# SUMMARY OF HYDROLOGIC CONDITIONS IN THE <br> UPPER DELAWARE RIVER BASIN 

March 2004

Prepared by the<br>Office of the Delaware River Master<br>Milford, Pennsylvania

Adjusted streamflow in the upper Delaware River Basin during March was in the normal range. The maximum daily mean discharge of 19,400 cfs occurred on March 7. The minimum daily mean discharge was 2,000 cfs on March 1.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during March was $8,133 \mathrm{cfs}$, which is 89 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs was 10,610 cfs, or 96 percent of median (water years 1971-2000).

On the basis of a 5-station average, precipitation during March was 2.10 inches, which is 63 percent of the 63 -year average. The maximum daily-average precipitation during the month was 0.36 inches on March 17. Precipitation in the upper Delaware River Basin during the past 12 months was 10.15 inches more than the long-term average. Precipitation during March was 1.25 inches less than the long-term average for the month.

Combined storage April 1, 2004 in Pepacton, Cannonsville, and Neversink Reservoirs was 99 percent of capacity above the point of maximum depletion. The combined storage of 268 billion gallons was 25 billion gallons more than that of one month ago and 8 billion gallons less than that of one year ago. Median storage on the first day of April in 36 years of record is 253 billion gallons. Cannonsville and Neversink Reservoirs spilled 20.6 and 0.3 billion gallons, respectively, in March.

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 March were above average in 8 of the wells. Water levels in 9 of the wells were below February 2004 levels, and water levels in 6 of the wells were above March 2003 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 Mar. 2003 |  | April 2003 to March 2004 |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Average |  | Actual |  | Percent of average |  | Excess (+) or deficit (-) |  |  |  |
|  | Amount | Cumulative | Amount | Cumulative | By month |  | Cumulative | By month |  | Cumulative |
| Apr. | 3.74 | 43.19 | 2.80 | 53.34 | 75 | 124 | -.94 | +10.15 |  |  |
| May | 4.22 | 39.45 | 3.71 | 50.54 | 88 | 128 | -.51 | +11.09 |  |  |
| June | 3.99 | 35.23 | 6.57 | 46.83 | 165 | 133 | +2.58 | +11.60 |  |  |
| July | 4.02 | 31.24 | 4.37 | 40.26 | 109 | 129 | +.35 | +9.02 |  |  |
| Aug. | 3.82 | 27.22 | 4.81 | 35.89 | 126 | 132 | +.99 | +8.67 |  |  |
| Sept. | 3.88 | 23.40 | $* 10.69$ | 31.08 | 276 | 133 | +6.81 | +7.68 |  |  |
| Oct. | 3.39 | 19.52 | $* 5.94$ | 20.39 | 175 | 104 | +2.55 | +.87 |  |  |
| Nov. | 3.79 | 16.13 | 3.98 | 14.45 | 105 | 90 | +.19 | -1.68 |  |  |
| Dec. | 3.37 | 12.34 | 4.63 | 10.47 | 137 | 85 | +1.26 | -1.87 |  |  |
| Jan. | 2.98 | 8.97 | 2.36 | 5.84 | 79 | 65 | -.62 | -3.13 |  |  |
| Feb. | 2.64 | 5.99 | 1.38 | 3.48 | 52 | 58 | -1.26 | -2.51 |  |  |
| Mar. | 3.35 | 3.35 | 2.10 | 2.10 | 63 | 63 | -1.25 | -1.25 |  |  |

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 | $1940-2002$ |  |  | 2004 <br> Monthly mean | Percent of <br> median |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Maximum | Median | Minimum | 8,133 | 89 |
| March (observed) | $24,480(1945)$ | 9,135 | $3,191(1981)$ | 10,610 | 96 |
| March (adjusted) | $25,910(1945)$ | 11,000 | $4,428(1981)$ |  |  |
|  |  |  |  |  |  |
| April (observed) | $31,560(1940)$ | 11,640 | $3,322(1985)$ |  |  |
| April (adjusted) | $33,010(1940)$ | 13,840 | $3,847(1946)$ |  |  |

