

Watershed MANAGEMENT



Drought Information Center

May 24, 1999

During the past week, there was roughly an average of three-quarters inches of rain across the Commonwealth. This ranged from over two inches in the extreme southwestern counties, to less than an inch in the central part of the state. Extreme east and northeast counties had rainfall amounts ranging from 1.2 to 1.8 inches. Since May 17, about eight counties in the southwestern corner of the state have improved on the basis of total precipitation for the month of May. About four counties in the southeast corner have improved on the same basis. On a 60-day basis, the western 40-50% of the state is between 25% above and 25% below normal precipitation. On this 60-day basis, the eastern 50-60% of the state is from 26 to 50% below normal precipitation. Carbon County records a 60-day precipitation deficit between 50% and 75% below normal.

In the Delaware basin, most headwater and lower basin streams showed significant flow increases during the past week; most increases at key stations are 50% or higher. During this period, the Delaware River at Trenton increased from 4,520 to 6,860 cfs. The Lackawaxen River at Hawley increased from 152 to 250 cfs. The Lehigh River at Bethlehem increased from 1,100 to 1,710 cfs. The Schuylkill River at Philadelphia increased from 1,090 to 1,410 cfs., and the Brandywine Creek at Chadds Ford increased from 204 to 293 cfs. Despite increased discharges for most streams in the basin, about 75% of all streams have flows significantly below the long-term median flow for this date.

Except for the Lackawanna River and its tributaries, streams in the Susquehanna basin have mixed flow changes. Although gauges in the Lackawanna basin record increases of 25 to 50% during the past week, the main stem Susquehanna has many stations with a 20 to 30% flow decrease. The Chemung River, Towanda Creek, and Tunkhannock Creek basins have flow decreases of about 10 to 30%. On practically all streams in the Susquehanna basin, stream flows are significantly below the long-term median flow for this date.

The Ohio River basin has mostly increased stream flows during the past week, with the exception of the Allegheny River main stem, and the Clarion River basin. Significant flow increases were recorded in the Monongahela River basin. Except for the main stem Monongahela River, most stream flows in the Ohio basin are significantly below the long-term median flow for this date.

Again, most test well levels across the Commonwealth are lower than the previous week. Of 27 wells (representing 27 counties), 19 well levels have dropped less than a foot; three well levels have dropped between one and three feet. There are only five wells with higher water levels; in four of these wells, the water level increase is less than a foot.

Showers and thunderstorms are expected over most the state today, with up to 0.5 inches of rain expected between Monday evening and Tuesday afternoon. Heaviest rainfall amounts will be in the northwest corner of the state, decreasing to near trace amounts in the extreme southeast. From Tuesday, May 25 to Wednesday, May 26, a similar rainfall distribution pattern is expected, with amounts for the period reaching up to 0.20 inches in the extreme northwest, tapering to no precipitation in the southeast. For the period May 24 to 29, a total of about 1.5 inches of rain is expected over the Commonwealth, with up to 2.0 inches along the northern tier counties. For May 29 to June 3, 0.25 inches of rain is forecast over most the state, with amounts up to 1.0 to 1.5 inches expected mainly over the central portion. Temperatures for the period are expected to be somewhat below normal for May 24 to May 27, and much below normal for May 27 to May 31.