# SUMMARY OF HYDROLOGIC CONDITIONS <br> IN THE <br> UPPER DELAWARE RIVER BASIN <br> May 2002 

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

Adjusted streamflow in the upper Delaware River Basin during May was excessive. The maximum daily mean discharge of $23,800 \mathrm{cfs}$ occurred on May 14 . The minimum daily mean discharge was 3,940 cfs on May 12.

On the basis of a 5-station average, precipitation during May was 6.00 inches, which is 143 percent of the 61-year average. The maximum daily-average precipitation during May was 1.07 inches on May 14. Precipitation in the upper Delaware River Basin during the past 12 months was 6.73 inches less than the long-term average. Precipitation during May was 1.81 inches more than the longterm average for the month.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during May was 9,428 cfs, which is 134 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs was $12,650 \mathrm{cfs}$, or 153 percent of median (water years 1961-90).

Combined storage June 1, 2002 in Pepacton, Cannonsville, and Neversink Reservoirs was 82 percent of capacity above the point of maximum depletion. The combined storage of 222 billion gallons was 53 billion gallons more than that of one month ago and 31 billion gallons less than that of one year ago. Median storage on the first day of June in 35 years of record is 269 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 May were below average in 8 of the wells. Water levels in 11 of the wells were trending upward in comparison to April levels, and water levels in 7 of the wells were below May 2001 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 May 2001 |  | June 2001 to May 2002 |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Average |  | Actual |  | Percent of average |  | Excess (+) or deficit (-) |  |  |  |  |
|  | Amount | Cumulative | Amount | Cumulative | By month | Cumulative | By month | Cumulative |  |  |  |
| June | 3.96 | 43.22 | 4.06 | 36.49 | 103 | 84 | +.10 | -6.73 |  |  |  |
| July | 4.09 | 39.26 | 2.49 | 32.43 | 61 | 83 | -1.60 | -6.83 |  |  |  |
| Aug. | 3.85 | 35.17 | 2.84 | 29.94 | 74 | 85 | -1.01 | -5.23 |  |  |  |
| Sept. | 3.83 | 31.32 | 5.37 | 27.10 | 140 | 87 | +1.54 | -4.22 |  |  |  |
| Oct. | 3.38 | 27.49 | 1.28 | 21.73 | 38 | 79 | -2.10 | -5.76 |  |  |  |
| Nov. | 3.83 | 24.11 | 1.37 | 20.45 | 36 | 85 | -2.46 | -3.66 |  |  |  |
| Dec. | 3.36 | 20.28 | 2.80 | 19.08 | 83 | 94 | -.56 | -1.20 |  |  |  |
| Jan. | 3.00 | 16.92 | 1.69 | 16.28 | 56 | 96 | -1.31 | -.64 |  |  |  |
| Feb. | 2.65 | 13.92 | 1.41 | 14.59 | 53 | 105 | -1.24 | +.67 |  |  |  |
| Mar. | 3.35 | 11.27 | 3.47 | 13.18 | 104 | 117 | +.12 | +1.91 |  |  |  |
| Apr. | 3.73 | 7.92 | 3.71 | 9.71 | 99 | 123 | -.02 | +1.79 |  |  |  |
| May | 4.19 | 4.19 | 6.00 | 6.00 | 143 | 143 | +1.81 | +1.81 |  |  |  |

Note: Amount shown in cumulative columns is total from month shown to present.

STREAMFLOW, IN CFS
DELAWARE RIVER AT MONTAGUE, N.J.

| Month | 1940-2000 |  |  | $2002$ <br> Monthly mean | Percent of median |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Maximum | Median | Minimum |  |  |
| May (observed) | 16,090 (1943) | 7,019 | 2,215 (1965) | 9,428 | 134 |
| May (adjusted) | 18,970 (1989) | 8,256 | 2,944 (1941) | 12,650 | 153 |
| June (observed) | 15,200 (1972) | 3,199 | 1,214 (1965) |  |  |
| June (adjusted) | 16,010 (1972) | 3,948 | 1,024 (1962) |  |  |

