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

July 2003

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

Adjusted streamflow in the upper Delaware River Basin during July was excessive. The maximum daily mean discharge of 5,610 cfs occurred on July 1. The minimum daily mean discharge was 1,990 cfs on July 20.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during July was $3,415 \mathrm{cfs}$, which is 142 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs was $3,395 \mathrm{cfs}$, or 152 percent of median (water years 1961-90).

On the basis of an 11-station average, precipitation during July was 3.95 inches, which is 98 percent of the 62 -year average. The maximum daily-average precipitation during the month was 1.20 inches on July 22. Precipitation in the upper Delaware River Basin during the past 12 months was 5.50 inches more than the long-term average. Precipitation during July was 0.07 inches less than the long-term average for the month.

Combined storage August 1, 2003 in Pepacton, Cannonsville, and Neversink Reservoirs was 96 percent of capacity above the point of maximum depletion. The combined storage of 259 billion gallons was 12 billion gallons less than that of one month ago and 52 billion gallons more than that of one year ago. Median storage on the first day of August in 36 years of record is 230 billion gallons. Cannonsville Reservoir spilled 25 million gallons on July 1. Pepacton and Neversink Reservoirs did not spill at any time during July.

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 July were above average in 11 of the wells. Water levels in 7 of the wells were below June 2003 levels, and water levels in all of the wells were above July 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 July 2002 |  | August 2002 to July 2003 |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Average |  | Actual |  | Percent of average |  | Excess (+) or deficit (-) |  |  |  |
|  | Amount | Cumulative | Amount | Cumulative | By month |  | Cumulative | By month |  | Cumulative |
| Aug. | 3.83 | 43.12 | 3.31 | 48.62 | 86 | 113 | -.52 | +5.50 |  |  |
| Sept. | 3.86 | 39.29 | 5.40 | 45.31 | 140 | 115 | +1.54 | +6.02 |  |  |
| Oct. | 3.35 | 35.43 | 6.30 | 39.91 | 188 | 113 | +2.95 | +4.48 |  |  |
| Nov. | 3.79 | 32.08 | 3.96 | 33.61 | 104 | 105 | +.17 | +1.53 |  |  |
| Dec. | 3.35 | 28.29 | $* 4.66$ | 29.65 | 139 | 105 | +1.31 | +1.36 |  |  |
| Jan. | 2.98 | 24.94 | 2.38 | 24.99 | 80 | 100 | -.60 | +.05 |  |  |
| Feb. | 2.63 | 21.96 | 2.59 | 22.61 | 98 | 103 | -.04 | +.65 |  |  |
| Mar. | 3.36 | 19.33 | 3.00 | 20.02 | 89 | 104 | -.36 | +.69 |  |  |
| Apr. | 3.74 | 15.97 | 2.63 | 17.02 | 70 | 107 | -1.11 | +1.05 |  |  |
| May | 4.22 | 12.23 | 3.57 | 14.39 | 85 | 118 | -.65 | +2.16 |  |  |
| June | 3.99 | 8.01 | 6.87 | 10.82 | 172 | 135 | +2.88 | +2.81 |  |  |
| July | 4.02 | 4.02 | 3.95 | 3.95 | 98 | 98 | -.07 | -.07 |  |  |

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 <br> Monthly mean |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| July (observed) | Maximum | Median | Minimum | 3,415 | 142 |
| July (adjusted) | $11,220(1945)$ | 2,397 | $864(1954)$ | 3,395 | 163 |
|  | $11,470(1945)$ | 2,082 | $391(1965)$ |  |  |
| August (observed) | $14,230(1955)$ | 2,088 | $715(1954)$ |  |  |
| August (adjusted) | $17,410(1955)$ | 1,341 | $364(1964)$ |  |  |

