

Watershed MANAGEMENT



Drought Information Center

October 14, 2001

On August 24, Secretary David E. Hess announced the expansion of the drought watch to 22 additional counties. A drought watch is now designated for 45 counties. 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>.

For the month of September 2001, 21 of 67 Pennsylvania counties had below normal precipitation. Departures from normal precipitation range from -2.10 inches (Philadelphia County) to 3.10 inches (Bradford, Lycoming, Monroe County). The September average departure from normal precipitation for the state as a whole is 0.60 inches. Cumulative rainfall for the period January through October 2001 ranged from 22.2 inches (Bedford County) to 36.6 inches (Bucks County). For the first 4 days of October all 67 counties have below normal precipitation, with average rainfall for the period being approximately 0.0 inches. Normal for the first 4 days of September would be approximately 0.4 inches.

Compared to September 4, in the Delaware Basin, the main-stem of the Delaware River is up from 3,160 to 3,440 cfs at Trenton. The Lackawaxen River is down from 45 to 42 cfs at Hawley. The Lehigh River is up from 738 to 933 cfs at Bethlehem. The Schuylkill River is up from 558 to 867 cfs at Philadelphia and the Brandywine Creek is up from 90 to 108 cfs at Chadds Ford. The New York City Delaware River Basin storage (October 4) is 21.40 % below normal and 27.643 billion gallons above the drought watch level.

Over the past four weeks in the Susquehanna Basin, the main stem Susquehanna River is up from 1,100 to 1,630 cfs at Towanda, up from 1,430 to 2,980 cfs at Wilkes-Barre, and up from 5,930 to 8,320 cfs at Harrisburg. The West Branch Susquehanna River is down from 1,010 to 751 cfs at Lock Haven, remained unchanged at 1,990 cfs at Williamsport, and up from 2,570 to 2,660 at Lewisburg. The Juniata River is down from 750 to 695 cfs at Newport. The Conestoga River is down from 66 to 55 cfs at Lancaster.

For the Ohio Basin, the Allegheny River is down from 3,750 to 2,200 cfs at Natrona. The main-stem Ohio River is down from 8,760 to 7,370 cfs at Sewickley. The Kiskiminetas River is down from 524 to 210 cfs at Vandergrift. The Monongahela River is down from 3,760 to 3,010 cfs at Braddock and the Beaver River is down from 971 to 572 cfs at Beaver Falls.

Instantaneous streamflow readings for October 4 at 5:45 a.m. indicate that there were 38 (out of 160 reporting) stream gages registering flows below the 25th percentile, 10 less than the 10th percentile and 5 at record lows.

USGS September 2001 end-of-month summary figures showing percent of wells where water level is above average decreased in the Delaware and Ohio River Basins and increased in the Susquehanna River Basin. The percent of wells where water level was above average was about 15%, 28% and 35% for the Delaware, Susquehanna and Ohio River basins, respectively. Groundwater levels responded to the above normal rainfall that occurred over the Susquehanna and Delaware River Basins. Compared to the September 4 readings, 16 of 33 groundwater monitoring wells show an increase in levels with the remaining decreasing. Increases range from 0.04 (Dauphin County) to 11.16 (Pike County) feet. Decreases range from 0.05 (Wayne County) to 2.46 (Lehigh County) feet.

For the period October 4th through October 14th, approximately 0.5 to 1.0 inches of rain is projected to fall across the state. Currently there are no tropical depressions or hurricanes predicted to affect the east coast.