

Watershed MANAGEMENT



Drought Information Center

June 17, 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 16 days of June, precipitation has resulted in continued improvements to stream flows. County precipitation totals through June 16th range from 1.9 inches (Dauphin County) to 5.7 inches (Indiana County). Departures from normal for the first 16 days of June range from -0.2 inches (Dauphin County) to 3.3 inches (Indiana County). For the past 365 days, precipitation departures range from -15.0 inches (Philadelphia County) to +7.4 inches (Bradford County). Three other counties, Lancaster, Chester and Delaware, have departures for the last 365 days that exceed -10 inches.

As of this morning, the daily streamflow readings were above normal across the entire state except for the Sherman Creek, Conodoguinet Creek, Codorus Creek, Yellow Breeches Creek, Swatara Creek, and Conestoga River Basins which are in the Lower Susquehanna River Basin, and the Christina River Basin and Pennypack, Frankford, Crum, Ridley and Chester Creek Basins located in the Lower Delaware River Basin. Also, streamflows in the Potomac River Basin are below normal. Daily streamflow readings across the state range from 25% of normal streamflow to as high as a factor of 14 times above the normal streamflow. Instantaneous streamflow readings of 161 gages for June 17th at 1:45 a.m. indicate that there was 3 gages with flows less than the 25th percentile and 3 at less than the 10th percentile. It should be noted that there were no record low flows recorded for this date. The 30-day streamflow duration graphs for June 16th reflect the positive affect the recent rainfall has had on streamflows in the Delaware and Susquehanna River Basins. Most gages are in the normal range, however the 30-day values have begun to drop, which is expected to occur this time of year. In the Delaware Basin 13 of 18 stream gages are decreasing, with one gage in watch. Twenty-nine of the 31 gages show decreases in their 30-day average streamflow values in the Susquehanna River Basin, with one duration graph in warning. Daily streamflow readings in the Delaware and Susquehanna Basins are dropping with the lowest flows occurring in the southeastern and south-central portion of the state.

The 30-day duration graphs for June 16th indicate that groundwater levels have responded to the recent rains however they have begun to drop as evaporation and transpiration begin to have an affect on groundwater recharge. In the Delaware Basin, 11 of 13 groundwater-monitoring gages are decreasing, with 4 in emergency and 4 in watch. In the Susquehanna Basin 17 of 21 gages are

decreasing with one well in emergency and 2 in watch.