

# Watershed MANAGEMENT



## Drought Information Center

July 1, 2002

On June 14, Governor Schweiker lifted the drought emergency for six counties and restored 14 other counties to normal status. Dauphin, Perry and Wayne counties were upgraded to drought watch status and Bucks, Montgomery and Philadelphia counties were upgraded to drought warning status. These counties are indicated on the drought status map and in the news release at <http://www.dep.state.pa.us/dep/subject/hotopics/drought>.

For the period June 1 to June 29, 20 of 67 Pennsylvania counties had below normal precipitation. Departures from normal precipitation range from -1.2 inches (Franklin, Lancaster and York Counties) to 2.1 inches (Jefferson and Tioga County). The average departure from normal precipitation for the state as a whole for this period was 0.48 inches.

Compared to June 5, in the Delaware Basin, the main-stem of the Delaware River is down from 11,500 to 6,760 cfs at Trenton. The Lackawaxen River is down from 312 to 235 cfs at Hawley. The Lehigh River is down from 1,870 to 1,600 cfs at Bethlehem. The Schuylkill River is up slightly from 1,320 to 1,400 cfs at Philadelphia and the Brandywine Creek is down from 147 to 135 cfs at Chadds Ford. The New York City Delaware River Basin storage (July 1) is 89.0 % (241.18 billion gallons) of normal.

Over the past four weeks in the Susquehanna Basin, the main stem Susquehanna River is down from 9,250 to 8,410 cfs at Towanda, down from 12,000 to 10,800 cfs at Wilkes-Barre, and down from 29,100 to 26,000 cfs at Harrisburg. The West Branch Susquehanna River is down from 3,930 to 2,410 cfs at Lock Haven, down from 6,820 to 4,500 cfs at Williamsport, and down from 8,100 to 5,780 cfs at Lewisburg. The Juniata River is down from 3,270 to 1,480 cfs at Newport. The Yellow Breeches Creek near Camp Hill was down from 131 to 112 cfs.

For the Ohio Basin, the Allegheny River is down from 17,300 to 11,200 cfs at Natrona. The main-stem Ohio River is down from 22,400 to 12,400 cfs at Sewickley. The Kiskiminetas River is down from 2,020 to 1,560 cfs at Vandergrift. The Monongahela River is down from 6,120 to 2,910 cfs at Braddock and the Beaver River is down from 2,220 to 1,300 cfs at Beaver Falls.

Instantaneous streamflow readings for July 1 at 1:45 a.m., indicate that there were 15 (out of 162 reporting) stream gages registering flows below the 25th percentile, 6 less than the 10th percentile and 2 at record lows. The rainfall of the last two to three months has replenished streamflow across the state. Areas of concern still remain in the southcentral and southeastern portions of the state, where streamflows remain below normal. It should also be noted that streamflow is now below normal in the

southwestern portion of the state. Streamflow levels across the state are dropping due to the lack of significant rainfall and above normal temperatures over the past few weeks.

Streamflows are below normal in the Lower Delaware and Lower Susquehanna River Basins. Streamflows have also dropped to below normal readings in the southwestern part of the state. Overall, the USGS 30-day duration graphs for streamflow are now decreasing across the state, which represents a seasonal trend. Three gages in the Lower Delaware Basin are in the watch range and in the Susquehanna Basin one gage is at watch and one is at warning.

The USGS 30-day duration graphs, which have previously shown recovery for groundwater in portions of the state, have now begun to drop. Groundwater levels continue to remain significantly below normal in the Middle and Lower Delaware River Basins and in the Lower Susquehanna River Basin. Groundwater levels in these areas never recovered and have now begun to drop while remaining in warning and emergency. This is the time of the year when groundwater levels drop due to evaporation and transpiration. Consequently, the wells that are already in warning and emergency will be significantly stressed this summer due to declining levels, which will most likely have little chance to recover until the fall.