Watershed MANAGEMENT 

Drought Information Center

September 7, 1999

There was considerable precipitation in Pennsylvania since the beginning of the month, most of which occurred during the past 24-hour period as the remains of hurricane Dennis swept through the state. During the period September 1 through 6, there was a corridor about 20 miles wide extending from approximately Philadelphia to Pottsville that received somewhat more than an inch of rainfall. During this period there was also an area in the south-central part of the state that received between 0.5 and one inch of precipitation, while the rest of Pennsylvania had rainfall amounts of under half an inch.

Within the past 24-hours, areas of precipitation ranged from little or nothing along the extreme east and west parts of Pennsylvania, to small pockets of between two to four inches in south central areas. Areas receiving over two inches of rainfall comprise probably less than 10% of the area of the state. About 85% of the Commonwealth had significant rain that was concentrated in central areas. The average amount of precipitation for these areas was possibly close to an inch.

In the Delaware River Basin, flow enhancements are noted in the Lehigh River Basin, Frankford Creek Basin, Schuylkill River Basin, Crum Creek Basin, Ridley Creek Basin, Chester Creek Basin, and Christina River Basin. Since August 30, the mainstem Delaware River is holding essentially even from 2,830 to 2,950 cfs. The Lehigh River at Bethlehem is up from 390 to 579 cfs. The Schuylkill River at Philadelphia is up from 510 to 2,290 cfs., and the Brandywine Creek at Chadds Ford is up from 94 to 162 cfs. About half the gauges in the Delaware Basin are at below normal discharge for September 7.

In the Susquehanna River Basin, increased discharges are noted in most sub-basins. Since August 30, the mainstem Susquehanna River is down slightly at Towanda from 666 to 552 cfs., up slightly at Wilkes-Barre from 1,230 to 1,250 cfs., and up at Harrisburg from 6,030 to 9,650 cfs. The West Branch Susquehanna River is down at Renovo from 797 to 352 cfs., down at Lock Haven from 814 to 469 cfs., but up at Williamsport form 866 to 5,010 cfs. The Juniata River at Newport is up from 2,280 to 4,900 cfs., and the Conestoga River at Conestoga is down from 109 to 77 cfs. About one-third of the stream gauges in the Susquehanna River Basin are at below normal discharge for this date.

Despite the recent rainfall, the Ohio River Basin shows overall flow increases only in the Clarion, Mahoning, and upper Kiskiminetas River Basins. Since August 30, many other streams show slight decreases in gauge readings. The Allegheny River at Natrona is down from 2,760 to 1,880 cfs. The mainstem Ohio River at Sewickley is down from 5,190 to 4,270 cfs. The Kiskiminetas River at Vandergrift is down slightly from 247 to 228 cfs. The Monongahela River at Braddock is down slightly from 1,840 to 1,650 cfs., and the Beaver River at Beaver Falls is down from 971 to 740 cfs. About two-third of the stream gauges in the Ohio River Basin are at below normal flow for September 7.

Since August 30, 26 counties with monitoring wells show a water level rise for 12 counties and a drop for 14. Water level rises range from 0.02 to 6.28 ft. with an average increase of 1.33 ft. Decreases range from 0.02 to 1.09 ft. with an average drop of 0.32 ft.

During the next five days, the latest forecast calls for average rainfalls of about 0.2 inches over the western section of the state, 1.5 inches over central portions, and about 0.5 inches in the east. The period September 12 to 17 calls for about 0.3 inches of precipitation along the Ohio border tapering to nothing along the Delaware River.

Temperatures for the next ten days are expected to be normal to somewhat below normal.