

**SUMMARY OF HYDROLOGIC CONDITIONS
IN THE
UPPER DELAWARE RIVER BASIN
October 2004**

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

Adjusted streamflow in the upper Delaware River Basin during October was excessive for the fourth consecutive month. The maximum daily mean discharge of 15,700 cfs occurred on October 1. The minimum daily mean discharge was 3,790 cfs on October 15.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during October was 6,593 cfs, which is 280 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs, was 6,721 cfs, or 261 percent of median (water years 1971-2000).

On the basis of an 5-station average, precipitation during October was 2.02 inches, which is 59 percent of the 63-year average. The maximum daily-average precipitation during the month was 0.84 inches on October 19. Precipitation in the upper Delaware River Basin during the past 12 months was 9.07 inches more than the long-term average. Precipitation during October was 1.41 inches less than the long-term average for the month.

Combined storage November 1, 2004 in Pepacton, Cannonsville, and Neversink Reservoirs was 99 percent of capacity above the point of maximum depletion. The combined storage of 268 billion gallons was 4 billion gallons less than that of one month ago and 10 billion gallons less than that of one year ago. Median storage on the first day of November in 37 years of record is 148 billion gallons. Pepacton, Cannonsville, and Neversink Reservoirs spilled 2.0, 6.9, and 0.01 billion gallons, respectively, in October.

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 October were above average in all of the wells. Water levels in all of the wells were above September 2004 levels, and water levels in 7 of the wells were above October 2003 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 Oct. 2003 | | November 2003 to October 2004 | | | | | |
|-------|------------------------|------------|-------------------------------|------------|--------------------|------------|---------------------------|------------|
| | Average | | Actual | | Percent of average | | Excess (+) or deficit (-) | |
| | Amount | Cumulative | Amount | Cumulative | By month | Cumulative | By month | Cumulative |
| Nov. | 3.79 | 43.38 | 4.38 | 52.45 | 116 | 121 | +0.59 | +9.07 |
| Dec. | 3.37 | 39.59 | 4.90 | 48.07 | 145 | 121 | +1.53 | +8.48 |
| Jan. | 2.98 | 36.22 | 2.60 | 43.17 | 87 | 119 | -.38 | +6.95 |
| Feb. | 2.64 | 33.24 | 1.41 | 40.57 | 53 | 122 | -1.23 | +7.33 |
| Mar. | 3.35 | 30.60 | 2.22 | 39.16 | 66 | 128 | -1.13 | +8.56 |
| Apr. | 3.72 | 27.25 | 3.84 | 36.94 | 103 | 136 | +0.12 | +9.69 |
| May | 4.21 | 23.53 | 4.81 | 33.10 | 114 | 141 | +0.60 | +9.57 |
| June | 4.03 | 19.32 | *3.02 | 28.29 | 75 | 146 | -1.01 | +8.97 |
| July | 4.03 | 15.29 | 6.12 | 25.27 | 152 | 165 | +2.09 | +9.98 |
| Aug. | 3.84 | 11.26 | 7.49 | 19.15 | 195 | 170 | +3.65 | +7.89 |
| Sept. | 3.99 | 7.42 | 9.64 | 11.66 | 242 | 157 | +5.65 | +4.24 |
| Oct. | 3.43 | 3.43 | 2.02 | 2.02 | 59 | 59 | -1.41 | -1.41 |

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 | 1940-2003 | | | 2004 Monthly mean | Percent of median |
|---------------------|---------------|--------|------------|----------------------|----------------------|
| | Maximum | Median | Minimum | | |
| October (observed) | 15,690 (1955) | 2,352 | 807 (1941) | 6,593 | 280 |
| October (adjusted) | 18,570 (1955) | 2,199 | 322 (1964) | 6,721 | 306 |
| November (observed) | 11,760 (1951) | 4,476 | 995 (1964) | | |
| November (adjusted) | 16,160 (1972) | 5,806 | 390 (1964) | | |