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

June 2003

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

Adjusted streamflow in the upper Delaware River Basin during June was excessive. The maximum daily mean discharge of $21,600 \mathrm{cfs}$ occurred on June 23. The minimum daily mean discharge was $6,100 \mathrm{cfs}$ on June 30.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during June was $11,240 \mathrm{cfs}$, which is 342 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs was $11,770 \mathrm{cfs}$, or 297 percent of median (water years 1961-90).

On the basis of an 11-station average, precipitation during June was 6.87 inches, which is 172 percent of the 62-year average. The maximum daily-average precipitation during the month was 1.66 inches on June 1. Precipitation in the upper Delaware River Basin during the past 12 months was 2.84 inches more than the long-term average. Precipitation during June was 2.88 inches more than the long-term average for the month.

Combined storage July 1, 2003 in Pepacton, Cannonsville, and Neversink Reservoirs was 100 percent of capacity above the point of maximum depletion. The combined storage of 270 billion gallons was 3 billion gallons less than that of one month ago and 29 billion gallons more than that of one year ago. Median storage on the first day of July in 36 years of record is 257 billion gallons. Cannonsville Reservoir spilled continuously throughout the month and spilled more than 18 billion gallons. Pepacton Reservoir spilled continuously until June 29 and spilled more than 13 billion gallons. Neversink Reservoir spilled on several days in June and spilled more than 3 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 June were above average in 11 of the wells. Water levels in 11 of the wells were above May 2003 levels, and water levels in 10 of the wells were above June 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 June 2002 |  | July 2002 to June 2003 |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Average |  | Actual |  | Percent of average |  | Excess (+) or deficit ( - ) |  |  |  |
|  | Amount | Cumulative | Amount | Cumulative | By month |  | Cumulative | By month |  | Cumulative |
| July | 4.07 | 43.17 | 1.32 | 46.01 | 32 | 107 | -2.75 | +2.84 |  |  |
| Aug. | 3.83 | 39.10 | 3.31 | 44.69 | 86 | 114 | -.52 | +5.59 |  |  |
| Sept. | 3.86 | 35.27 | 5.40 | 41.38 | 140 | 117 | +1.54 | +6.11 |  |  |
| Oct. | 3.35 | 31.41 | 6.30 | 35.98 | 188 | 115 | +2.95 | +4.57 |  |  |
| Nov. | 3.79 | 28.06 | 3.96 | 29.68 | 104 | 106 | +.17 | +1.62 |  |  |
| Dec. | 3.35 | 24.27 | 4.68 | 25.72 | 140 | 106 | +1.33 | +1.45 |  |  |
| Jan. | 2.98 | 20.92 | 2.38 | 21.04 | 80 | 101 | -.60 | +.12 |  |  |
| Feb. | 2.63 | 17.94 | 2.59 | 18.66 | 98 | 104 | -.04 | +.72 |  |  |
| Mar. | 3.36 | 15.31 | 3.00 | 16.07 | 89 | 105 | -.36 | +.76 |  |  |
| Apr. | 3.74 | 11.95 | 2.63 | 13.07 | 70 | 109 | -1.11 | +1.12 |  |  |
| May | 4.22 | 8.21 | 3.57 | 10.44 | 85 | 127 | -.65 | +2.23 |  |  |
| June | 3.99 | 3.99 | 6.87 | 6.87 | 172 | 172 | +2.88 | +2.88 |  |  |

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

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

| Month | 1940-2001 |  |  | $\begin{gathered} 2003 \\ \text { Monthly mean } \end{gathered}$ | Percent of median |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Maximum | Median | Minimum |  |  |
| June (observed) | 15,200 (1972) | 3,284 | 1,214 (1965) | 11,240 | 342 |
| June (adjusted) | 16,010 (1972) | 3,960 | 1,024 (1962) | 11,770 | 297 |
| July (observed) | 11,220 (1945) | 2,442 | 864 (1954) |  |  |
| July (adjusted) | 11,470 (1945) | 2,138 | 391 (1965) |  |  |

