

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

January 2003

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

Adjusted streamflow in the upper Delaware River Basin during January was in the normal range. The maximum daily mean discharge of 17,600 cfs occurred on January 3. The minimum daily mean discharge was 4,300 cfs on January 31.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during January was 6,845 cfs, which is 139 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs was 7,599 cfs, or 173 percent of median (water years 1961-90).

On the basis of a 5-station average, precipitation during January was 2.38 inches, which is 80 percent of the 62-year average. The maximum daily-average precipitation during the month was 1.05 inches on January 2. Precipitation in the upper Delaware River Basin during the past 12 months was 4.18 inches more than the long-term average. Precipitation during January was 0.60 inches less than the long-term average for the month.

Combined storage February 1, 2003 in Pepacton, Cannonsville, and Neversink Reservoirs was 89 percent of capacity above the point of maximum depletion. The combined storage of 242 billion gallons was 17 billion gallons more than that of one month ago and 163 billion gallons more than that of one year ago. Median storage on the first day of February in 35 years of record is 214 billion gallons.

As part of a statewide network, the USGS operates 12 observation wells in the Pennsylvania part of the Delaware River Basin. Mean water levels during January were above average in 9 of the wells. Water levels in 8 of the wells were above December 2002 levels, and water levels in all 12 wells were above January 2002 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. 2002 | | February 2002 to January 2003 | | | | | |
|-------|------------------------|------------|-------------------------------|------------|--------------------|------------|---------------------------|------------|
| | Average | | Actual | | Percent of average | | Excess (+) or deficit (-) | |
| | Amount | Cumulative | Amount | Cumulative | By month | Cumulative | By month | Cumulative |
| Feb. | 2.65 | 43.11 | 1.59 | 47.29 | 60 | 110 | -1.06 | +4.18 |
| Mar. | 3.35 | 40.46 | 3.59 | 45.70 | 107 | 113 | +0.24 | +5.24 |
| Apr. | 3.73 | 37.11 | 3.89 | 42.11 | 104 | 113 | +0.16 | +5.00 |
| May | 4.19 | 33.38 | 5.94 | 38.22 | 142 | 114 | +1.75 | +4.84 |
| June | 3.96 | 29.19 | 5.74 | 32.28 | 145 | 111 | +1.78 | +3.09 |
| July | 4.07 | 25.23 | 1.32 | 26.54 | 32 | 105 | -2.75 | +1.31 |
| Aug. | 3.83 | 21.16 | *3.31 | 25.22 | 86 | 119 | -.52 | +4.06 |
| Sept. | 3.86 | 17.33 | 4.86 | 21.91 | 126 | 126 | +1.00 | +4.58 |
| Oct. | 3.35 | 13.47 | 6.31 | 17.05 | 188 | 127 | +2.96 | +3.58 |
| Nov. | 3.79 | 10.12 | 3.68 | 10.74 | 97 | 106 | -.11 | +0.62 |
| Dec. | 3.35 | 6.33 | 4.68 | 7.06 | 140 | 112 | +1.33 | +0.73 |
| Jan. | 2.98 | 2.98 | 2.38 | 2.38 | 80 | 80 | -.60 | -.60 |

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 | 1940-2001 | | | 2003 Monthly mean | Percent of median |
|---------------------|---------------|--------|--------------|----------------------|----------------------|
| | Maximum | Median | Minimum | | |
| January (observed) | 15,600 (1996) | 4,922 | 1,318 (1981) | 6,845 | 139 |
| January (adjusted) | 21,330 (1996) | 5,820 | 1,064 (1981) | 7,599 | 131 |
| February (observed) | 15,120 (1976) | 5,468 | 1,748 (1980) | | |
| February (adjusted) | 20,330 (1981) | 5,613 | 1,373 (1980) | | |