# SUMMARY OF HYDROLOGIC CONDITIONS <br> IN THE <br> UPPER DELAWARE RIVER BASIN <br> April 2001 

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

Adjusted streamflow in the upper Delaware River Basin during April was excessive. The maximum daily discharge of $35,800 \mathrm{cfs}$ occurred on April 11. The minimum daily discharge was $3,470 \mathrm{cfs}$ on April 30.

On the basis of a 5-station average, precipitation during April was 1.38 inches, which was 37 percent of the 60 -year average. The maximum daily-average precipitation during April was 0.45 inches on April 10. Precipitation in the upper Delaware River Basin during the past 12 months was 0.18 inches greater than the long-term average. Precipitation during April was 2.39 inches less than the long-term average for the month.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during April was $14,750 \mathrm{cfs}$, which was 129 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs was $17,110 \mathrm{cfs}$, or 122 percent of median (water years 1961-90).

Combined storage May 1, 2001, in Pepacton, Cannonsville, and Neversink Reservoirs was 100.0 percent of capacity above the point of maximum depletion. The combined storage of 271 billion gallons was 29 billion gallons more than that of one month ago and was 1 billion gallons less than that of one year ago. Median storage on the first day of May in 33 years of record is 271 billion gallons.

As part of a statewide network, the USGS operates 13 observation wells in the Pennsylvania part of the Delaware River Basin. Mean water levels during April were below average in 7 of the wells. Water levels in 12 of the wells were trending upward in comparison to March levels. Water levels in 8 of the wells were below April 2000 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 Apr. 2000 |  | May 2000 to April 2001 |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Average |  | Actual |  | Percent of average |  | Excess (+) or deficit (-) |  |  |  |  |
|  | Amount | Cumulative | Amount | Cumulative | By month | Cumulative | By month | Cumulative |  |  |  |
| May | 4.17 | 43.21 | 6.36 | 43.39 | 153 | 100 | +2.19 | +0.18 |  |  |  |
| June | 3.91 | 39.04 | 6.50 | 37.03 | 166 | 95 | +2.59 | -2.01 |  |  |  |
| July | 4.09 | 35.13 | 4.54 | 30.53 | 111 | 87 | +.45 | -4.60 |  |  |  |
| Aug. | 3.86 | 31.04 | $* 3.19$ | 25.99 | 83 | 84 | -.67 | -5.05 |  |  |  |
| Sept. | 3.83 | 27.18 | $* 3.74$ | 22.80 | 98 | 84 | -.09 | -4.38 |  |  |  |
| Oct. | 3.39 | 23.35 | 2.41 | 19.06 | 71 | 82 | -.98 | -4.29 |  |  |  |
| Nov. | 3.85 | 19.96 | 2.50 | 16.65 | 65 | 83 | -1.35 | -3.31 |  |  |  |
| Dec. | 3.34 | 16.11 | 4.21 | 14.15 | 126 | 88 | +.87 | -1.96 |  |  |  |
| Jan. | 3.02 | 12.77 | 1.35 | 9.94 | 45 | 78 | -1.67 | -2.83 |  |  |  |
| Feb. | 2.65 | 9.75 | 2.26 | 8.59 | 85 | 88 | -.39 | -1.16 |  |  |  |
| Mar. | 3.33 | 7.10 | 4.95 | 6.33 | 149 | 89 | +1.62 | -.77 |  |  |  |
| Apr. | 3.77 | 3.77 | 1.38 | 1.38 | 37 | 37 | -2.39 | -2.39 |  |  |  |

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 | $1940-99$ |  |  |  | 2001 <br> Monthly mean |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| April (observed) | Maximum | Median | Minimum | M1,560(1940) | 11,400 |
| $3,322(1985)$ | 14,750 | 129 |  |  |  |
| April (adjusted) | $33,010(1940)$ | 13,870 | $3,847(1946)$ | 17,110 | 123 |
|  |  |  |  |  |  |
| May (observed) | $16,090(1943)$ | 6,998 | $2,215(1965)$ |  |  |
| May (adjusted) | $18,970(1989)$ | 8,234 | $2,944(1941)$ |  |  |

