

Watershed MANAGEMENT



Drought Information Center

September 17, 2002

On September 5th, Governor Schweiker added 5 counties to drought emergency, 3 in southeastern Pennsylvania (Bucks, Montgomery and Philadelphia) and 2 in the lower Susquehanna River Basin (Dauphin and Perry). The Governor also upgraded 5 counties to drought-warning status. In addition, 24 counties were added to drought watch, bringing a total to 31. 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 17 days of September, county precipitation totals range from 0.1 inches (Somerset County) to 3.3 inches (Carbon County). Departures from normal for the first 17 days of September range from 0.9 inches (Carbon County) to -1.8 inches (Adams County). The average statewide departure from normal for the period was -0.85 inches and the average rainfall for the period was 1.17 inches. For the past 365 days, ending September 17th, precipitation departures range from -14.6 inches (Lancaster County) to +4.6 inches (Forest County). There are 13 counties that in the last 365 days either exceeded or equaled -10.0 inches. It should be noted that on August 15th, 2002, the Climate Prediction Center released its most recent 3-month outlook and predicts below normal precipitation and normal temperatures for the period September through November 2002.

As of 8:56 a.m., September 16th, streamflows were above normal in the area where heavy rain occurred over the weekend. The Lehigh and Schuylkill River Basins were above normal in the Delaware Basin, with the Lackawanna River and Wapwallopen Creek Basin above normal in the Susquehanna Basin. The Allegheny and Beaver River Basins were above normal in the Ohio Basin. Daily streamflow readings range from 19% of normal to above normal. Instantaneous streamflow readings of 161 gages for September 17th at 1:45 a.m. indicate that there was 31 gages with flows less than the 25th percentile, 26 at less than the 10th percentile and 4 at record lows.

The 30-day streamflow duration graphs for September 17th indicate that the rainfall of the past weekend is providing only temporary relief in some areas of the state. Those gages that are increasing have daily streamflows that are again dropping. In the Delaware Basin 14 of 18 stream gages are decreasing, with 10

gages in watch, 2 in warning and 4 in emergency. In the Susquehanna River Basin, 16 of 31 gages also show decreases in their 30-day average, with 11 duration graphs in emergency, 10 in warning and 6 in watch. Of the 3 Potomac River Basin gages 1 each was in watch and emergency. In the Ohio River Basin, 15 of 22 gages are decreasing with 9 gages in watch, 1 in warning and 1 in emergency. Three gages in the Susquehanna River Basin were at record lows for the day on the 17th.

The 30-day groundwater duration graphs for September 17th indicate that groundwater levels continue to drop in spite of the recent rainfall, as evaporation and transpiration restricts groundwater recharge. In the Delaware Basin, all 13 groundwater-monitoring gages are decreasing, with 6 in emergency, 1 in warning and 1 in watch. In the Susquehanna Basin, 19 of 20 gages are decreasing with 5 wells in emergency, 1 in warning and 6 in watch. In the Ohio River Basin, 12 of 13 gages are dropping with 4 wells in watch and 1 in emergency. There were 6 monitoring wells with daily readings at a record low, 3 each in the Delaware and Susquehanna River Basins.

The Climate Prediction Centers most recent projection for October indicates there will be normal temperatures and below normal precipitation over most of Pennsylvania. The projection for the period October through December is also for near normal temperatures and below normal precipitation.