

Watershed MANAGEMENT



Drought Information Center

May 28, 2002

As reported during the last weekly update, Governor Schweiker extended the drought emergency on May 8, 2002 for up to 90 additional days for 20 counties in the state. Four counties were removed from the emergency list with Huntingdon County returning to normal and Carbon, Monroe and Pike counties moving to drought watch status. Twenty-four counties were returned to normal status from drought watch 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 28 days of May, precipitation has resulted in continued improvements to stream flows and groundwater conditions. County precipitation totals through May 28th range from 3.4 inches (Fulton County) to 6.7 inches (Warren County). Departures from normal for the first 28 days of May range from 0.1 inches (Fulton County) to 3.2 inches (Warren County). For the past 365 days, precipitation departures range from -15.6 inches (Philadelphia County) to +5.0 inches (Greene County).

As of this morning, the daily streamflow readings were above normal across the entire state except for the Codorus Creek, Yellow Breeches Creek and the Conestoga River Basins which are in the Lower Susquehanna River Basin, and the Christina River Basin and Delaware River (Main Stem) and Pennypack, Frankford, Crum, Ridley and Chester Creek Basins located in the Lower Delaware River Basin. Daily streamflow readings across the state range from 40% of normal streamflow to as high as 588% of normal streamflow. Instantaneous streamflow readings of 162 gages for May 28th at 5:45 a. m. indicate that there was 10 gages with flows less than the 25th percentile and 5 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 May 28th reflect the positive affect the recent rainfall has had on streamflows in the Delaware and Susquehanna River Basins. In the Delaware Basin 13 of 18 stream gages are increasing, with 2 duration graphs in watch. Fifteen of the 31 gages show increases in their 30-day average streamflow values in the Susquehanna River Basin, with 1 duration graph in warning. Daily streamflow readings in the Delaware and Susquehanna Basins are now dropping with lowest flows occurring in the southeastern part of the state.

The 30-day duration graphs for May 28th indicate that groundwater continues to respond to the recent rainfall. In the Delaware Basin, only 2 of 14 groundwater-monitoring gages are decreasing, with 4 in emergency, 1 in warning and 3 in watch. In the Susquehanna Basin 15 of 20 gages are increasing. However, 2 remain in emergency, 1 in warning and 1 in watch. At this time of the year, recharge will normally decrease due to the consumption of water by vegetation and evaporation by the hot weather conditions that soon will be upon us. Daily groundwater levels have already begun to drop in most of the monitoring wells in the Delaware and Susquehanna River Basins. Significant rainfall in the

southcentral and southeastern areas of the state is still believed to be necessary to maintain the recent recharge improvements provided by the rainfall during the last two months.