

**SUMMARY OF HYDROLOGIC CONDITIONS  
IN THE  
UPPER DELAWARE RIVER BASIN  
August 2007**

Prepared by the  
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Adjusted streamflow in the upper Delaware River Basin during August was in the normal range. The maximum daily mean discharge of 4,410 cfs was recorded on August 11. The minimum daily mean discharge was 1,780 cfs on August 31.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during August was 2,439 cfs, which is 116 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs, was 2,087 cfs, or 132 percent of median (water years 1971-2000).

On the basis of an 11-station average, precipitation during August was 3.89 inches, which is 99 percent of the 66-year average. The maximum daily-average precipitation during the month was 1.05 inches on August 10. Precipitation in the upper Delaware River Basin during the past 12 months was 3.83 inches more than the long-term average. Precipitation during August was 0.03 inches less than the long-term average for the month.

Combined storage September 1, 2007 in Pepacton, Cannonsville, and Neversink Reservoirs was 70 percent of capacity above the point of maximum depletion. The combined storage of 191 billion gallons was 26 billion gallons less than that of one month ago and 57 billion gallons less than that of one year ago. Median combined storage on the first day of September in 40 years of record is 203 billion gallons.

As part of statewide networks, the USGS operates ground-water observation wells in the Pennsylvania and New Jersey parts of the Delaware River Basin. Mean water levels during August were above average in 12 of 20 observation wells. Water levels in 16 of the wells were below July 2007 levels, and water levels in 12 of the wells were below August 2006 levels.

## HYDROLOGIC CONDITIONS IN THE UPPER DELAWARE RIVER BASIN

Compiled by the Office of the Delaware River Master, Milford, Pa.

(Preliminary data - subject to revision)

### PRECIPITATION, IN INCHES

|       | Dec. 1940 to August 2006 |            | September 2006 to August 2007 |            |                    |            |                           |            |
|-------|--------------------------|------------|-------------------------------|------------|--------------------|------------|---------------------------|------------|
|       | Average                  |            | Actual                        |            | Percent of average |            | Excess (+) or deficit (-) |            |
|       | Amount                   | Cumulative | Amount                        | Cumulative | By month           | Cumulative | By month                  | Cumulative |
| Sept. | 4.04                     | 43.77      | 5.04                          | 47.60      | 125                | 109        | +1.00                     | +3.83      |
| Oct.  | 3.54                     | 39.73      | 5.16                          | 42.56      | 146                | 107        | +1.62                     | +2.83      |
| Nov.  | 3.80                     | 36.19      | 4.70                          | 37.40      | 124                | 103        | +0.90                     | +1.21      |
| Dec.  | 3.40                     | 32.39      | 2.12                          | 32.70      | 62                 | 101        | -1.28                     | +0.31      |
| Jan.  | 3.05                     | 28.99      | 3.92                          | 30.58      | 129                | 105        | +0.87                     | +1.59      |
| Feb.  | 2.59                     | 25.94      | *3.12                         | 26.66      | 120                | 103        | +0.53                     | +0.72      |
| Mar.  | 3.33                     | 23.35      | *3.66                         | 23.54      | 110                | 101        | +0.33                     | +0.19      |
| Apr.  | 3.76                     | 20.02      | 5.37                          | 19.88      | 143                | 99         | +1.61                     | -0.14      |
| May   | 4.18                     | 16.26      | 1.40                          | 14.51      | 33                 | 89         | -2.78                     | -1.75      |
| June  | 4.12                     | 12.08      | 3.46                          | 13.11      | 84                 | 109        | -0.66                     | +1.03      |
| July  | 4.04                     | 7.96       | 5.76                          | 9.65       | 143                | 121        | +1.72                     | +1.69      |
| Aug.  | 3.92                     | 3.92       | 3.89                          | 3.89       | 99                 | 99         | -0.03                     | -0.03      |

Note: Amount shown in cumulative columns is total from month shown to present.

\* Revised since last month.

### STREAMFLOW, IN CFS DELAWARE RIVER AT MONTAGUE, N.J.

| Month                | 1940-2005     |        |            | 2007<br>Monthly mean | Percent of<br>median |
|----------------------|---------------|--------|------------|----------------------|----------------------|
|                      | Maximum       | Median | Minimum    |                      |                      |
| August (observed)    | 14,230 (1955) | 2,096  | 715 (1954) | 2,439                | 116                  |
| August (adjusted)    | 17,410 (1955) | 1,380  | 364 (1964) | 2,087                | 151                  |
| September (observed) | 17,200 (2004) | 2,016  | 892 (1941) |                      |                      |
| September (adjusted) | 18,310 (2004) | 1,462  | 324 (1964) |                      |                      |