

**SUMMARY OF HYDROLOGIC CONDITIONS
IN THE
UPPER DELAWARE RIVER BASIN
May 2001**

Prepared by the
Office of the Delaware River Master
Milford, Pennsylvania

Adjusted streamflow in the upper Delaware River Basin during May was deficient. The maximum daily discharge of 4,880 cfs occurred on May 29. The minimum daily discharge was 1,500 cfs on May 16.

On the basis of a multi-station average, precipitation during May was 3.09 inches, which was 73 percent of the 60-year average. The maximum daily-average precipitation during May was 1.08 inches on May 23. Precipitation in the upper Delaware River Basin during the past 12 months was 2.81 inches less than the long-term average. Precipitation during May was 1.12 inches less than the long-term average for the month.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during May was 2,618 cfs, which was 37 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs was 3,025 cfs, or 37 percent of median (water years 1961-90).

Combined storage June 1, 2001 in Pepacton, Cannonsville, and Neversink Reservoirs was 93 percent of capacity above the point of maximum depletion. The combined storage of 253 billion gallons was 18 billion gallons less than that of one month ago and 20 billion gallons less than that of one year ago. Median storage on the first day of June in 34 years of record is 270 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 May were below average in 11 of the wells. Water levels in 12 of the wells were trending downward in comparison to April levels. Water levels in 12 of the wells were below May 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 May 2000 | | June 2000 to May 2001 | | | | | |
|-------|-----------------------|------------|-----------------------|------------|--------------------|------------|---------------------------|------------|
| | Average | | Actual | | Percent of average | | Excess (+) or deficit (-) | |
| | Amount | Cumulative | Amount | Cumulative | By month | Cumulative | By month | Cumulative |
| June | 3.91 | 43.25 | 6.50 | 40.44 | 166 | 94 | +2.59 | -2.81 |
| July | 4.09 | 39.34 | 4.54 | 33.94 | 111 | 86 | +4.45 | -5.40 |
| Aug. | 3.86 | 35.25 | 3.19 | 29.40 | 83 | 83 | -.67 | -5.85 |
| Sept. | 3.83 | 31.39 | 3.74 | 26.21 | 98 | 83 | -.09 | -5.18 |
| Oct. | 3.39 | 27.56 | *2.78 | 22.47 | 82 | 82 | -.61 | -5.09 |
| Nov. | 3.85 | 24.17 | *2.45 | 19.69 | 64 | 81 | -1.40 | -4.48 |
| Dec. | 3.34 | 20.32 | 4.21 | 17.24 | 126 | 85 | +87 | -3.08 |
| Jan. | 3.02 | 16.98 | 1.35 | 13.03 | 45 | 77 | -1.67 | -3.95 |
| Feb. | 2.65 | 13.96 | 2.26 | 11.68 | 85 | 84 | -.39 | -2.28 |
| Mar. | 3.33 | 11.31 | 4.95 | 9.42 | 149 | 83 | +1.62 | -1.89 |
| Apr. | 3.77 | 7.98 | 1.38 | 4.47 | 37 | 56 | -2.39 | -3.51 |
| May | 4.21 | 4.21 | 3.09 | 3.09 | 73 | 73 | -1.12 | -1.12 |

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 Monthly mean | Percent of median |
|-----------------|---------------|--------|--------------|----------------------|----------------------|
| | Maximum | Median | Minimum | | |
| May (observed) | 16,090 (1943) | 6,998 | 2,215 (1965) | 2,618 | 37 |
| May (adjusted) | 18,970 (1989) | 8,234 | 2,944 (1941) | 3,025 | 37 |
| June (observed) | 15,200 (1972) | 3,194 | 1,214 (1965) | | |
| June (adjusted) | 16,010 (1972) | 3,909 | 1,024 (1962) | | |