

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

Prepared by the  
Office of the Delaware River Master  
Milford, Pennsylvania

Adjusted streamflow in the upper Delaware River Basin during January was excessive. The maximum daily mean discharge of 21,200 cfs was recorded on January 9. The minimum daily mean discharge was 4,820 cfs on January 28.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during January was 9,885 cfs, which is 193 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs, was 10,950 cfs, or 180 percent of median (water years 1971-2000).

On the basis of a 5-station average, precipitation during January was 3.40 inches, which is 111 percent of the 66-year average. The maximum daily-average precipitation during the month was 0.90 inches on January 6. Precipitation in the upper Delaware River Basin during the past 12 months was 7.68 inches more than the long-term average. Precipitation during January was 0.35 inches more than the long-term average for the month.

Combined storage February 1, 2007 in Pepacton, Cannonsville, and Neversink Reservoirs was 97 percent of capacity above the point of maximum depletion. The combined storage of 262 billion gallons was 8 billion gallons more than that of one month ago and 12 billion gallons less than that of one year ago. Median storage on the first day of February in 39 years of record is 223 billion gallons. Pepacton and Cannonsville Reservoirs spilled 1.1 and 5.6 billion gallons, respectively, in January.

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 January were above average in 19 of 20 observation wells. Water levels in 17 of 20 wells were above December 2006 levels, and water levels in 11 of 20 wells were below January 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 Jan. 2006 |            | February 2006 to January 2007 |            |                    |            |                           |            |
|-------|------------------------|------------|-------------------------------|------------|--------------------|------------|---------------------------|------------|
|       | Average                |            | Actual                        |            | Percent of average |            | Excess (+) or deficit (-) |            |
|       | Amount                 | Cumulative | Amount                        | Cumulative | By month           | Cumulative | By month                  | Cumulative |
| Feb.  | 2.61                   | 43.69      | 1.56                          | 51.37      | 60                 | 118        | -1.05                     | +7.68      |
| Mar.  | 3.36                   | 41.08      | 1.32                          | 49.81      | 39                 | 121        | -2.04                     | +8.73      |
| Apr.  | 3.76                   | 37.72      | 3.80                          | 48.49      | 101                | 129        | .04                       | +10.77     |
| May   | 4.18                   | 33.96      | 4.43                          | 44.69      | 106                | 132        | .25                       | +10.73     |
| June  | 4.00                   | 29.78      | 11.62                         | 40.26      | 290                | 135        | +7.62                     | +10.48     |
| July  | 4.06                   | 25.78      | *3.12                         | 28.64      | 77                 | 111        | -.94                      | +2.86      |
| Aug.  | 3.89                   | 21.72      | *6.13                         | 25.52      | 158                | 117        | +2.24                     | +3.80      |
| Sept. | 4.04                   | 17.83      | 4.90                          | 19.39      | 121                | 109        | .86                       | +1.56      |
| Oct.  | 3.54                   | 13.79      | 4.86                          | 14.49      | 137                | 105        | +1.32                     | .70        |
| Nov.  | 3.80                   | 10.25      | 4.31                          | 9.63       | 113                | 94         | .51                       | -.62       |
| Dec.  | 3.40                   | 6.45       | 1.92                          | 5.32       | 56                 | 82         | -1.48                     | -1.13      |
| Jan.  | 3.05                   | 3.05       | 3.40                          | 3.40       | 111                | 111        | .35                       | .35        |

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      |                      |                      |
| January (observed)  | 15,600 (1996) | 5,116  | 1,318 (1981) | 9,885                | 193                  |
| January (adjusted)  | 21,330 (1996) | 5,939  | 1,064 (1981) | 10,950               | 184                  |
| February (observed) | 15,120 (1976) | 5,295  | 1,748 (1980) |                      |                      |
| February (adjusted) | 20,330 (1981) | 5,613  | 1,373 (1980) |                      |                      |