

Watershed MANAGEMENT



Drought Information Center

June 7, 1999

The past week brought minimal precipitation across most of the Commonwealth. Erie and Crawford Counties received 0.7 and 0.6 inches respectively, and precipitation declined sharply to about 0.4 inches moving southeastwardly to a line from Somerset to Potter Counties. Heavier rains fell in the lower Susquehanna River basin area, west of the river, totaling again about 0.7 inch. The eastern Susquehanna basin received about 0.2-0.4 inch and the Delaware fared least well with only 0.0-0.2 inch. These numbers measure up against normal rainfall of about 0.8-1.0 inch for the period, and all counties recorded deficits for the period, ranging from 0.2 inch in Erie County to 0.8 inch throughout most of the Delaware basin.

In the Delaware River basin, stream flows continued their slide, with the main stem at Trenton down a third from last week's flow of 6080 cubic feet per second (cfs) to only 4040 cfs this morning, compared to a normal of 7610. The Lackawaxen River fell from 176 to 108 cfs at Hawley; the Lehigh River at Bethlehem declined from 1020 to 878 cfs; and the Schuylkill River at Philadelphia is down from 894 last week to 680, less than half of its normal of 1440 cfs for today. In the Christina River watershed, Brandywine Creek at Chadds Ford declined from 195 to 178 cfs, about two-thirds of its normal of 289.

In the Susquehanna River basin, similar conditions abound. The main stem at Harrisburg decreased from 9530 to 7400 cfs, about a third of its normal flow of 20,600 cfs. The Lackawanna River at Old Forge declined from 208 to 142, less than a half of its normal of 310 cfs. The West Branch Susquehanna at Lewisburg is down from 2390 to 2050 cfs, less than a third of its normal of 7480. The Juniata River at Newport held its own for the week, flowing again at 1190 this morning, but well under half of its normal of 2700 cfs. In the lower basin, the Conestoga River at Conestoga declined slightly from 195 to 189, against a normal of 553. The Juniata and Conestoga flows reflect the higher precipitation that occurred in the lower basin area.

In the Ohio River basin, the main stem Allegheny River fell to nearly half of last week's flows, with Natrona down from 9440 to 5600 cfs, about half of the 10,100-cfs normal. The Kiskiminetas River at Vandergrift is down from 903 to 818, about half its normal, and the Monongahela at Braddock is down from 4310 to 2080 cfs, about a third of its normal of 6010 cfs. The Beaver River at Beaver Falls declined from 953 to 827 cfs, also about half of normal. The Ohio River at Sewickley fell nearly half from 16,700 to 8990 cfs, half of its normal of 17,600.

Ground water levels declined at all daily monitoring wells, except Franklin, Huntingdon and Pike Counties. Franklin and Huntingdon reflect the week's precipitation, but Pike is difficult to explain. Many ground water monitoring sites in the Susquehanna and Delaware basin are indicating warning and

emergency levels.

Short-range forecasts indicate hot weather through mid-week, with the possibility of thunderstorms for most of the state. The five-day outlook shows no precipitation in the Ohio basin, about 0.1-0.25 inch in the Susquehanna, and 0.25-0.5 inch in the Delaware basin. The 5-10 day forecast adds another 0.5-1.0 inch statewide, with up to 1.5 inches along the northern tier, with average temperatures above normal in the 65-70 degree range.

Conditions overall continued to deteriorate during the week. A number of stream gages are recording record daily lows in both the Delaware and Susquehanna basins. Stream flows are already at typical late August and September levels. Ground water levels are likewise showing record lows for the period at several Delaware and Susquehanna basin sites. These are harbingers of potentially serious water supply problems later, if not early, this summer. All individuals and all water suppliers should be conserving their available resources. Water supply systems should be monitoring their sources closely.