Watershed MANAGEMENT 

Drought Information Center

December 5, 2001

On December 5, Secretary David E. Hess announced the upgrading of 22 drought watch counties to drought warning. Also, 7 additional counties were designated in drought watch. There are now 31 counties in drought watch and 31 counties in drought warning. 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 November 2001, all 67 Pennsylvania counties had below normal precipitation. Departures from normal precipitation range from –2.90 inches (Bucks, Montgomery, and Philadelphia Counties) to –0.1 inches (Butler County). The November average departure from normal precipitation for the state as a whole is –1.59 inches. Cumulative rainfall for the period January through December 5, 2001 ranged from 24.9 inches (Bedford County) to 39.1 inches (Greene County). For the first 5 days of December 40 of 67 counties have below normal precipitation, with average rainfall for the period being approximately 0.4 inches. Normal for the first 5 days of December is approximately 0.6 inches.

Compared to November 7, in the Delaware Basin, the main-stem of the Delaware River is up from 2,830 to 3,770 cfs at Trenton. The Lackawaxen River is up from 62 to 68 cfs at Hawley. The Lehigh River is up from 604 to 1,110 cfs at Bethlehem. The Schuylkill River is up from 465 to 571 cfs at Philadelphia and the Brandywine Creek is up from 98 to 106 cfs at Chadds Ford. The New York City Delaware River Basin storage (December 5) is 61.04 % below normal. The NYC Delaware River Basin storage levels declined to drought levels on November 26.

Over the past four weeks in the Susquehanna Basin, the main stem Susquehanna River is up from 1,380 to 4,510 cfs at Towanda, up from 1,900 to 7,300 cfs at Wilkes-Barre, and up from 5,450 to 21,100 cfs at Harrisburg. The West Branch Susquehanna River is up from 1,110 to 4,290 cfs at Lock Haven, up from 1,900 to 8,450 cfs at Williamsport, and up from 2,290 to 9,570 cfs at Lewisburg. The Juniata River is up from 673 to 1,160 cfs at Newport. The Conestoga River is up from 53 to 55 cfs at Lancaster.

For the Ohio Basin, the Allegheny River is up from 5,600 to 13,600 cfs at Natrona. The main-stem Ohio River is up from 10,300 to 15,800 cfs at Sewickley. The Kiskiminetas River is down from 566 to 548 cfs at Vandergrift. The Monongahela River is up from 2,590 to 3,800 cfs at Braddock and the Beaver River is up from 740 to 2,700 cfs at Beaver Falls.

Instantaneous streamflow readings for December 5 at 1:45 p.m., indicate that there were 40 (out of 159 reporting) stream gages registering flows below the 25th percentile, 40 less than the 10th percentile and 4 at record lows. These statistics reflect the continued below normal streamflows across the central and eastern portions of the state. It also should be noted that streamflows continue to decline relative to long term averages.

USGS November 2001 end-of-month summary figures showing percent of wells where water level is above average decreased in all three river basins. The percent of wells where water level was above average was about 8%, 10% and 32% for the Delaware, Susquehanna and Ohio River basins, respectively. Groundwater levels are increasing slightly, however they remain significantly below normal during the normal recharge period. Compared to the November 7 readings, 19 of 60 groundwater monitoring wells show a decrease in levels. Increases range from 0.04 (Fayette and Huntingdon Counties) to 12.00 (Butler County) feet. Decreases range from 0.03 (Dauphin County) to 2.39 (Clearfield County) feet. The average rise during the period November 7 to December 4 was 1.58 feet and the average fall was 0.98 feet. The average rise has had minimal affects on groundwater conditions as they continue to decline relative to long term averages.

For the period December 5ththrough December 15th, approximately 0.35 to a potential maximum of 2.0 inches (western portions) of rain is projected to fall across the state.