

Watershed MANAGEMENT



Drought Information Center

October 7, 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 7 days of October, county precipitation totals range from 0.0 inches (Elk, Forest, McKean, Montour, Venango and Perry County) to 0.5 inches (Monroe, Lehigh and Indiana County). Departures from normal for the first 7 days of October range from -0.2 inches (Allegheny, Beaver and Indiana County) to -0.7 inches (Crawford, Elk, Forest, Fulton, McKean, Montour, Venango and Warren County). The average statewide departure from normal for the period was -0.5 inches and the average rainfall for the period was 0.21 inches. All 67 counties currently have below normal rainfall for the month. For the past 365 days, ending October 7th, precipitation departures range from -14.4 inches (Chester County) to +3.8 inches (Forest County). There are 9 counties that in the last 365 days either exceeded or equaled -10.0 inches. It should be noted that on September 19th, 2002, the Climate Prediction Center released its most recent 3-month outlook and predicts below normal precipitation and normal temperatures for the period October through December 2002.

As of 8:18 a.m., October 7th, streamflows were below normal across the state except on the Main Stem Susquehanna River. Daily streamflow readings range from 22% of normal to slightly above normal. Instantaneous streamflow readings of 160 gages for October 7th at 1:45 a.m. indicate that there was 41 gages with flows less than the 25th percentile, 13 at less than the 10th percentile and 8 at record lows. Streamflows were dropping across the state and most of the streams that are now above normal will be below normal by the end of the week. Streamflows were the lowest in the Lower Susquehanna River Basin and in the Lower Delaware River Basin.

The 30-day streamflow duration graphs for October 7th indicate that rainfall from Hurricane Isadore has had a positive affect on the 30-day values. The 30-day

values are increasing however they still remain below normal on several stream gages with some gages still dropping in spite of the rainfall. In the Delaware Basin 5 of 18 stream gages are decreasing, with 4 gages in watch, 2 in warning and 1 in emergency. In the Susquehanna River Basin, 29 of 30 gages have increasing 30-day averages, with 1 duration graph in emergency, 1 in warning and 3 in watch. The 3 Potomac River Basin gages are now in normal status and are all increasing. In the Ohio River Basin, 3 of 22 gages are decreasing with 6 gages in watch and 1 in warning.

The 30-day groundwater duration graphs for October 7th indicate that groundwater levels continue to drop in spite of the recent rainfall. In the Delaware Basin, 2 of 12 groundwater-monitoring gages are decreasing, with 6 in emergency, 1 in warning and 3 in watch. In the Susquehanna Basin, 5 of 20 gages are decreasing with 3 wells in emergency and 4 in watch. In the Ohio River Basin, 10 of 13 gages are dropping with 1 well in watch, 1 in warning and 2 in emergency. There were 4 monitoring wells with daily readings at a record low, 2 in the Delaware River Basin and 1 each in the Susquehanna and Ohio River Basin's.

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.