

Watershed MANAGEMENT



Drought Information Center

May 20, 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 20 days of May, precipitation has resulted in continued improvements to stream flows and groundwater conditions. County precipitation totals through May 20th range from 3.1 inches (Franklin County) to 6.3 inches (Jefferson and Elk Counties). Departures from normal for the first 20 days of May range from +0.5 inches (Franklin County) to +3.7 inches (Jefferson County). For the past 365 days, precipitation departures range from -12.3 inches (Philadelphia) to +7.4 inches (Greene County).

As of this morning, the daily streamflow readings were above normal across the entire state except for the Codorus Creek and Yellow Breeches Creek Basins which are in the Lower Susquehanna River Basin, and the Christina River and Pennypack, Frankford, Crum, Ridley and Chester Creek Basins located in the Lower Delaware River Basin. Daily streamflow readings range from 37% of normal streamflow to as high as 440% of normal streamflow. Instantaneous streamflow readings of 160 gages for May 20th at 5:45 p.m. indicate that there were 3 gages with flows less than the 25th percentile and 2 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 20th reflect the positive affect the recent rainfall has had on streamflows in the Delaware and Susquehanna River Basins. In the Delaware Basin all 18 stream gages are increasing, with 2 duration graphs in watch. All of the 31 gages show increases in their 30-day average streamflow values in the Susquehanna River Basin, with 1 duration graph in warning.

The 30-day durations graphs for May 20th indicates that groundwater has responded to the recent rainfall. In the Delaware Basin, only 2 of 14 groundwater-monitoring gages are decreasing, with 5 in emergency, 2 in warning and 3 in watch. In the Susquehanna Basin all 20 gages are increasing. However, 2 remain in emergency and 1 in warning. 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. 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.

