for July 29th 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 and one in watch. In the Susquehanna Basin, all 20 gages continue to decrease with one well in emergency, one in warning and 5 now in watch. In the Ohio River Basin, all 13 gages are dropping with one well in watch and another in emergency.