

**SUMMARY OF HYDROLOGIC CONDITIONS
IN THE
UPPER DELAWARE RIVER BASIN
January 2008**

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 26,000 cfs was recorded on January 12. The minimum daily mean discharge was 5,810 cfs on January 29.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during January was 10,790 cfs, which is 205 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs, was 11,170 cfs, or 184 percent of median (water years 1971-2000).

On the basis of a 5-station average, precipitation during January was 1.79 inches, which is 58 percent of the 67-year average. The maximum daily-average precipitation during the month was 0.31 inches on January 11. Precipitation in the upper Delaware River Basin during the past 12 months was 3.03 inches more than the long-term average. Precipitation during December was 1.27 inches less than the long-term average for the month.

Combined storage February 1, 2008 in Pepacton, Cannonsville, and Neversink Reservoirs was 93 percent of capacity above the point of maximum depletion. The combined storage of 252 billion gallons was 2 billion gallons more than that of one month ago and 10 billion gallons less than that of one year ago. Median combined storage on the first day of February in 40 years of record is 224 billion gallons. Cannonsville Reservoir spilled a total of 1.9 billion gallons during the month.

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 16 of 20 observation wells. Water levels in 14 of the wells were above December 2007 levels, and water levels in 16 of the wells were below January 2007 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. 2007 | | February 2007 to January 2008 | | | | | |
|-------|------------------------|------------|-------------------------------|------------|--------------------|------------|---------------------------|------------|
| | Average | | Actual | | Percent of average | | Excess (+) or deficit (-) | |
| | Amount | Cumulative | Amount | Cumulative | By month | Cumulative | By month | Cumulative |
| Feb. | 2.59 | 43.81 | 3.12 | 46.84 | 120 | 107 | +0.53 | +3.03 |
| Mar. | 3.33 | 41.22 | 3.66 | 43.72 | 110 | 106 | +0.33 | +2.50 |
| Apr. | 3.76 | 37.89 | 5.57 | 40.06 | 148 | 106 | +1.81 | +2.17 |
| May | 4.18 | 34.13 | 1.68 | 34.49 | 40 | 101 | -2.50 | +0.36 |
| June | 4.12 | 29.95 | *3.35 | 32.81 | 81 | 110 | -0.77 | +2.86 |
| July | 4.04 | 25.83 | 5.76 | 29.46 | 143 | 114 | +1.72 | +3.63 |
| Aug. | 3.92 | 21.79 | *3.53 | 23.70 | 90 | 109 | -0.39 | +1.91 |
| Sept. | 4.06 | 17.87 | 2.34 | 20.17 | 58 | 113 | -1.72 | +2.30 |
| Oct. | 3.56 | 13.81 | 7.01 | 17.83 | 197 | 129 | +3.45 | +4.02 |
| Nov. | 3.81 | 10.25 | 4.15 | 10.82 | 109 | 106 | +0.34 | +0.57 |
| Dec. | 3.38 | 6.44 | 4.88 | 6.67 | 144 | 104 | +1.50 | +0.23 |
| Jan. | 3.06 | 3.06 | 1.79 | 1.79 | 58 | 58 | -1.27 | -1.27 |

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 | 1940-2006 | | | 2008 Monthly mean | Percent of median |
|---------------------|---------------|--------|--------------|----------------------|----------------------|
| | Maximum | Median | Minimum | | |
| January (observed) | 16,060 (2006) | 5,271 | 1,318 (1981) | 10,790 | 205 |
| January (adjusted) | 21,330 (1996) | 6,004 | 1,064 (1981) | 11,170 | 186 |
| February (observed) | 15,120 (1976) | 5,456 | 1,748 (1980) | | |
| February (adjusted) | 20,330 (1981) | 5,616 | 1,373 (1980) | | |