

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

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

Adjusted streamflow in the upper Delaware River Basin during January was deficient. The maximum daily mean discharge of 4,100 cfs was recorded on January 22. The minimum daily mean discharge was 2,300 cfs on January 16.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during January was 3,341 cfs, which is 58 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs, was 3,612 cfs, or 60 percent of median (water years 1971-2000).

On the basis of a 5-station average, precipitation during January was 1.75 inches, which is 58 percent of the 70-year average. The maximum daily-average precipitation during the month was 0.54 inches on January 19. Precipitation in the upper Delaware River Basin during the past 12 months was 3.91 inches more than the long-term average. Precipitation during January was 1.29 inches less than the long-term average for the month.

Combined storage February 1, 2011 in Pepacton, Cannonsville, and Neversink Reservoirs was 84 percent of capacity above the point of maximum depletion. The combined storage of 227 billion gallons was 12 billion gallons less than that of one month ago and 29 billion gallons less than that of one year ago. Median storage on the first day of February in 43 years of record is 225 billion gallons.

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 January were below average in 16 of 21 observation wells. Water levels in 13 of the wells were below December 2010 levels, and water levels in all of the wells were below January 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 Jan. 2010		February 2010 to January 2011					
	Average		Actual		Percent of average		Excess (+) or deficit (-)	
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative
Feb.	2.64	44.06	3.47	47.97	131	109	+0.83	+3.91
Mar.	3.36	41.42	5.36	44.50	160	107	+2.00	+3.08
Apr.	3.75	38.06	2.86	39.14	76	103	-0.89	+1.08
May	4.16	34.31	3.02	36.28	73	106	-1.14	+1.97
June	4.14	30.15	3.90	33.26	94	110	-0.24	+3.11
July	4.13	26.01	4.49	29.36	109	113	+0.36	+3.35
Aug.	3.94	21.88	5.40	24.87	137	114	+1.46	+2.99
Sept.	4.03	17.94	2.40	19.47	60	109	-1.63	+1.53
Oct.	3.64	13.91	9.07	17.07	249	123	+5.43	+3.16
Nov.	3.77	10.27	2.83	8.00	75	78	-0.94	-2.27
Dec.	3.46	6.50	3.42	5.17	99	80	-0.04	-1.33
Jan.	3.04	3.04	1.75	1.75	58	58	-1.29	-1.29

Note: Amount shown in cumulative columns is total from month shown to present.

STREAMFLOW, IN CFS
DELAWARE RIVER AT MONTAGUE, N.J.

Month	1940-2009			2011 Monthly mean	Percent of median
	Maximum	Median	Minimum		
January (observed)	16,060 (2006)	5,743	1,318 (1981)	3,341	58
January (adjusted)	21,330 (1996)	6,074	1,064 (1981)	3,612	59
February (observed)	15,430 (2008)	5,444	1,748 (1980)		
February (adjusted)	20,330 (1981)	5,823	1,373 (1980)		