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 5,280 cfs occurred on January 31. The minimum daily mean discharge was 934 cfs on January 21.

On the basis of a 5-station average, precipitation during January was 1.69 inches, which is 56 percent of the 61-year average. The maximum daily-average precipitation during January was 0.55 inches on January 7. Precipitation in the upper Delaware River Basin during the past 12 months was 9.84 inches less than the long-term average. Precipitation during January was 1.31 inches less than the long-term average for the month.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during January was 1,579 cfs, which is 32 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs was 2,574 cfs, or 58 percent of median (water years 1961-90).

Combined storage February 1, 2002 in Pepacton, Cannonsville, and Neversink Reservoirs was 29 percent of capacity above the point of maximum depletion. The combined storage of 79 billion gallons was 9 billion gallons more than that of one month ago and 150 billion gallons less than that of one year ago. Median storage on the first day of February in 34 years of record is 214 billion gallons. On the basis of reservoir storage, the river basin entered drought on December 1, 2001.

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 January were below average in all of the wells and new record low levels were set in 7 of the wells. Water levels in 7 of the wells were trending downward in comparison to December levels. Water levels in 12 of the wells were below January 2001 levels.

Compiled by the Office of the Delaware River Master, Milford, Pa.

(Preliminary data - subject to revision)

# PRECIPITATION, IN INCHES

	Dec. 1940	to Jan. 2001	February 2001 to January 2002							
	Average		Actual		Percent of average		Excess (+) or deficit (-)			
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative		
Feb.	2.65	43.26	2.38	33.42	90	77	27	-9.84		
Mar.	3.33	40.61	4.95	31.04	149	76	+1.62	-9.57		
Apr.	3.77	37.28	1.35	26.09	36	70	-2.42	-11.19		
May	4.21	33.51	3.08	24.74	73	74	-1.13	-8.77		
June	3.96	29.30	4.06	21.66	103	74	+.10	-7.64		
July	4.09	25.34	2.49	17.60	61	69	-1.60	-7.74		
Aug.	3.85	21.25	*2.84	15.11	74	71	-1.01	-6.14		
Sept.	3.83	17.40	*5.37	12.27	140	71	+1.54	-5.13		
Oct.	3.38	13.57	1.18	6.90	35	51	-2.20	-6.67		
Nov.	3.83	10.19	1.32	5.72	34	56	-2.51	-4.47		
Dec.	3.36	6.36	2.71	4.40	81	69	65	-1.96		
Jan.	3.00	3.00	1.69	1.69	56	56	-1.31	-1.31		

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

		1940-2000	2002	Percent of	
Month	Maximum	Median	Minimum	Monthly mean	median
January (observed)	15,600 (1996)	4,960	1,318 (1981)	1,579	32
January (adjusted)	21,330 (1996)	5,874	1,064 (1981)	2,574	44
February (observed)	15,120 (1976)	5,480	1,748 (1980)		
February (adjusted)	20,330 (1981)	5,616	1,373 (1980)		

<sup>\*</sup> Revised since last month.

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

Adjusted streamflow in the upper Delaware River Basin during February was in the normal range. The maximum daily mean discharge of 8,330 cfs occurred on February 12. The minimum daily mean discharge was 2,180 cfs on February 10.

On the basis of a 5-station average, precipitation during February was 1.41 inches, which is 53 percent of the 61-year average. The maximum daily-average precipitation during February was 0.76 inches on February 11. Precipitation in the upper Delaware River Basin during the past 12 months was 10.71 inches less than the long-term average. Precipitation during February was 1.24 inches less than the long-term average for the month.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during February was 3,785 cfs, which is 69 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs was 6,441 cfs, or 100 percent of median (water years 1961-90).

Combined storage March 1, 2002 in Pepacton, Cannonsville, and Neversink Reservoirs was 39 percent of capacity above the point of maximum depletion. The combined storage of 107 billion gallons was 28 billion gallons more than that of one month ago and 128 billion gallons less than that of one year ago. Median storage on the first day of March in 34 years of record is 221 billion gallons. On the basis of reservoir storage, the river basin entered drought on December 1, 2001. **The combined storage on March 1, 2002, was the lowest of record for the month of March.** 

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 February were below average in 12 of the wells. Water levels in 3 of the wells were trending downward in comparison to January levels. Water levels in 12 of the wells were below February 2001 levels.

Compiled by the Office of the Delaware River Master, Milford, Pa.

(Preliminary data - subject to revision)

# PRECIPITATION, IN INCHES

	Dec. 1940 to Feb. 2001		March 2001 to February 2002							
	Average		Actual		Percent of average		Excess (+) or deficit (-)			
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative		
Mar.	3.33	43.26	4.95	32.55	149	75	+1.62	-10.71		
Apr.	3.77	39.93	1.35	27.60	36	69	-2.42	-12.33		
May	4.21	36.16	3.08	26.25	73	73	-1.13	-9.91		
June	3.96	31.95	4.06	23.17	103	73	+.10	-8.78		
July	4.09	27.99	2.49	19.11	61	68	-1.60	-8.88		
Aug.	3.85	23.90	2.84	16.62	74	70	-1.01	-7.28		
Sept.	3.83	20.05	5.37	13.78	140	69	+1.54	-6.27		
Oct.	3.38	16.22	*1.28	8.41	38	52	-2.10	-7.81		
Nov.	3.83	12.84	1.32	7.13	34	56	-2.51	-5.71		
Dec.	3.36	9.01	2.71	5.81	81	64	65	-3.20		
Jan.	3.00	5.65	1.69	3.10	56	55	-1.31	-2.55		
Feb.	2.65	2.65	1.41	1.41	53	53	-1.24	-1.24		

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

		1940-2000	2002	Percent of	
Month	Maximum	Median	Minimum	Monthly mean	median
February (observed)	15,120 (1976)	5,480	1,748 (1980)	3,785	69
February (adjusted)	20,330 (1981)	5,616	1,373 (1980)	6,441	115
March (observed)	24,480 (1945)	9,168	3,191 (1981)		
March (adjusted)	25,910 (1945)	11,220	4,428 (1981)		

<sup>\*</sup> Revised since last month.

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

Adjusted streamflow in the upper Delaware River Basin during March was deficient. The maximum daily mean discharge of 14,200 cfs occurred on March 28. The minimum daily mean discharge was 2,080 cfs on March 2.

On the basis of a 5-station average, precipitation during March was 3.47 inches, which is 104 percent of the 61-year average. The maximum daily-average precipitation during March was 1.21 inches on March 27. Precipitation in the upper Delaware River Basin during the past 12 months was 12.16 inches less than the long-term average. Precipitation during March was 0.12 inches more than the long-term average for the month.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during March was 3,969 cfs, which is 43 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs was 6,567 cfs, or 56 percent of median (water years 1961-90).

Combined storage April 1, 2002 in Pepacton, Cannonsville, and Neversink Reservoirs was 50 percent of capacity above the point of maximum depletion. The combined storage of 136 billion gallons was 29 billion gallons more than that of one month ago and 106 billion gallons less than that of one year ago. Median storage on the first day of April in 34 years of record is 253 billion gallons. On the basis of reservoir storage, the river basin entered drought on December 1, 2001. **The combined storage on April 1, 2002, was the lowest of record for the first day of April.** 

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 March were below average in 12 of the wells. Water levels in 6 of the wells were trending downward in comparison to February levels, and water levels in 12 of the wells were below March 2001 levels.

Compiled by the Office of the Delaware River Master, Milford, Pa.

(Preliminary data - subject to revision)

# PRECIPITATION, IN INCHES

	Dec. 1940 t	to Mar. 2001			April 2001 t	o March 2002		
	Ave	erage	Actual		Percent of average		Excess (+) or deficit (-)	
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative
Apr.	3.77	43.28	1.35	31.12	36	72	-2.42	-12.16
May	4.21	39.51	3.08	29.77	73	75	-1.13	-9.74
June	3.96	35.30	4.06	26.69	103	76	+.10	-8.61
July	4.09	31.34	2.49	22.63	61	72	-1.60	-8.71
Aug.	3.85	27.25	2.84	20.14	74	74	-1.01	-7.11
Sept.	3.83	23.40	5.37	17.30	140	74	+1.54	-6.10
Oct.	3.38	19.57	1.28	11.93	38	61	-2.10	-7.64
Nov.	3.83	16.19	*1.37	10.65	36	66	-2.46	-5.54
Dec.	3.36	12.36	2.71	9.28	81	75	65	-3.08
Jan.	3.00	9.00	1.69	6.57	56	73	-1.31	-2.43
Feb.	2.65	6.00	1.41	4.88	53	81	-1.24	-1.12
Mar.	3.35	3.35	3.47	3.47	104	104	+.12	+.12

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

		1940-2000	2002	Percent of	
Month	Maximum	Median	Minimum	Monthly mean	median
March (observed)	24,480 (1945)	9,168	3,191 (1981)	3,969	43
March (adjusted)	25,910 (1945)	11,220	4,428 (1981)	6,567	59
April (observed)	31,560 (1940)	11,640	3,322 (1985)		
April (adjusted)	33,010 (1940)	13,840	3,847 (1946)		

<sup>\*</sup> Revised since last month.

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 14,200 cfs occurred on April 30. The minimum daily mean discharge was 2,820 cfs on April 14.

On the basis of a 5-station average, precipitation during April was 3.71 inches, which is 99 percent of the 61-year average. The maximum daily-average precipitation during April was 0.85 inches on April 29. Precipitation in the upper Delaware River Basin during the past 12 months was 9.67 inches less than the long-term average. Precipitation during April was 0.02 inches less than the long-term average for the month.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during April was 5,310 cfs, which is 46 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs was 7,914 cfs, or 57 percent of median (water years 1961-90).

Combined storage May 1, 2002 in Pepacton, Cannonsville, and Neversink Reservoirs was 63 percent of capacity above the point of maximum depletion. The combined storage of 169 billion gallons was 34 billion gallons more than that of one month ago and 101 billion gallons less than that of one year ago. Median storage on the first day of May in 34 years of record is 271 billion gallons. On the basis of reservoir storage, the river basin entered drought on December 1, 2001.

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 April were below average in all 12 of the wells. Water levels in 11 of the wells were trending upward in comparison to March levels, and water levels in all 12 of the wells were below April 2001 levels.

Compiled by the Office of the Delaware River Master, Milford, Pa.

(Preliminary data - subject to revision)

# PRECIPITATION, IN INCHES

	Dec. 1940 t	to Apr. 2001		May 2001 to April 2002							
	Ave	rage	Actual		Percent of average		Excess (+) or deficit (-)				
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative			
May	4.21	43.24	3.08	33.57	73	78	-1.13	-9.67			
June	3.96	39.03	4.06	30.49	103	78	+.10	-8.54			
July	4.09	35.07	2.49	26.43	61	75	-1.60	-8.64			
Aug.	3.85	30.98	2.84	23.94	74	77	-1.01	-7.04			
Sept.	3.83	27.13	5.37	21.10	140	78	+1.54	-6.03			
Oct.	3.38	23.30	1.28	15.73	38	68	-2.10	-7.57			
Nov.	3.83	19.92	1.37	14.45	36	73	-2.46	-5.47			
Dec.	3.36	16.09	*2.80	13.08	83	81	56	-3.01			
Jan.	3.00	12.73	1.69	10.28	56	81	-1.31	-2.45			
Feb.	2.65	9.73	1.41	8.59	53	88	-1.24	-1.14			
Mar.	3.35	7.08	3.47	7.18	104	101	+.12	+.10			
Apr.	3.73	3.73	3.71	3.71	99	99	02	02			

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

		1940-2000	2002	Percent of	
Month	Maximum	Median	Minimum	Monthly mean	median
April (observed)	31,560 (1940)	11,640	3,322 (1985)	5,310	46
April (adjusted)	33,010 (1940)	13,840	3,847 (1946)	7,914	57
May (observed)	16,090 (1943)	7,019	2,215 (1965)		
May (adjusted)	18,970 (1989)	8,256	2,944 (1941)		

<sup>\*</sup> Revised since last month.

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

Adjusted streamflow in the upper Delaware River Basin during May was excessive. The maximum daily mean discharge of 23,800 cfs occurred on May 14. The minimum daily mean discharge was 3,940 cfs on May 12.

On the basis of a 5-station average, precipitation during May was 6.00 inches, which is 143 percent of the 61-year average. The maximum daily-average precipitation during May was 1.07 inches on May 14. Precipitation in the upper Delaware River Basin during the past 12 months was 6.73 inches less than the long-term average. Precipitation during May was 1.81 inches more than the long-term average for the month.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during May was 9,428 cfs, which is 134 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs was 12,650 cfs, or 153 percent of median (water years 1961-90).

Combined storage June 1, 2002 in Pepacton, Cannonsville, and Neversink Reservoirs was 82 percent of capacity above the point of maximum depletion. The combined storage of 222 billion gallons was 53 billion gallons more than that of one month ago and 31 billion gallons less than that of one year ago. Median storage on the first day of June in 35 years of record is 269 billion gallons.

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 May were below average in 8 of the wells. Water levels in 11 of the wells were trending upward in comparison to April levels, and water levels in 7 of the wells were below May 2001 levels.

Compiled by the Office of the Delaware River Master, Milford, Pa.

(Preliminary data - subject to revision)

# PRECIPITATION, IN INCHES

	Dec. 1940	to May 2001			June 2001	to May 2002		
	Average		Actual		Percent of average		Excess (+) or deficit (-)	
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative
June	3.96	43.22	4.06	36.49	103	84	+.10	-6.73
July	4.09	39.26	2.49	32.43	61	83	-1.60	-6.83
Aug.	3.85	35.17	2.84	29.94	74	85	-1.01	-5.23
Sept.	3.83	31.32	5.37	27.10	140	87	+1.54	-4.22
Oct.	3.38	27.49	1.28	21.73	38	79	-2.10	-5.76
Nov.	3.83	24.11	1.37	20.45	36	85	-2.46	-3.66
Dec.	3.36	20.28	2.80	19.08	83	94	56	-1.20
Jan.	3.00	16.92	1.69	16.28	56	96	-1.31	64
Feb.	2.65	13.92	1.41	14.59	53	105	-1.24	+.67
Mar.	3.35	11.27	3.47	13.18	104	117	+.12	+1.91
Apr.	3.73	7.92	3.71	9.71	99	123	02	+1.79
May	4.19	4.19	6.00	6.00	143	143	+1.81	+1.81

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

		1940-2000	2002	Percent of	
Month	Maximum	Median	Minimum	Monthly mean	median
May (observed)	16,090 (1943)	7,019	2,215 (1965)	9,428	134
May (adjusted)	18,970 (1989)	8,256	2,944 (1941)	12,650	153
June (observed)	15,200 (1972)	3,199	1,214 (1965)		
June (adjusted)	16,010 (1972)	3,948	1,024 (1962)		

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

Adjusted streamflow in the upper Delaware River Basin during June was excessive. The maximum daily mean discharge of 18,800 cfs occurred on June 8. The minimum daily mean discharge was 2,740 cfs on June 30.

On the basis of a 12-station average, precipitation during June was 6.32 inches, which is 160 percent of the 61-year average. The maximum daily-average precipitation during the month was 1.55 inches on June 7. Precipitation in the upper Delaware River Basin during the past 12 months was 4.47 inches less than the long-term average. Precipitation during June was 2.36 inches more than the long-term average for the month.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during June was 7,194 cfs, which is 225 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs was 8,938 cfs, or 226 percent of median (water years 1961-90).

Combined storage July 1, 2002 in Pepacton, Cannonsville, and Neversink Reservoirs was 89 percent of capacity above the point of maximum depletion. The combined storage of 241 billion gallons was 19 billion gallons more than that of one month ago and 10 billion gallons less than that of one year ago. Median storage on the first day of July in 35 years of record is 257 billion gallons.

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 June were below average in 7 of the wells. Water levels in 8 of the wells were trending downward in comparison to May levels, and water levels in 8 of the wells were below June 2001 levels.

Compiled by the Office of the Delaware River Master, Milford, Pa.

(Preliminary data - subject to revision)

# PRECIPITATION, IN INCHES

	Dec. 1940 t	o June 2001	July 2001 to June 2002							
	Ave	rage	Actual		Percent of average		Excess (+) or deficit (-)			
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative		
July	4.09	43.22	2.49	38.75	61	90	-1.60	-4.47		
Aug.	3.85	39.13	2.84	36.26	74	93	-1.01	-2.87		
Sept.	3.83	35.28	5.37	33.42	140	95	+1.54	-1.86		
Oct.	3.38	31.45	1.28	28.05	38	89	-2.10	-3.40		
Nov.	3.83	28.07	1.37	26.77	36	95	-2.46	-1.30		
Dec.	3.36	24.24	2.80	25.40	83	105	56	+1.16		
Jan.	3.00	20.88	1.69	22.60	56	108	-1.31	+1.72		
Feb.	2.65	17.88	1.41	20.91	53	117	-1.24	+3.03		
Mar.	3.35	15.23	3.47	19.50	104	128	+.12	+4.27		
Apr.	3.73	11.88	3.71	16.03	99	135	02	+4.15		
May	4.19	8.15	6.00	12.32	143	151	+1.81	+4.17		
June	3.96	3.96	6.32	6.32	160	160	+2.36	+2.36		

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

		1940-2000	2002	Percent of	
Month	Maximum	Median	Minimum	Monthly mean	median
June (observed)	15,200 (1972)	3,199	1,214 (1965)	7,194	225
June (adjusted)	16,010 (1972)	3,948	1,024 (1962)	8,938	226
July (observed)	11,220 (1945)	2,486	864 (1954)		
July (adjusted)	11,470 (1945)	2,193	391 (1965)		

#### **July 2002**

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

Adjusted streamflow in the upper Delaware River Basin during July was deficient. The maximum daily mean discharge of 3,300 cfs occurred on July 3. The minimum daily mean discharge was 1,470 cfs on July 14.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during July was 2,088 cfs, which is 84 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs was 1,239 cfs, or 55 percent of median (water years 1961-90).

On the basis of a 12-station average, precipitation during July was 1.46 inches, which is 36 percent of the 61-year average and the second driest July on record. The maximum daily-average precipitation during the month was 0.72 inches on July 24. Precipitation in the upper Delaware River Basin during the past 12 months was 4.96 inches less than the long-term average. Precipitation during July was 2.61 inches less than the long-term average for the month.

Combined storage August 1, 2002 in Pepacton, Cannonsville, and Neversink Reservoirs was 77 percent of capacity above the point of maximum depletion. The combined storage of 207 billion gallons was 34 billion gallons less than that of one month ago and 14 billion gallons less than that of one year ago. Median storage on the first day of August in 35 years of record is 230 billion gallons.

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 July were below average in 10 of the wells. Water levels in all 12 of the wells were trending downward in comparison to June levels, and water levels in 10 of the wells were below July 2001 levels.

Compiled by the Office of the Delaware River Master, Milford, Pa.

(Preliminary data - subject to revision)

# PRECIPITATION, IN INCHES

	Dec. 1940 t	to July 2001	August 2001 to July 2002						
	Average		Actual		Percent of average		Excess (+) or deficit (-)		
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative	
Aug.	3.85	43.20	2.84	38.24	74	89	-1.01	-4.96	
Sept.	3.83	39.35	5.37	35.40	140	90	+1.54	-3.95	
Oct.	3.38	35.52	1.28	30.03	38	85	-2.10	-5.49	
Nov.	3.83	32.14	1.37	28.75	36	89	-2.46	-3.39	
Dec.	3.36	28.31	2.80	27.38	83	97	56	93	
Jan.	3.00	24.95	*2.03	24.58	68	99	97	37	
Feb.	2.65	21.95	*1.59	22.55	60	103	-1.06	+.60	
Mar.	3.35	19.30	3.47	20.96	104	109	+.12	+1.66	
Apr.	3.73	15.95	3.71	17.49	99	110	02	+1.54	
May	4.19	12.22	6.00	13.78	143	113	+1.81	+1.56	
June	3.96	8.03	6.32	7.78	160	97	+2.36	25	
July	4.07	4.07	1.46	1.46	36	36	-2.61	-2.61	

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

		1940-2000	2002	Percent of	
Month	Maximum	Median	Minimum	Monthly mean	median
July (observed)	11,220 (1945)	2,486	864 (1954)	2,088	84
July (adjusted)	11,470 (1945)	2,193	391 (1965)	1,239	56
August (observed)	14,230 (1955)	2,105	715 (1954)		
August (adjusted)	17,410 (1955)	1,418	364 (1964)		

<sup>\*</sup> Revised since last month.

#### August 2002

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

Adjusted streamflow in the upper Delaware River Basin during August was deficient. The maximum daily mean discharge of 2,120 cfs occurred on August 30. The minimum daily mean discharge was 1,540 cfs on August 28.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during August was 1,760 cfs, which is 84 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs was 579 cfs, or 40 percent of median (water years 1961-90).

On the basis of a 12-station average, precipitation during August was 2.98 inches, which is 78 percent of the 61-year average. The maximum daily-average precipitation during the month was 0.64 inches on August 24. Precipitation in the upper Delaware River Basin during the past 12 months was 4.80 inches less than the long-term average. Precipitation during August was 0.85 inches less than the long-term average for the month.

Combined storage September 1, 2002 in Pepacton, Cannonsville, and Neversink Reservoirs was 60 percent of capacity above the point of maximum depletion. The combined storage of 162 billion gallons was 45 billion gallons less than that of one month ago and 17 billion gallons less than that of one year ago. Median storage on the first day of September in 35 years of record is 202 billion gallons.

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 August were below average in 11 of the wells. Water levels in all 12 of the wells were trending downward in comparison to July levels, and water levels in 11 of the wells were below August 2001 levels.

Compiled by the Office of the Delaware River Master, Milford, Pa.

(Preliminary data - subject to revision)

# PRECIPITATION, IN INCHES

	Dec. 1940 t	o Aug. 2001		S	eptember 200	1 to August 200	)2	
ĺ	Ave	rage	Actual		Percent of average		Excess (+) or deficit (-)	
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative
Sept.	3.83	43.18	5.37	38.38	140	89	+1.54	-4.80
Oct.	3.38	39.35	1.28	33.01	38	84	-2.10	-6.34
Nov.	3.83	35.97	1.37	31.73	36	88	-2.46	-4.24
Dec.	3.36	32.14	2.80	30.36	83	94	56	-1.78
Jan.	3.00	28.78	2.03	27.56	68	96	97	-1.22
Feb.	2.65	25.78	1.59	25.53	60	99	-1.06	25
Mar.	3.35	23.13	3.47	23.94	104	104	+.12	+.81
Apr.	3.73	19.78	3.71	20.47	99	103	02	+.69
May	4.19	16.05	6.00	16.76	143	104	+1.81	+.71
June	3.96	11.86	6.32	10.76	160	91	+2.36	-1.10
July	4.07	7.90	1.46	4.44	36	56	-2.61	-3.46
Aug.	3.83	3.83	2.98	2.98	78	78	85	85

<u>STREAMFLOW, IN CFS</u> DELAWARE RIVER AT MONTAGUE, N.J.

		1940-2000	2002	Percent of	
Month	Maximum	Median	Minimum	Monthly mean	median
August (observed)	14,230 (1955)	2,105	715 (1954)	1,760	84
August (adjusted)	17,410 (1955)	1,418	364 (1964)	579	41
September (observed)	9,167 (1960)	2,037	892 (1941)		
September (adjusted)	10,720 (1960)	1,496	324 (1964)		

#### September 2002

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

Adjusted streamflow in the upper Delaware River Basin during September was in the normal range. The maximum daily mean discharge of 3,500 cfs occurred on September 29. The minimum daily mean discharge was 1,020 cfs on September 23.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during September was 1,832 cfs, which is 91 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs was 1,151 cfs, or 94 percent of median (water years 1961-90).

On the basis of a 12-station average, precipitation during September was 4.86 inches, which is 126 percent of the 61-year average. The maximum daily-average precipitation during the month was 1.28 inches on September 16. Precipitation in the upper Delaware River Basin during the past 12 months was 5.22 inches less than the long-term average. Precipitation during September was 1.00 inches more than the long-term average for the month.

Combined storage October 1, 2002 in Pepacton, Cannonsville, and Neversink Reservoirs was 50 percent of capacity above the point of maximum depletion. The combined storage of 137 billion gallons was 25 billion gallons less than that of one month ago and 4 billion gallons less than that of one year ago. Median storage on the first day of October in 35 years of record is 177 billion gallons.

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 September were below average in 11 of the wells. Water levels in 11 of the wells were trending downward in comparison to August levels, and water levels in 11 of the wells were below September 2001 levels. Water levels in 6 of the wells set record lows for September, and water levels in 2 of the wells set new period of record lows regardless of month.

Compiled by the Office of the Delaware River Master, Milford, Pa.

(Preliminary data - subject to revision)

# PRECIPITATION, IN INCHES

	Dec. 1940 to Sept. 2001			October 2001 to September 2002							
	Ave	rage	Actual		Percent of average		Excess (+) or deficit (-)				
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative			
Oct.	3.38	43.21	1.28	37.99	38	88	-2.10	-5.22			
Nov.	3.83	39.83	1.37	36.71	36	92	-2.46	-3.12			
Dec.	3.36	36.00	2.80	35.34	83	98	56	66			
Jan.	3.00	32.64	2.03	32.54	68	100	97	10			
Feb.	2.65	29.64	1.59	30.51	60	103	-1.06	+.87			
Mar.	3.35	26.99	*3.59	28.92	107	107	+.24	+1.93			
Apr.	3.73	23.64	3.71	25.33	99	107	02	+1.69			
May	4.19	19.91	6.00	21.62	143	109	+1.81	+1.71			
June	3.96	15.72	6.32	15.62	160	99	+2.36	10			
July	4.07	11.76	1.46	9.30	36	79	-2.61	-2.46			
Aug.	3.83	7.69	2.98	7.84	78	102	85	+.15			
Sept.	3.86	3.86	4.86	4.86	126	126	+1.00	+1.00			

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

		1940-2001	2002	Percent of	
Month	Maximum	Median	Minimum	Monthly mean	median
September (observed)	9,167 (1960)	2,016	892 (1941)	1,832	91
September (adjusted)	10,720 (1960)	1,462	324 (1964)	1,151	79
October (observed)	15,690 (1955)	2,352	807 (1941)		
October (adjusted)	18,570 (1955)	2,199	322 (1964)		

<sup>\*</sup> Revised since last month.

#### October 2002

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

Adjusted streamflow in the upper Delaware River Basin during October was excessive. The maximum daily mean discharge of 19,000 cfs occurred on October 17. The minimum daily mean discharge was 1,460 cfs on October 3.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during October was 5,478 cfs, which is 233 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs was 7,616 cfs, or 346 percent of median (water years 1961-90).

On the basis of a 12-station average, precipitation during October was 6.31 inches, which is 188 percent of the 61-year average. The maximum daily-average precipitation during the month was 2.28 inches on October 12. Precipitation in the upper Delaware River Basin during the past 12 months was 0.04 inches less than the long-term average. Precipitation during October was 2.96 inches more than the long-term average for the month.

Combined storage November 1, 2002 in Pepacton, Cannonsville, and Neversink Reservoirs was 58 percent of capacity above the point of maximum depletion. The combined storage of 156 billion gallons was 19 billion gallons more than that of one month ago and 58 billion gallons more than that of one year ago. Median storage on the first day of November in 35 years of record is 147 billion gallons.

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 below average in 11 of the wells. Water levels in 9 of the wells were trending upward in comparison to September levels, and water levels in 8 of the wells were below October 2001 levels. Water levels in 5 of the wells set record lows for October, and the level in 1 of the wells (Chester County well number 10) set a new period of record low regardless of month.

Compiled by the Office of the Delaware River Master, Milford, Pa.

(Preliminary data - subject to revision)

# PRECIPITATION, IN INCHES

	Dec. 1940 t	to Oct. 2001		November 2001 to October 2002						
	Average		Actual		Percent of average		Excess (+) or deficit (-)			
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative		
Nov.	3.83	43.18	1.37	43.14	36	100	-2.46	04		
Dec.	3.36	39.35	2.80	41.77	83	106	56	+2.42		
Jan.	3.00	35.99	2.03	38.97	68	108	97	+2.98		
Feb.	2.65	32.99	1.59	36.94	60	112	-1.06	+3.95		
Mar.	3.35	30.34	3.59	35.35	107	117	+.24	+5.01		
Apr.	3.73	26.99	*3.89	31.76	104	118	+.16	+4.77		
May	4.19	23.26	*5.94	27.87	142	120	+1.75	+4.61		
June	3.96	19.07	6.32	21.93	160	115	+2.36	+2.86		
July	4.07	15.11	1.46	15.61	36	103	-2.61	+.50		
Aug.	3.83	11.04	2.98	14.15	78	128	85	+3.11		
Sept.	3.86	7.21	4.86	11.17	126	155	+1.00	+3.96		
Oct.	3.35	3.35	6.31	6.31	188	188	+2.96	+2.96		

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

		1940-2000	2002	Percent of	
Month	Maximum	Median	Minimum	Monthly mean	median
October (observed)	15,690 (1955)	2,352	807 (1941)	5,478	233
October (adjusted)	18,570 (1955)	2,199	322 (1964)	7,616	346
November (observed)	11,760 (1951)	4,476	995 (1964)		
November (adjusted)	16,160 (1972)	5,806	390 (1964)		

<sup>\*</sup> Revised since last month.

#### November 2002

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

Adjusted streamflow in the upper Delaware River Basin during November was excessive. The maximum daily mean discharge of 15,100 cfs occurred on November 18. The minimum daily mean discharge was 2,810 cfs on November 5.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during November was 6,445 cfs, which is 144 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs was 9,365 cfs, or 175 percent of median (water years 1961-90).

On the basis of a 5-station average, precipitation during November was 3.68 inches, which is 97 percent of the 61-year average. The maximum daily-average precipitation during the month was 0.92 inches on November 17. Precipitation in the upper Delaware River Basin during the past 12 months was 1.73 inches greater than the long-term average. Precipitation during November was 0.11 inches less than the long-term average for the month.

Combined storage December 1, 2002 in Pepacton, Cannonsville, and Neversink Reservoirs was 72 percent of capacity above the point of maximum depletion. The combined storage of 194 billion gallons was 38 billion gallons more than that of one month ago and 128 billion gallons more than that of one year ago. Median storage on the first day of December in 35 years of record is 167 billion gallons.

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 November were below average in 7 of the wells. Water levels in all 12 wells were above October 2002 levels, and water levels in 10 of the wells were above November 2001 levels.

Compiled by the Office of the Delaware River Master, Milford, Pa.

(Preliminary data - subject to revision)

# PRECIPITATION, IN INCHES

	Dec. 1940 to Nov. 2001			De	cember 2001 t	to November 20	002	
	Ave	rage	Actual		Percent of average		Excess (+) or deficit (-)	
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative
Dec.	3.36	43.14	2.80	44.87	83	104	56	+1.73
Jan.	3.00	39.78	2.03	42.07	68	106	97	+2.29
Feb.	2.65	36.78	1.59	40.04	60	109	-1.06	+3.26
Mar.	3.35	34.13	3.59	38.45	107	113	+.24	+4.32
Apr.	3.73	30.78	3.89	34.86	104	113	+.16	+4.08
May	4.19	27.05	5.94	30.97	142	114	+1.75	+3.92
June	3.96	22.86	*5.74	25.03	145	109	+1.78	+2.17
July	4.07	18.90	1.46	19.29	36	102	-2.61	+.39
Aug.	3.83	14.83	2.98	17.83	78	120	85	+3.00
Sept.	3.86	11.00	4.86	14.85	126	135	+1.00	+3.85
Oct.	3.35	7.14	6.31	9.99	188	140	+2.96	+2.85
Nov.	3.79	3.79	3.68	3.68	97	97	11	11

<u>STREAMFLOW, IN CFS</u> DELAWARE RIVER AT MONTAGUE, N.J.

		1940-2001	2002	Percent of	
Month	Maximum	Median	Minimum	Monthly mean	median
November (observed)	11,760 (1951)	4,476	995 (1964)	6,445	144
November (adjusted)	16,160 (1972)	5,806	390 (1964)	9,365	161
December (observed)	18,830 (1996)	4,916	1,665 (1998)		
December (adjusted)	20,880 (1973)	6,506	1,624 (1998)		

<sup>\*</sup> Revised since last month.

#### December 2002

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

Adjusted streamflow in the upper Delaware River Basin during December was in the normal range. The maximum daily mean discharge of 11,000 cfs occurred on December 22. The minimum daily mean discharge was 3,210 cfs on December 9.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during December was 6,143 cfs, which is 125 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs was 8,149 cfs, or 154 percent of median (water years 1961-90).

On the basis of a 5-station average, precipitation during December was 4.68 inches, which is 140 percent of the 61-year average. The maximum daily-average precipitation during the month was 1.58 inches on December 26. Precipitation in the upper Delaware River Basin during the past 12 months was 3.48 inches more than the long-term average. Precipitation during December was 1.33 inches more than the long-term average for the month.

Combined storage January 1, 2003 in Pepacton, Cannonsville, and Neversink Reservoirs was 83 percent of capacity above the point of maximum depletion. The combined storage of 225 billion gallons was 31 billion gallons more than that of one month ago and 155 billion gallons more than that of one year ago. Median storage on the first day of January in 35 years of record is 186 billion gallons.

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 December were below average in 7 of the wells. Water levels in 10 of the wells were above November 2002 levels, and water levels in all 12 wells were above December 2001 levels.

Compiled by the Office of the Delaware River Master, Milford, Pa.

(Preliminary data - subject to revision)

# PRECIPITATION, IN INCHES

	Dec. 1940 t	o Dec. 2001	January to December 2002						
ĺ	Ave	rage	Actual		Percent of average		Excess (+) or deficit (-)		
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative	
Jan.	3.00	43.13	2.03	46.61	68	108	97	+3.48	
Feb.	2.65	40.13	1.59	44.58	60	111	-1.06	+4.45	
Mar.	3.35	37.48	3.59	42.99	107	115	+.24	+5.51	
Apr.	3.73	34.13	3.89	39.40	104	115	+.16	+5.27	
May	4.19	30.40	5.94	35.51	142	117	+1.75	+5.11	
June	3.96	26.21	5.74	29.57	145	113	+1.78	+3.36	
July	4.07	22.25	*1.32	23.83	32	107	-2.75	+1.58	
Aug.	3.83	18.18	2.98	22.51	78	124	85	+4.33	
Sept.	3.86	14.35	4.86	19.53	126	136	+1.00	+5.18	
Oct.	3.35	10.49	6.31	14.67	188	140	+2.96	+4.18	
Nov.	3.79	7.14	3.68	8.36	97	117	11	+1.22	
Dec.	3.35	3.35	4.68	4.68	140	140	+1.33	+1.33	

<u>STREAMFLOW, IN CFS</u> DELAWARE RIVER AT MONTAGUE, N.J.

		1940-2001	2002	Percent of	
Month	Maximum	Median	Minimum	Monthly mean	median
December (observed)	18,830 (1996)	4,916	1,665 (1998)	6,143	125
December (adjusted)	20,880 (1973)	6,506	1,624 (1998)	8,149	125
January (observed)	15,600 (1996)	4,922	1,318 (1981)		
January (adjusted)	21,330 (1996)	5,820	1,064 (1981)		

<sup>\*</sup> Revised since last month.