

**SUMMARY OF HYDROLOGIC CONDITIONS
IN THE
UPPER DELAWARE RIVER BASIN
April 2006**

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

Adjusted streamflow in the upper Delaware River Basin during April was deficient. The maximum daily mean discharge of 17,800 cfs was recorded on April 25. The minimum daily mean discharge was 2,220 cfs on April 2.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during April was 5,263 cfs, which is 47 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs, was 6,991 cfs, or 55 percent of median (water years 1971-2000).

On the basis of a 5-station average, precipitation during April was 3.76 inches, which is 100 percent of the 65-year average. The maximum daily-average precipitation during the month was 1.41 inches on April 23. Precipitation in the upper Delaware River Basin during the past 12 months was 1.44 inches less than the long-term average. Precipitation during April was equal to the long-term average for the month.

Combined storage May 1, 2006 in Pepacton, Cannonsville, and Neversink Reservoirs was 100 percent of capacity above the point of maximum depletion. The combined storage of 272 billion gallons was 13 billion gallons more than that of one month ago and 2 billion gallons less than that of one year ago. Median storage on the first day of May in 38 years of record is 271 billion gallons. Pepacton and Cannonsville Reservoirs spilled 2.8 and 14.8 billion gallons, respectively, in April.

As part of statewide networks, the USGS operates ground-water observation wells in the Pennsylvania and New Jersey parts of the Delaware River Basin. Mean water levels during April were below average in 16 of 20 observation wells. Water levels in 18 of 20 wells were below March 2006 levels, and water levels in 19 of 20 wells were below April 2005 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 Apr. 2005 | | May 2005 to April 2006 | | | | | |
|-------|------------------------|------------|------------------------|------------|--------------------|------------|---------------------------|------------|
| | Average | | Actual | | Percent of average | | Excess (+) or deficit (-) | |
| | Amount | Cumulative | Amount | Cumulative | By month | Cumulative | By month | Cumulative |
| May | 4.22 | 43.64 | 1.52 | 42.20 | 36 | 97 | -2.70 | -1.44 |
| June | 4.01 | 39.42 | 3.25 | 40.68 | 81 | 103 | -.76 | +1.26 |
| July | 4.07 | 35.41 | 2.97 | 37.43 | 73 | 106 | -1.10 | +2.02 |
| Aug. | 3.89 | 31.34 | 3.57 | 34.46 | 92 | 110 | -.32 | +3.12 |
| Sept. | 4.08 | 27.45 | 1.72 | 30.89 | 42 | 113 | -2.36 | +3.44 |
| Oct. | 3.42 | 23.37 | *11.28 | 29.17 | 330 | 125 | +7.86 | +5.80 |
| Nov. | 3.79 | 19.95 | 3.91 | 17.89 | 103 | 90 | +.12 | -2.06 |
| Dec. | 3.41 | 16.16 | 2.64 | 13.98 | 77 | 87 | -.77 | -2.18 |
| Jan. | 3.02 | 12.75 | 4.90 | 11.34 | 162 | 89 | +1.88 | -1.41 |
| Feb. | 2.61 | 9.73 | 1.39 | 6.44 | 53 | 66 | -1.22 | -3.29 |
| Mar. | 3.36 | 7.12 | 1.29 | 5.05 | 38 | 71 | -2.07 | -2.07 |
| Apr. | 3.76 | 3.76 | 3.76 | 3.76 | 100 | 100 | 0 | 0 |

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 | 1940-2004 | | | 2006 Monthly mean | Percent of median |
|------------------|---------------|--------|--------------|----------------------|----------------------|
| | Maximum | Median | Minimum | | |
| April (observed) | 31,560 (1940) | 11,130 | 3,322 (1985) | 5,263 | 47 |
| April (adjusted) | 33,010 (1940) | 13,780 | 3,847 (1946) | 6,991 | 51 |
| May (observed) | 16,090 (1943) | 6,978 | 2,215 (1965) | | |
| May (adjusted) | 18,970 (1989) | 8,211 | 2,944 (1941) | | |