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

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

Adjusted streamflow in the upper Delaware River Basin during February was in the normal range. The maximum daily mean discharge of 8,330 cfs occurred on February 12. The minimum daily mean discharge was 2,180 cfs on February 10.

On the basis of a 5 -station average, precipitation during February was 1.41 inches, which is 53 percent of the 61-year average. The maximum daily-average precipitation during February was 0.76 inches on February 11. Precipitation in the upper Delaware River Basin during the past 12 months was 10.71 inches less than the long-term average. Precipitation during February was 1.24 inches less than the long-term average for the month.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during February was $3,785 \mathrm{cfs}$, which is 69 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs was $6,441 \mathrm{cfs}$, or 100 percent of median (water years 1961-90).

Combined storage March 1, 2002 in Pepacton, Cannonsville, and Neversink Reservoirs was 39 percent of capacity above the point of maximum depletion. The combined storage of 107 billion gallons was 28 billion gallons more than that of one month ago and 128 billion gallons less than that of one year ago. Median storage on the first day of March in 34 years of record is 221 billion gallons. On the basis of reservoir storage, the river basin entered drought on December 1, 2001. The combined storage on March 1, 2002, was the lowest of record for the month of March.

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 February were below average in 12 of the wells. Water levels in 3 of the wells were trending downward in comparison to January levels. Water levels in 12 of the wells were below February 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 Feb. 2001 |  | March 2001 to February 2002 |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Average |  | Actual |  | Percent of average |  | Excess (+) or deficit (-) |  |  |
|  | Amount | Cumulative | Amount | Cumulative | By month | Cumulative | By month | Cumulative |  |
| Mar. | 3.33 | 43.26 | 4.95 | 32.55 | 149 | 75 | +1.62 | -10.71 |  |
| Apr. | 3.77 | 39.93 | 1.35 | 27.60 | 36 | 69 | -2.42 | -12.33 |  |
| May | 4.21 | 36.16 | 3.08 | 26.25 | 73 | 73 | -1.13 | -9.91 |  |
| June | 3.96 | 31.95 | 4.06 | 23.17 | 103 | 73 | +.10 | -8.78 |  |
| July | 4.09 | 27.99 | 2.49 | 19.11 | 61 | 68 | -1.60 | -8.88 |  |
| Aug. | 3.85 | 23.90 | 2.84 | 16.62 | 74 | 70 | -1.01 | -7.28 |  |
| Sept. | 3.83 | 20.05 | 5.37 | 13.78 | 140 | 69 | +1.54 | -6.27 |  |
| Oct. | 3.38 | 16.22 | $* 1.28$ | 8.41 | 38 | 52 | -2.10 | -7.81 |  |
| Nov. | 3.83 | 12.84 | 1.32 | 7.13 | 34 | 56 | -2.51 | -5.71 |  |
| Dec. | 3.36 | 9.01 | 2.71 | 5.81 | 81 | 64 | -.65 | -3.20 |  |
| Jan. | 3.00 | 5.65 | 1.69 | 3.10 | 56 | 55 | -1.31 | -2.55 |  |
| Feb. | 2.65 | 2.65 | 1.41 | 1.41 | 53 | 53 | -1.24 | -1.24 |  |

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 | $1940-2000$ |  |  | 2002 <br> Monthly mean | Percent of <br> median |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Maximum | Median | Minimum | 3,785 | 69 |
| February (observed) | $15,120(1976)$ | 5,480 | $1,748(1980)$ | 6,441 | 115 |
| February (adjusted) | $20,330(1981)$ | 5,616 | $1,373(1980)$ |  |  |
|  |  |  |  |  |  |
| March (observed) | $24,480(1945)$ | 9,168 | $3,191(1981)$ |  |  |
| March (adjusted) | $25,910(1945)$ | 11,220 | $4,428(1981)$ |  |  |

