

**SUMMARY OF HYDROLOGIC CONDITIONS
IN THE
UPPER DELAWARE RIVER BASIN
March 2011**

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

Adjusted streamflow in the upper Delaware River Basin during March was excessive. The maximum daily mean discharge of 71,000 cfs was recorded on March 11. The minimum daily mean discharge was 8,280 cfs on March 31.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during March was 22,870 cfs, which is 247 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs, was 25,650 cfs, or 231 percent of median (water years 1971-2000).

On the basis of a 5-station average, precipitation during March was 6.09 inches, which is 180 percent of the 70-year average. The maximum daily-average precipitation during the month was 2.23 inches on March 7. Precipitation in the upper Delaware River Basin during the past 12 months was 4.57 inches more than the long-term average. Precipitation during March was 2.70 inches more than the long-term average for the month.

Combined storage April 1, 2011 in Pepacton, Cannonsville, and Neversink Reservoirs was 98 percent of capacity above the point of maximum depletion. The combined storage of 266 billion gallons was 40 billion gallons more than that of one month ago and 11 billion gallons less than that of one year ago. Median storage on the first day of April in 43 years of record is 261 billion gallons. Pepacton, Cannonsville, and Neversink Reservoirs spilled a total of 13.9, 26.2, and 3.7 billion gallons, respectively, during the month.

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 March were above average in 16 of 21 observation wells. Water levels in all of the wells were above February 2011 levels, and water levels in 11 of the wells were below March 2010 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 Mar. 2010		April 2010 to March 2011					
	Average		Actual		Percent of average		Excess (+) or deficit (-)	
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative
Apr.	3.75	44.10	2.86	48.67	76	110	-0.89	+4.57
May	4.16	40.35	3.02	45.81	73	114	-1.14	+5.46
June	4.14	36.19	3.90	42.79	94	118	-0.24	+6.60
July	4.13	32.05	4.49	38.89	109	121	+0.36	+6.84
Aug.	3.94	27.92	5.40	34.40	137	123	+1.46	+6.48
Sept.	4.03	23.98	2.44	29.00	61	121	+1.59	+5.02
Oct.	3.64	19.95	8.50	26.56	234	133	+4.86	+6.61
Nov.	3.77	16.31	*3.00	18.06	80	111	-0.77	+1.75
Dec.	3.46	12.54	3.42	15.06	99	120	-0.04	+2.52
Jan.	3.04	9.08	1.75	11.64	58	128	-1.29	+2.56
Feb.	2.65	6.04	3.80	9.89	143	164	+1.15	+3.85
Mar.	3.39	3.39	6.09	6.09	180	180	+2.70	+2.70

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	1940-2009			2011 Monthly mean	Percent of median
	Maximum	Median	Minimum		
March (observed)	24,480 (1945)	9,242	3,191 (1981)	22,870	247
March (adjusted)	25,910 (1945)	11,110	3,928 (2006)	25,650	231
April (observed)	31,560 (1940)	11,010	3,322 (1985)		
April (adjusted)	33,010 (1940)	13,585	3,847 (1946)		