

Watershed MANAGEMENT



Drought Information Center

November 13, 2000

For the month of October 2000, 59 Pennsylvania counties had below normal precipitation. Departures from normal precipitation range from -2.70 inches (Adams County) to +0.60 inches (Bradford County). The average departure from normal precipitation for the state as a whole, for the month of October, is -0.93 inches. For the cumulative departure from normal precipitation for the first ten months of 2000, 41 Pennsylvania counties had normal or above normal rainfall. Cumulative precipitation departures range from -4.00 inches (Cambria County) to +7.40 inches (Philadelphia County). The average cumulative departure from normal precipitation, for Pennsylvania for the first ten months of this year, is +0.99 inches. For the first 12 days of November, all but five Pennsylvania counties have below normal precipitation.

Compared to October 13, the Delaware River Basin has a mixed bag of comparisons. Flow enhancements are seen on the mainstem Delaware River, and in the Lackawanna River, Bush Kill, Brodhead Creek and Lehigh River basins. Tohickon Creek, Neshaminy Creek and Pennypack Creek basins show recessions, while Frankford Creek, Crum Creek, Ripley Creek, Chester Creek, and Christina River basins are holding rather steady. There are mixed gauge changes in the Schuylkill River Basin. The mainstem Delaware River is up from 3,540 to 6,810 cfs. at Trenton. The Lackawaxen River is up from 127 to 459 cfs. at Hawley. The Lehigh River is up from 767 to 817 cfs. at Bethlehem. The Schuylkill River is down slightly from 1,130 to 1,090 cfs. at Philadelphia and the Brandywine Creek is almost unchanged from 157 to 155 cfs. at Chadds Ford. About 80% of the stream gauges in the Delaware River Basin are at below normal flow for November 13. The New York City Delaware River Basin storage (November 8) is 48.63% above normal and 130.714 billion gallon above the drought warning level.

Over the past four and a half weeks, the Susquehanna River Basin shows mostly all flow enhancements throughout its drainage area. Swatara Creek, Codorus Creek and Conestoga Creek basins are holding about even. The mainstem Susquehanna River is up from 3,220 to 5,860 cfs. at Towanda, up from 4,500 to 8,450 cfs. at Wilkes-Barre, and up from 10,000 to 12,100 cfs. at Harrisburg. The West Branch Susquehanna River is up from 1,660 to 2,370 cfs. at Lock Haven, up from 2,190 to 3,630 cfs. at Williamsport, and up from 2,410 to 4,040 cfs. at Lewisburg. The Juniata River is up from 608 to 1,770 cfs. at Newport and the Conestoga River is down slightly from 234 to 207 cfs. at Conestoga. About 75% of the stream gauges in the Susquehanna River Basin are at below normal flow for this date. Below normal rainfall during October 2000 throughout the Susquehanna River Basin, and particularly south of Blue Mountain, has caused reservoir levels to continue to decline. Harrisburg's Dehart Reservoir has dropped an additional 18 inches during October to 37 inches of total drawdown, or 92.8 % of capacity. Also, Hanover Borough's total reservoir storage has shown

significant declines, dropping 64 million gallons for the month, or from 92.16% to 88.7% of capacity. However, Slagles Run station was turned off for a portion of the month for maintenance. It is important to note that while declines have been significant, reservoir supplies continue to be in good condition for this time of year. During October, storage levels for the PA American Water Company, Scranton-Springbrook system have declined by about one percent per week, and are currently at 89.4% of capacity. Five of the system's 21 reservoirs are below 90% of capacity including Nesbitt (88.6%), Watres (84.9%), and Lake Scranton (80.1%). However, nine other reservoirs in the system are currently full.

Compared to mid-October, in the Ohio River Basin, the Allegheny River, Oswayo Creek, Kinzua Creek, Conewango Creek, Brokenstraw Creek, Oil Creek, and French Creek basins, as well as the mainstem Ohio River, show flow recessions. Flow enhancements occurred in Crooked Creek, Kiskiminetas River and Monongahela River basins while Redbank Creek, Buffalo Creek, Pine Creek and Chartiers Creek are holding close to even. Mixed gauge changes were seen in the Beaver River, Clarion River and Mahoning Creek basins. The Allegheny River is down from 19,900 to 9,680 cfs. at Natrona. The mainstem Ohio River is down from 25,500 to 15,800 cfs. at Sewickley. The Kiskiminetas River is up from 935 to 2,280 cfs. at Vandergrift. The Monongahela River is up from 2,790 to 3,340 cfs. at Braddock and the Beaver River is down slightly from 1,560 to 1,510 cfs. at Beaver Falls. About 70% of the stream gauges in the Ohio River Basin are at below normal flow for today's date.

For October 2000, 22 of 27 available stream gauging stations in Pennsylvania had a monthly mean discharge at or above average for the month of October. Four gauging stations had a monthly mean discharge at or above the 70th percentile value.

Since October 13, 27 counties with monitoring wells show water level rises for 13 counties and drops for 14. Increases range from 0.05 to 9.94 ft. (Adams County) with an average rise of 1.84 ft. Decreases range from 0.25 to 3.68 ft. (Lehigh County) with an average drop of 1.21 ft. USGS September 2000 end-of-month summary figures showing percent of wells where water level is above average, have decreased for the Delaware and Ohio River basins, but increased for the Susquehanna River Basin. The percent of wells where water level is above average is about 42%, 45% and 50% for the Delaware, Susquehanna and Ohio River basins, respectively.

For the next five days, about one inch of precipitation is predicted for the eastern and western parts of the state. Amounts less than one-half inch are expected for south central and central counties. For the period November 17 to 22, the western third of the Commonwealth can expect close to an inch of precipitation, with the remainder of Pennsylvania receiving between perhaps one-quarter to one-half inch of precipitation. Temperatures for the next ten days are expected to be normal to somewhat below normal.