

# Watershed MANAGEMENT



## Drought Information Center

May 13, 2002

On May 8, 2002, Governor Schweiker extended the drought emergency 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 improvements are as a result of above normal precipitation in the western, north-central and east-central portions of the state during the last 60 days. Streamflows have returned to normal to above normal conditions in those portions of the state with groundwater levels responding and improving in those areas also. 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>.

County precipitation totals for the first 13 days of May range from 1.1 inches (Franklin County) to 4.3 inches (Jefferson County). Average departures from normal for the first 13 days of May in the Delaware River Basin is 0.4 inches. In the Susquehanna River Basin the departures are 1.0 inch for the Upper Susquehanna River Basin and 0.6 in the Middle Susquehanna Basin and 0.1 in the Lower Susquehanna, and in the Ohio River Basin the departures range from 0.5 to 2.5 inches. Departures from normal for the first 13 days of May range from -0.6 inches (Franklin County) to 2.6 inches (Jefferson County).

As of this morning, the daily streamflow readings were above normal across the entire state except for the Codus, Conodoguinet, Yellow Breeches and the West Conewago Creek Basins, all of which are in the Lower Susquehanna River Basin and portions of the Christina River Basin located in the Lower Delaware River Basin. Daily streamflow readings range from 33% of normal streamflow to as high as 600% normal streamflow. Instantaneous streamflow readings of 16 gages for May 13<sup>th</sup> at 5:45 a.m. indicate that there were 5 gages with flows less than the 25<sup>th</sup> percentile, 2 at less than the 10<sup>th</sup> percentile and 2 at record lows for the day. The 30-day streamflow duration graphs for May 13<sup>th</sup> reflect the positive affect the recent rainfall has had on streamflows in the Delaware and Susquehanna River Basins. In the Delaware Basin, 17 of 18 stream gages are increasing, with 2 duration graphs in emergency, 3 in warning and 1 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 emergency and 1 in watch.

The 30-day duration graphs for groundwater indicate that 4 of 14 monitoring wells in the Delaware River Basin have decreasing levels and 4 of 20 wells in the Susquehanna River Basin have decreasing levels. The 30-day durations graphs for May 13<sup>th</sup> indicates that groundwater has also responded to the recent rainfall, although not as significantly as streamflow. In the Delaware Basin, 4 of 14 groundwater monitoring gages are decreasing, with 8 in emergency and 3 in watch, and in the Susquehanna Basin

4 of 20 gages are decreasing, with 3 in emergency, 1 in warning and 1 in watch. The ability for groundwater to recharge will soon be significantly decreased due to the consumption of water by vegetation and evaporation by the hot weather conditions that soon will be upon us. Significant rainfall events will be necessary to maintain the recent recharge provided by the rainfall of the last 30 to 45 days.