Watershed MANAGEMENT 

Drought Information Center

October 13, 2000

For the month of September 2000, 41 Pennsylvania counties had below normal precipitation. Departures from normal precipitation range from –1.60 inches (Carbon County) to +5.60 inches (Philadelphia County). The average departure from normal precipitation for the state as a whole for the month of September is +0.11 inches. For the cumulative departure from normal precipitation for the first nine months of 2000, 48 Pennsylvania counties had normal or above normal rainfall. Cumulative precipitation departures range from –4.00 inches (Cambria County) to +9.40 inches (Philadelphia County). The average cumulative departure from normal precipitation, for Pennsylvania for the first nine months of this year, is +1.91 inches. For the first 12 days of October, 38 Pennsylvania counties had less than normal precipitation.

Compared to September 13, the Delaware River Basin shows mainly flow recessions. Flow enhancements are seen in Tohickon Creek, Ridley Creek and Chester Creek basins while mixed gauge changes occurred in Neshaminy Creek and Schuylkill River basins. The mainstem Delaware River is holding even with 3,540 cfs. at Trenton. The Lackawaxen River is down from 393 to 127 cfs. at Hawley. The Lehigh River is down from 1,109 to 767 cfs. at Bethlehem. The Schuylkill River is down from 1,620 to 1,130 cfs. at Philadelphia and the Brandywine Creek is up from 126 to 157 cfs. at Chadds Ford. About 55% of the stream gauges in the Delaware River Basin are at above normal flow for October 13. The New York City Delaware River Basin storage (October 12) is 40.14% above normal and 163.927 billion gallon above the drought warning level.

Over the past four and a half weeks, the Susquehanna River Basin also shows mainly flow recessions throughout its drainage area. Towanda Creek Basin is holding rather steady while mixed gauge changes occurred in the Chemung River, West Branch Susquehanna River and Juniata River basins. The mainstem Susquehanna River is up from 1,820 to 3,220 cfs. at Towanda, up from 3,420 to 4,500 cfs. at Wilkes-Barre, and up from 7,400 to 10,000 cfs. at Harrisburg. The West Branch Susquehanna River is up from 561 to 1,660 cfs. at Lock Haven, up from 1,300 to 2,190 cfs. at Williamsport, and up from 1,300 to 2,410 cfs. at Lewisburg. The Juniata River is down from 739 to 608 cfs. at Newport and the Conestoga River is down from 604 to 234 cfs. at Conestoga. About 55% of the stream gauges in the Susquehanna River Basin are at above normal flow for this date. Above normal rainfall in the lower Susquehanna Basin, south of Blue Mountain, has sustained Hanover Borough's reservoir storage at constant levels throughout the month of September. Total system storage dropped by one percent and is currently at 92.16% of capacity. During the month, withdrawals averaging 0.4 mgd. have been made from Slagles Run to supplement Hanover's reservoirs supplies. Elsewhere in the Susquehanna Basin, slightly below normal September rainfall has caused a continuing slow decline in reservoir storage levels. Harrisburg's Dehart Reservoir has dropped an additional 11 inches during September, to 19

inches of total drawdown, or 96.3% of capacity. Storage levels for the Pennsylvania American Water Company, Scranton-Springbrook systems, have declined from 96.9 to 93.9% of capacity during the month. However, only three of the system's 21 reservoirs are below 90% capacity, and seven remain full.

Compared to mid-September, the Ohio River Basin shows mainly flow enhancements. Recessions occurred in Oswayo Creek, Raccoon Creek, Pine Creek, Monongahela River, Kiskiminetas River and Chartiers Creek basins. Mixed gauge changes are seen for Mahoning Creek and Clarion River basins. The Allegheny River is up from 6,250 to 19,900 cfs. at Natrona. The mainstem Ohio River is up from 14,500 to 25,500 cfs. at Sewickley. The Kiskiminetas River is down from 1,310 to 935 cfs. at Vandergrift. The Monongahela River is down from 7,150 to 2,790 cfs. at Braddock and the Beaver River is up from 1,300 to 1,560 cfs. at Beaver Falls. About 80% of the stream gauges in the Ohio River Basin are at above normal flow for today's date.

For September 2000, 24 of 28 stream gauging stations in Pennsylvania had a monthly mean discharge at or above average for the month of September. Thirteen gauging stations had a monthly mean discharge at or above the 70th percentile value, and none of these stations had a monthly mean discharge below the 40th percentile value.

Since September 13, 27 counties with monitoring wells show water level rises for nine counties and drops for 18. Increases range from 0.06 to 27.87 ft. (Pike County) with an average rise of 3.60 ft. If the Pike County increase is called into question, the other eight increases range from 0.06 to1.40 ft. (Potter County) with an average rise of 0.57 ft. Decreases range from 0.01 to 4.87 ft. (Carbon County) with an average drop of 0.74 ft. USGS September 2000 end-of-month summary figures showing percent of wells where water level is above average, have decreased for the Delaware, Susquehanna and Ohio River basins. The percent of wells where water level is above average is about 58%, 42% and 57% for the Delaware, Susquehanna and Ohio River basins, respectively.

For the next five days, up to 0.5 inches of rain are predicted for the northern half of Pennsylvania, with heavier amounts along the New York border tapering in intensity from north to south. For the period October 18 to 23, up to one inch of rain is expected in the extreme southeast, tapering to zero amounts about two-thirds of the distance westward across the state. Temperatures for the next ten days are expected to be normal to somewhat above normal.