

# Watershed MANAGEMENT



## Drought Information Center

**December 11, 2002**

For the month of November 2002, 49 of 67 Pennsylvania counties had below normal precipitation. Departures from normal precipitation range from +1.2 inches (Philadelphia County) to -1.1 inches (Crawford County). For the second month in a row, Crawford County had the greatest negative departure from normal. The average departure from normal precipitation for the state as a whole for this period was -0.25 inches. Above normal rainfall again occurred east of the Allegheny Mountain range across the Susquehanna and Delaware River Basins during November, improving drought conditions in the Basins for the third month in a row. For the last 365 days, the rainfall during the past three months has reduced precipitation deficits in the central and eastern parts of Pennsylvania. The most significant deficits have shifted westward into the Ohio River Basin with Crawford County having a deficit of -5.5 inches and Beaver County having a deficit of -6.0 inches for the past 365 days.

Compared to November 5th instantaneous streamflow, in the Delaware Basin, the main-stem of the Delaware River is down from 7,730 to 7,190 cfs at Trenton. The Lackawaxen River is up from 295 to 413 cfs at Hawley. The Lehigh River is down from 1,830 to 1,450 cfs at Bethlehem. The Schuylkill River is down from 2,200 to 1,400 cfs at Philadelphia and the Brandywine Creek is up from 159 to 261 cfs at Chadds Ford. The New York City Delaware River Basin storage for December 11 is at 73.1% (197.915 billion gallons) of capacity.

Reviewing instantaneous streamflow from November 5th in the Susquehanna Basin, the main stem Susquehanna River is up from 5,470 to 6,020 cfs at Towanda, down from 8,400 to 7,370 cfs at Wilkes-Barre, and down from 20,200 to 19,800 cfs at Harrisburg. The West Branch Susquehanna River is down from 1,720 to 1,640 cfs at Lock Haven, down from 3,690 to 3,100 cfs at Williamsport, and down from 4,980 to 4,200 cfs at Lewisburg. The Juniata River is down from 3,140 to 2,090 cfs at Newport. The Yellow Breeches Creek near Camp Hill was down from 158 to 122 cfs.

For the Ohio Basin, the Allegheny River is down from 7,310 to 6,680 cfs at Natrona. The main-stem Ohio River is down from 18,900 to 17,400 cfs at Sewickley. The Kiskiminetas River is down from 1,290 to 1,190 cfs at Vandergrift. The Monongahela River is down from 9,780 to 7,820 cfs at Braddock and the Beaver River is up from 656 to 863 cfs at Beaver Falls. Most of the streamflow gages in the Ohio River Basin were reading at levels below normal with flows as low as 20 percent of normal.

Instantaneous streamflow readings for December 10th at 1:45 a.m. indicate that there were 41 (out of 161 reporting) stream gages registering flows below the 25th percentile and 16 with flows less than the 10th percentile.

Overall, the USGS 30-day duration graphs for streamflow have returned to normal in the Delaware, Potomac and Susquehanna River Basins. Streamflow averages are fluctuating between increasing and decreasing on the graphs, however the flows remain above normal for most of the gages. In the Ohio River Basin, there are 8 gages in watch.

The USGS 30-day duration graphs have responded to the significant rainfall we experience during the past few months. Most wells responded positively to the rain. However, a few wells still remain low and will require above normal rainfall to continue to occur in the coming months for them to fully recover. In the Delaware Basin 2 wells are in watch and 1 is in emergency. For the Susquehanna River Basin, 2 wells are in watch. In the Ohio Basin, 3 wells are in watch and 4 are in emergency.