SUMMARY OF HYDROLOGIC CONDITIONS IN THE UPPER DELAWARE RIVER BASIN January 2001

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 discharge of 4,680 cfs occurred on January 1. The minimum daily discharge was 1,800 cfs on January 29.

On the basis of a 5-station average, precipitation during January was 1.35 inches, which was 45 percent of the 60-year average. The maximum daily-average precipitation during January was 0.52 inches on January 31. Precipitation in the upper Delaware River Basin during the past 12 months was 3.67 inches greater than the long-term average. Precipitation during January was 1.67 inches less than the long-term average for the month.

The monthly mean streamflow of the Delaware River at Montague, N.J. during January was 2,712 cfs (observed), which was 53 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs was 3,126 cfs, or 71 percent of median (water years 1961-90).

Combined storage February 1, 2001, in Pepacton, Cannonsville, and Neversink Reservoirs was 84.4 percent of capacity above the point of maximum depletion. The combined storage of 229 billion gallons was 16 billion gallons less than that of one month ago and was 41 billion gallons more than that of one year ago. Median storage on the first day of February in 33 years of record is 214 billion gallons.

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 11 of the wells. Water levels in 8 of the wells were trending upward in comparison to December levels. Water levels in 11 of the wells were below January 2000 levels.

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

(Preliminary data - subject to revision)

PRECIPITATION, IN INCHES

	Dec. 1940 to Jan. 2000			February 2000 to January 2001							
	Average		Actual		Percent of average		Excess (+)	Excess (+) or deficit (-)			
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative			
Feb.	2.64	43.18	3.26	46.85	123	108	+.62	+3.67			
Mar.	3.32	40.54	4.08	43.59	123	108	+.76	+3.05			
Apr.	3.76	37.22	4.81	39.51	128	106	+1.05	+2.29			
May	4.17	33.46	6.36	34.70	153	104	+2.19	+1.24			
June	3.91	29.29	6.50	28.34	166	97	+2.59	95			
July	4.09	25.38	4.24	21.84	104	86	+.15	-3.54			
Aug.	3.86	21.29	3.60	17.60	93	83	26	-3.69			
Sept.	3.83	17.43	3.53	14.00	92	80	30	-3.43			
Oct.	3.39	13.60	2.41	10.47	71	77	98	-3.13			
Nov.	3.85	10.21	2.50	8.06	65	79	-1.35	-2.15			
Dec.	3.34	6.36	*4.21	5.56	126	87	+.87	80			
Jan.	3.02	3.02	1.35	1.35	45	45	-1.67	-1.67			

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

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

		1940-99	2001	Percent of	
Month	Maximum	Median	Minimum	Monthly mean	median
January (observed)	15,600 (1996)	5,116	1,318 (1981)	2,712	53
January (adjusted)	21,330 (1996)	5,939	1,064 (1981)	3,126	53
February (observed)	15,120 (1976)	5,468	1,748 (1980)		
February (adjusted)	20,330 (1981)	5,613	1,373 (1980)		

^{*} Revised since last month.

SUMMARY OF HYDROLOGIC CONDITIONS IN THE UPPER DELAWARE RIVER BASIN February 2001

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 discharge of 5,110 cfs occurred on February 16. The minimum daily discharge was 2,700 cfs on February 5 and 9.

On the basis of a 5-station average, precipitation during February was 2.26 inches, which was 85 percent of the 60-year average. The maximum daily-average precipitation during February was 0.61 inches on February 6. Precipitation in the upper Delaware River Basin during the past 12 months was 2.66 inches greater than the long-term average. Precipitation during February was 0.39 inches less than the long-term average for the month.

The monthly mean streamflow of the Delaware River at Montague, N.J. during February was 3,755 cfs (observed), which was 69 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs was 5,438 cfs, or 85 percent of median (water years 1961-90).

Combined storage March 1, 2001, in Pepacton, Cannonsville, and Neversink Reservoirs was 86.5 percent of capacity above the point of maximum depletion. The combined storage of 234 billion gallons was 6 billion gallons more than that of one month ago and was 13 billion gallons more than that of one year ago. Median storage on the first day of March in 33 years of record is 221 billion gallons.

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 9 of the wells. Water levels in all of the wells were trending upward in comparison to January levels. Water levels in 10 of the wells were above February 2000 levels.

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

(Preliminary data - subject to revision)

PRECIPITATION, IN INCHES

	Dec. 1940 to Feb. 2000		March 2000 to February 2001							
	Ave	rage	Actual		Percent of average		Excess (+) or deficit (-)			
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative		
Mar.	3.32	43.19	4.08	45.85	123	106	+.76	+2.66		
Apr.	3.76	39.87	4.81	41.77	128	105	+1.05	+1.90		
May	4.17	36.11	6.36	36.96	153	102	+2.19	+.85		
June	3.91	31.94	6.50	30.60	166	96	+2.59	-1.34		
July	4.09	28.03	4.24	24.10	104	86	+.15	-3.93		
Aug.	3.86	23.94	3.60	19.86	93	83	26	-4.08		
Sept.	3.83	20.08	3.53	16.26	92	81	30	-3.82		
Oct.	3.39	16.25	2.41	12.73	71	78	98	-3.52		
Nov.	3.85	12.86	2.50	10.32	65	80	-1.35	-2.54		
Dec.	3.34	9.01	4.21	7.82	126	87	+.87	-1.19		
Jan.	3.02	5.67	1.35	3.61	45	64	-1.67	-2.06		
Feb.	2.65	2.65	2.26	2.26	85	85	39	39		

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

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

		1940-99	2001	Percent of	
Month	Maximum	Median	Minimum	Monthly mean	median
February (observed)	15,120 (1976)	5,468	1,748 (1980)	3,755	69
February (adjusted)	20,330 (1981)	5,613	1,373 (1980)	5,438	97
March (observed)	24,480 (1945)	9,152	3,191 (1981)		
March (adjusted)	25,910 (1945)	11,110	4,428 (1981)		

SUMMARY OF HYDROLOGIC CONDITIONS IN THE UPPER DELAWARE RIVER BASIN March 2001

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 discharge of 25,600 cfs occurred on March 31. The minimum daily discharge was 2,710 cfs on March 12.

On the basis of a 5-station average, precipitation during March was 4.95 inches, which was 149 percent of the 60-year average. The maximum daily-average precipitation during March was 1.24 inches on March 30. Precipitation in the upper Delaware River Basin during the past 12 months was 3.82 inches greater than the long-term average. Precipitation during March was 1.62 inches more than the long-term average for the month.

The obsreved monthly mean streamflow of the Delaware River at Montague, N.J. during March was 6,954 cfs, which was 76 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs was 8,622 cfs, or 74 percent of median (water years 1961-90).

Combined storage April 1, 2001, in Pepacton, Cannonsville, and Neversink Reservoirs was 89.4 percent of capacity above the point of maximum depletion. The combined storage of 242 billion gallons was 8 billion gallons more than that of one month ago and was 14 billion gallons less than that of one year ago. Median storage on the first day of April in 33 years of record is 256 billion gallons.

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 8 of the wells. Water levels in all of the wells were trending upward in comparison to February levels. Water levels in 10 of the wells were below March 2000 levels.

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

(Preliminary data - subject to revision)

PRECIPITATION, IN INCHES

	Dec. 1940 to Mar. 2000			April 2000 to March 2001						
	Ave	rage	Actual		Percent of average		Excess (+)	Excess (+) or deficit (-)		
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative		
Apr.	3.76	43.20	4.81	47.02	128	109	+1.05	+3.82		
May	4.17	39.44	6.36	42.21	153	107	+2.19	+2.77		
June	3.91	35.27	6.50	35.85	166	102	+2.59	+.58		
July	4.09	31.36	*4.54	29.35	111	94	+.45	-2.01		
Aug.	3.86	27.27	3.60	24.81	93	91	26	-2.46		
Sept.	3.83	23.41	3.53	21.21	92	91	30	-2.20		
Oct.	3.39	19.58	2.41	17.68	71	90	98	-1.90		
Nov.	3.85	16.19	2.50	15.27	65	94	-1.35	92		
Dec.	3.34	12.34	4.21	12.77	126	103	+.87	+.43		
Jan.	3.02	9.00	1.35	8.56	45	95	-1.67	44		
Feb.	2.65	5.98	2.26	7.21	85	121	39	+1.23		
Mar.	3.33	3.33	4.95	4.95	149	149	+1.62	+1.62		

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

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

		1940-99	2001	Percent of	
Month	Maximum	Median	Minimum	Monthly mean	median
March (observed)	24,480 (1945)	9,152	3,191 (1981)	6,954	76
March (adjusted)	25,910 (1945)	11,110	4,428 (1981)	8,622	78
April (observed)	31,560 (1940)	11,400	3,322 (1985)		
April (adjusted)	33,010 (1940)	13,870	3,847 (1946)		

^{*}Revised since last month

SUMMARY OF HYDROLOGIC CONDITIONS IN THE UPPER DELAWARE RIVER BASIN April 2001

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

Adjusted streamflow in the upper Delaware River Basin during April was excessive. The maximum daily discharge of 35,800 cfs occurred on April 11. The minimum daily discharge was 3,470 cfs on April 30.

On the basis of a 5-station average, precipitation during April was 1.38 inches, which was 37 percent of the 60-year average. The maximum daily-average precipitation during April was 0.45 inches on April 10. Precipitation in the upper Delaware River Basin during the past 12 months was 0.18 inches greater than the long-term average. Precipitation during April was 2.39 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 14,750 cfs, which was 129 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs was 17,110 cfs, or 122 percent of median (water years 1961-90).

Combined storage May 1, 2001, in Pepacton, Cannonsville, and Neversink Reservoirs was 100.0 percent of capacity above the point of maximum depletion. The combined storage of 271 billion gallons was 29 billion gallons more than that of one month ago and was 1 billion gallons less than that of one year ago. Median storage on the first day of May in 33 years of record is 271 billion gallons.

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 April were below average in 7 of the wells. Water levels in 12 of the wells were trending upward in comparison to March levels. Water levels in 8 of the wells were below April 2000 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. 2000	May 2000 to April 2001						
	Average		Actual		Percent of average		Excess (+) or deficit (-)		
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative	
May	4.17	43.21	6.36	43.39	153	100	+2.19	+0.18	
June	3.91	39.04	6.50	37.03	166	95	+2.59	-2.01	
July	4.09	35.13	4.54	30.53	111	87	+.45	-4.60	
Aug.	3.86	31.04	*3.19	25.99	83	84	67	-5.05	
Sept.	3.83	27.18	*3.74	22.80	98	84	09	-4.38	
Oct.	3.39	23.35	2.41	19.06	71	82	98	-4.29	
Nov.	3.85	19.96	2.50	16.65	65	83	-1.35	-3.31	
Dec.	3.34	16.11	4.21	14.15	126	88	+.87	-1.96	
Jan.	3.02	12.77	1.35	9.94	45	78	-1.67	-2.83	
Feb.	2.65	9.75	2.26	8.59	85	88	39	-1.16	
Mar.	3.33	7.10	4.95	6.33	149	89	+1.62	77	
Apr.	3.77	3.77	1.38	1.38	37	37	-2.39	-2.39	

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

		1940-99	2001	Percent of	
Month	Maximum	Median	Minimum	Monthly mean	median
April (observed)	31,560 (1940)	11,400	3,322 (1985)	14,750	129
April (adjusted)	33,010 (1940)	13,870	3,847 (1946)	17,110	123
May (observed)	16,090 (1943)	6,998	2,215 (1965)		
May (adjusted)	18,970 (1989)	8,234	2,944 (1941)		

^{*}Revised since last month

SUMMARY OF HYDROLOGIC CONDITIONS IN THE UPPER DELAWARE RIVER BASIN May 2001

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

Adjusted streamflow in the upper Delaware River Basin during May was deficient. The maximum daily discharge of 4,880 cfs occurred on May 29. The minimum daily discharge was 1,500 cfs on May 16.

On the basis of a multi-station average, precipitation during May was 3.09 inches, which was 73 percent of the 60-year average. The maximum daily-average precipitation during May was 1.08 inches on May 23. Precipitation in the upper Delaware River Basin during the past 12 months was 2.81 inches less than the long-term average. Precipitation during May was 1.12 inches less than the long-term average for the month.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during May was 2,618 cfs, which was 37 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs was 3,025 cfs, or 37 percent of median (water years 1961-90).

Combined storage June 1, 2001 in Pepacton, Cannonsville, and Neversink Reservoirs was 93 percent of capacity above the point of maximum depletion. The combined storage of 253 billion gallons was 18 billion gallons less than that of one month ago and 20 billion gallons less than that of one year ago. Median storage on the first day of June in 34 years of record is 270 billion gallons.

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 May were below average in 11 of the wells. Water levels in 12 of the wells were trending downward in comparison to April levels. Water levels in 12 of the wells were below May 2000 levels.

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

(Preliminary data - subject to revision)

PRECIPITATION, IN INCHES

	Dec. 1940 to May 2000		June 2000 to May 2001						
	Ave	rage	Actual		Percent of average		Excess (+) or deficit (-)		
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative	
June	3.91	43.25	6.50	40.44	166	94	+2.59	-2.81	
July	4.09	39.34	4.54	33.94	111	86	+.45	-5.40	
Aug.	3.86	35.25	3.19	29.40	83	83	67	-5.85	
Sept.	3.83	31.39	3.74	26.21	98	83	09	-5.18	
Oct.	3.39	27.56	*2.78	22.47	82	82	61	-5.09	
Nov.	3.85	24.17	*2.45	19.69	64	81	-1.40	-4.48	
Dec.	3.34	20.32	4.21	17.24	126	85	+.87	-3.08	
Jan.	3.02	16.98	1.35	13.03	45	77	-1.67	-3.95	
Feb.	2.65	13.96	2.26	11.68	85	84	39	-2.28	
Mar.	3.33	11.31	4.95	9.42	149	83	+1.62	-1.89	
Apr.	3.77	7.98	1.38	4.47	37	56	-2.39	-3.51	
May	4.21	4.21	3.09	3.09	73	73	-1.12	-1.12	

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

		1940-99	2001	Percent of	
Month	Maximum	Median	Minimum	Monthly mean	median
May (observed)	16,090 (1943)	6,998	2,215 (1965)	2,618	37
May (adjusted)	18,970 (1989)	8,234	2,944 (1941)	3,025	37
June (observed)	15,200 (1972)	3,194	1,214 (1965)		
June (adjusted)	16,010 (1972)	3,909	1,024 (1962)		

^{*}Revised since last month

SUMMARY OF HYDROLOGIC CONDITIONS IN THE UPPER DELAWARE RIVER BASIN June 2001

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

Adjusted streamflow in the upper Delaware River Basin during June was in the normal range. The maximum daily discharge of 7,590 cfs occurred on June 4. The minimum daily discharge was 2,630 cfs on June 11.

On the basis of a multi-station average, precipitation during June was 3.81 inches, which was 96 percent of the 60-year average. The maximum daily-average precipitation during June was 1.30 inches on June 17. Precipitation in the upper Delaware River Basin during the past 12 months was 5.55 inches less than the long-term average. Precipitation during June was 0.15 inches less than the long-term average for the month.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during June was 3,838 cfs, which was 120 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs was 4,444 cfs, or 112 percent of median (water years 1961-90).

Combined storage July 1, 2001 in Pepacton, Cannonsville, and Neversink Reservoirs was 93 percent of capacity above the point of maximum depletion. The combined storage of 251 billion gallons was 2 billion gallons less than that of one month ago and 20 billion gallons less than that of one year ago. Median storage on the first day of July in 34 years of record is 257 billion gallons.

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 June were below average in 9 of the wells. Water levels in 7 of the wells were trending downward in comparison to May levels. Water levels in 9 of the wells were below June 2000 levels.

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

(Preliminary data - subject to revision)

PRECIPITATION, IN INCHES

	Dec. 1940 to June 2000		July 2000 to June 2001						
	Ave	erage	Actual		Percent of average		Excess (+) or deficit (-)		
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative	
July	4.09	43.30	4.54	37.75	111	87	+.45	-5.55	
Aug.	3.86	39.21	3.19	33.21	83	85	67	-6.00	
Sept.	3.83	35.35	3.74	30.02	98	85	09	-5.33	
Oct.	3.39	31.52	2.78	26.28	82	83	61	-5.24	
Nov.	3.85	28.13	2.45	23.50	64	84	-1.40	-4.63	
Dec.	3.34	24.28	4.21	21.05	126	87	+.87	-3.23	
Jan.	3.02	20.94	1.35	16.84	45	80	-1.67	-4.10	
Feb.	2.65	17.92	2.26	15.49	85	86	39	-2.43	
Mar.	3.33	15.27	4.95	13.23	149	87	+1.62	-2.04	
Apr.	3.77	11.94	1.38	8.28	37	69	-2.39	-3.66	
May	4.21	8.17	3.09	6.90	73	84	-1.12	-1.27	
June	3.96	3.96	3.81	3.81	96	96	15	15	

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

		1940-99	2001	Percent of	
Month	Maximum	Median	Minimum	Monthly mean	median
June (observed)	15,200 (1972)	3,194	1,214 (1965)	3,838	120
June (adjusted)	16,010 (1972)	3,909	1,024 (1962)	4,444	114
July (observed)	11,220 (1945)	2,442	864 (1954)		
July (adjusted)	11,470 (1945)	2,138	391 (1965)		

SUMMARY OF HYDROLOGIC CONDITIONS IN THE UPPER DELAWARE RIVER BASIN July 2001

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 discharge of 2,670 cfs occurred on July 1. The minimum daily discharge was 1,490 cfs on July 15.

On the basis of a multi-station average, precipitation during July was 2.36 inches, which was 58 percent of the 60-year average. The maximum daily-average precipitation during the month was 0.39 inches on July 26. Precipitation in the upper Delaware River Basin during the past 12 months was 7.64 inches less than the long-term average. Precipitation during July was 1.73 inches less than the long-term average for the month.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during July was 1,911 cfs, which was 78 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs was 1,265 cfs, or 56 percent of median (water years 1961-90).

Combined storage August 1, 2001 in Pepacton, Cannonsville, and Neversink Reservoirs was 82 percent of capacity above the point of maximum depletion. The combined storage of 221 billion gallons was 30 billion gallons less than that of one month ago and 45 billion gallons less than that of one year ago. Median storage on the first day of August in 34 years of record is 232 billion gallons.

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 July were below average in 8 of the wells. Water levels in 11 of the wells were trending downward in comparison to June levels. Water levels in 8 of the wells were below July 2000 levels.

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

(Preliminary data - subject to revision)

PRECIPITATION, IN INCHES

	Dec. 1940 to July 2000			August 2000 to July 2001							
	Ave	rage	Actual		Percent of average		Excess (+) or deficit (-)				
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative			
Aug.	3.86	43.30	3.19	35.66	83	82	67	-7.64			
Sept.	3.83	39.44	3.74	32.47	98	82	09	-6.97			
Oct.	3.39	35.61	2.78	28.73	82	81	61	-6.88			
Nov.	3.85	32.22	2.45	25.95	64	81	-1.40	-6.27			
Dec.	3.34	28.37	*4.30	23.50	129	83	+.96	-4.87			
Jan.	3.02	25.03	1.35	19.20	45	77	-1.67	-5.83			
Feb.	2.65	22.01	2.26	17.85	85	81	39	-4.16			
Mar.	3.33	19.36	4.95	15.59	149	81	+1.62	-3.77			
Apr.	3.77	16.03	1.38	10.64	37	66	-2.39	-5.39			
May	4.21	12.26	3.09	9.26	73	76	-1.12	-3.00			
June	3.96	8.05	3.81	6.17	96	77	15	-1.88			
July	4.09	4.09	2.36	2.36	58	58	-1.73	-1.73			

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

		1940-99	2001	Percent of	
Month	Maximum	Median	Minimum	Monthly mean	median
July (observed)	11,220 (1945)	2,442	864 (1954)	1,911	78
July(adjusted)	11,470 (1945)	2,138	391 (1965)	1,265	59
August (observed)	14,230 (1955)	2,096	715 (1954)		
August (adjusted)	17,410 (1955)	1,380	364 (1964)		

^{*}Revised since last month.

SUMMARY OF HYDROLOGIC CONDITIONS IN THE UPPER DELAWARE RIVER BASIN August 2001

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 discharge of 2,400 cfs occurred on August 10. The minimum daily discharge was 1,560 cfs on August 27.

On the basis of a multi-station average, precipitation during August was 2.58 inches, which was 67 percent of the 60-year average. The maximum daily-average precipitation during August was 0.38 inches on August 4. Precipitation in the upper Delaware River Basin during the past 12 months was 8.13 inches less than the long-term average. Precipitation during August was 1.27 inches less than the long-term average for the month.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during August was 1,788 cfs, which was 85 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs was 620 cfs, or 45 percent of median (water years 1961-90).

Combined storage September 1, 2001 in Pepacton, Cannonsville, and Neversink Reservoirs was 66 percent of capacity above the point of maximum depletion. The combined storage of 178 billion gallons was 43 billion gallons less than that of one month ago and 77 billion gallons less than that of one year ago. Median storage on the first day of September in 34 years of record is 203 billion gallons.

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 August were below average in 9 of the wells. Water levels in 11 of the wells were trending downward in comparison to July levels. Water levels in 8 of the wells were below August 2000 levels.

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

(Preliminary data - subject to revision)

PRECIPITATION, IN INCHES

	Dec. 1940 to	August 2000		S	eptember 2000	to August 200)1	
	Average		Actual		Percent of average		Excess (+) or deficit (-)	
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative
Sept.	3.83	43.29	3.74	35.16	98	81	09	-8.13
Oct.	3.39	39.46	2.78	31.42	82	80	61	-8.04
Nov.	3.85	36.07	2.45	28.64	64	79	-1.40	-7.43
Dec.	3.34	32.22	4.30	26.19	129	81	+.96	-6.03
Jan.	3.02	28.88	*1.46	21.89	48	76	-1.56	-6.99
Feb.	2.65	25.86	2.26	20.43	85	79	39	-5.43
Mar.	3.33	23.21	4.95	18.17	149	78	+1.62	-5.04
Apr.	3.77	19.88	1.38	13.22	37	66	-2.39	-6.66
May	4.21	16.11	3.09	11.84	73	73	-1.12	-4.27
June	3.96	11.90	3.81	8.75	96	74	15	-3.15
July	4.09	7.94	2.36	4.94	58	62	-1.73	-3.00
Aug.	3.85	3.85	2.58	2.58	67	67	-1.27	-1.27

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

		1940-99	2001	Percent of	
Month	Maximum	Median	Minimum	Monthly mean	median
August (observed)	14,230 (1955)	2,096	715 (1954)	1,788	85
August (adjusted)	17,410 (1955)	1,380	364 (1964)	620	45
September (observed)	9,167 (1960)	2,016	892 (1941)		
September (adjusted)	10,720 (1960)	1,462	324 (1964)		

^{*}Revised since last month

SUMMARY OF HYDROLOGIC CONDITIONS IN THE UPPER DELAWARE RIVER BASIN September 2001

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 2,660 cfs occurred on September 27. The minimum daily mean discharge was 1,340 cfs on September 30.

On the basis of a multi-station average, precipitation during September was 5.31 inches, which was 139 percent of the 60-year average. The maximum daily-average precipitation during September was 1.76 inches on September 25. Precipitation in the upper Delaware River Basin during the past 12 months was 6.47 inches less than the long-term average. Precipitation during September was 1.48 inches more than the long-term average for the month.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during September was 1,877 cfs, which was 93 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs was 1,004 cfs, or 82 percent of median (water years 1961-90).

Combined storage October 1, 2001 in Pepacton, Cannonsville, and Neversink Reservoirs was 52 percent of capacity above the point of maximum depletion. The combined storage of 141 billion gallons was 37 billion gallons less than that of one month ago and 97 billion gallons less than that of one year ago. Median storage on the first day of October in 34 years of record is 178 billion gallons.

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 September were below average in 11 of the wells. Water levels in 10 of the wells were trending downward in comparison to August levels. Water levels in 11 of the wells were below September 2000 levels.

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

(Preliminary data - subject to revision)

PRECIPITATION, IN INCHES

	Dec. 1940 to Sept. 2000			October 2000 to September 2001							
	Average		Actual		Percent of average		Excess (+) or deficit (-)				
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative			
Oct.	3.39	43.29	2.78	36.82	82	85	61	-6.47			
Nov.	3.85	39.90	2.45	34.04	64	85	-1.40	-5.86			
Dec.	3.34	36.05	4.30	31.59	129	88	+.96	-4.46			
Jan.	3.02	32.71	1.46	27.29	48	83	-1.56	-5.42			
Feb.	2.65	29.69	*2.38	25.83	90	87	27	-3.86			
Mar.	3.33	27.04	4.95	23.45	149	87	+1.62	-3.59			
Apr.	3.77	23.71	*1.35	18.50	36	78	-2.42	-5.21			
May	4.21	19.94	3.09	17.15	73	86	-1.12	-2.79			
June	3.96	15.73	3.81	14.06	96	89	15	-1.67			
July	4.09	11.77	2.36	10.25	58	87	-1.73	-1.52			
Aug.	3.85	7.68	2.58	7.89	67	103	-1.27	+.21			
Sept.	3.83	3.83	5.31	5.31	139	139	+1.48	+1.48			

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

		1940-99	2001	Percent of	
Month	Maximum	Median	Minimum	Monthly mean	median
September (observed)	9,167 (1960)	2,016	892 (1941)	1,877	93
September (adjusted)	10,720 (1960)	1,462	324 (1964)	1,004	69
October (observed)	15,690 (1955)	2,326	807 (1941)		
October (adjusted)	18,570 (1955)	2,130	322 (1964)		

^{*}Revised since last month

SUMMARY OF HYDROLOGIC CONDITIONS IN THE UPPER DELAWARE RIVER BASIN October 2001

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

Adjusted streamflow in the upper Delaware River Basin during October was deficient. The maximum daily mean discharge of 1,930 cfs occurred on October 26. The minimum daily mean discharge was 1,620 cfs on October 1.

On the basis of a multi-station average, precipitation during October was 1.18 inches, which was 35 percent of the 60-year average. The maximum daily-average precipitation during October was 0.49 inches on October 15. Precipitation in the upper Delaware River Basin during the past 12 months was 8.07 inches less than the long-term average. Precipitation during October was 2.20 inches less than the long-term average for the month.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during October was 1,784 cfs, which was 77 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs was 638 cfs, or 30 percent of median (water years 1961-90).

Combined storage November 1, 2001 in Pepacton, Cannonsville, and Neversink Reservoirs was 36 percent of capacity above the point of maximum depletion. The combined storage of 98 billion gallons was 44 billion gallons less than that of one month ago and 132 billion gallons less than that of one year ago. Median storage on the first day of November in 34 years of record is 148 billion gallons. Based on reservoir storage, the river basin entered drought watch on October 29, 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 October were below average in 10 of the wells. Water levels in 9 of the wells were trending downward in comparison to September levels. Water levels in 12 of the wells were below October 2000 levels.

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

(Preliminary data - subject to revision)

PRECIPITATION, IN INCHES

	Dec. 1940 t	to Oct. 2000	November 2000 to October 2001						
	Average		Actual		Percent of average		Excess (+) or deficit (-)		
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative	
Nov.	3.85	43.28	2.45	35.21	64	81	-1.40	-8.07	
Dec.	3.34	39.43	4.30	32.76	129	83	+.96	-6.67	
Jan.	3.02	36.09	1.46	28.46	48	79	-1.56	-7.63	
Feb.	2.65	33.07	2.38	27.00	90	82	27	-6.07	
Mar.	3.33	30.42	4.95	24.62	149	81	+1.62	-5.80	
Apr.	3.77	27.09	1.35	19.67	36	73	-2.42	-7.42	
May	4.21	23.32	*3.08	18.32	73	79	-1.13	-5.00	
June	3.96	19.11	3.81	15.24	96	80	15	-3.87	
July	4.09	15.15	2.36	11.43	58	75	-1.73	-3.72	
Aug.	3.85	11.06	2.58	9.07	67	82	-1.27	-1.99	
Sept.	3.83	7.21	5.31	6.49	139	90	+1.48	72	
Oct.	3.38	3.38	1.18	1.18	35	35	-2.20	-2.20	

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

		1940-99	2001	Percent of	
Month	Maximum	Median	Minimum	Monthly mean	median
October (observed)	15,690 (1955)	2,326	807 (1941)	1,784	77
October (adjusted)	18,570 (1955)	2,130	322 (1964)	638	30
November (observed)	11,760 (1951)	4,642	995 (1964)		
November (adjusted)	16,160 (1972)	6,100	390 (1964)		

^{*}Revised since last month

SUMMARY OF HYDROLOGIC CONDITIONS IN THE IJPPER DELAWARE RIVER BASIN

UPPER DELAWARE RIVER BASIN November 2001

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

Adjusted streamflow in the upper Delaware River Basin during November was deficient. The maximum daily mean discharge of 1,790 cfs occurred on November 6. The minimum daily mean discharge was 1,440 cfs on November 29.

On the basis of a multi-station average, precipitation during November was 1.32 inches, which is 34 percent of the 60-year average. The maximum daily-average precipitation during November was 0.68 inches on November 26. Precipitation in the upper Delaware River Basin during the past 12 months was 9.18 inches less than the long-term average. Precipitation during November was 2.51 inches less than the long-term average for the month.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during November was 1,580 cfs, which is 34 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs was 825 cfs, or 15 percent of median (water years 1961-90).

Combined storage December 1, 2001 in Pepacton, Cannonsville, and Neversink Reservoirs was 24 percent of capacity above the point of maximum depletion. The combined storage of 66 billion gallons was 32 billion gallons less than that of one month ago and 155 billion gallons less than that of one year ago. Median storage on the first day of December in 34 years of record is 172 billion gallons. Based on reservoir storage, the river basin entered drought warning on November 4, 2001 and drought on December 1, 2001. **The combined storage on December 1, 2001 was the lowest of record, regardless of month.**

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 November were below average in 12 of the wells. Water levels in 12 of the wells were trending downward in comparison to October levels. Water levels in 11 of the wells were below November 2000 levels.

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

(Preliminary data - subject to revision)

PRECIPITATION, IN INCHES

	Dec. 1940 t	o Nov. 2000	December 2000 to November 2001						
	Average		Actual		Percent of average		Excess (+) or deficit (-)		
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative	
Dec.	3.34	43.26	4.30	34.08	129	79	+.96	-9.18	
Jan.	3.02	39.92	1.46	29.78	48	75	-1.56	-10.14	
Feb.	2.65	36.90	2.38	28.32	90	77	27	-8.58	
Mar.	3.33	34.25	4.95	25.94	149	76	+1.62	-8.31	
Apr.	3.77	30.92	1.35	20.99	36	68	-2.42	-9.93	
May	4.21	27.15	3.08	19.64	73	72	-1.13	-7.51	
June	3.96	22.94	3.81	16.56	96	72	15	-6.38	
July	4.09	18.98	2.36	12.75	58	67	-1.73	-6.23	
Aug.	3.85	14.89	2.58	10.39	67	70	-1.27	-4.50	
Sept.	3.83	11.04	5.31	7.81	139	71	+1.48	-3.23	
Oct.	3.38	7.21	1.18	2.50	35	35	-2.20	-4.71	
Nov.	3.83	3.83	1.32	1.32	34	34	-2.51	-2.51	

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

		1940-99	2001	Percent of	
Month	Maximum	Median	Minimum	Monthly mean	median
November (observed)	11,760 (1951)	4,642	995 (1964)	1,580	34
November (adjusted)	16,160 (1972)	6,100	390 (1964)	825	14
December (observed)	18,830 (1996)	4,916	1,665 (1998)		
December (adjusted)	20,880 (1973)	6,506	1,624 (1998)		

SUMMARY OF HYDROLOGIC CONDITIONS IN THE UPPER DELAWARE RIVER BASIN December 2001

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

Adjusted streamflow in the upper Delaware River Basin during December was deficient. The maximum daily mean discharge of 5,140 cfs occurred on December 19. The minimum daily mean discharge was 1,170 cfs on December 11.

On the basis of a multi-station average, precipitation during December was 2.71 inches, which is 81 percent of the 60-year average. The maximum daily-average precipitation during December was 0.86 inches on December 18. Precipitation in the upper Delaware River Basin during the past 12 months was 10.41 inches less than the long-term average. Precipitation during December was 0.65 inches less than the long-term average for the month.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during December was 2,167 cfs, which is 44 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs was 3,061 cfs, or 58 percent of median (water years 1961-90).

Combined storage January 1, 2002 in Pepacton, Cannonsville, and Neversink Reservoirs was 26 percent of capacity above the point of maximum depletion. The combined storage of 70 billion gallons was 4 billion gallons more than that of one month ago and 175 billion gallons less than that of one year ago. Median storage on the first day of January in 34 years of record is 188 billion gallons. Based on reservoir storage, the river basin entered drought on December 1, 2001. **The combined storage on January 1, 2002 was the lowest of record for the month of January.**

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 December were below average in all of the wells and new record low levels were set in 5 of the wells. Water levels in 8 of the wells were trending downward in comparison to November levels. Water levels in 12 of the wells were below December 2000 levels.

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

(Preliminary data - subject to revision)

PRECIPITATION, IN INCHES

	Dec. 1940 to Dec. 2000		January 2001 to December 2001							
	Average		Actual		Percent of average		Excess (+) or deficit (-)			
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative		
Jan.	3.02	43.28	1.46	32.87	48	76	-1.56	-10.41		
Feb.	2.65	40.26	2.38	31.41	90	78	27	-8.85		
Mar.	3.33	37.61	4.95	29.03	149	77	+1.62	-8.58		
Apr.	3.77	34.28	1.35	24.08	36	70	-2.42	-10.20		
May	4.21	30.51	3.08	22.73	73	75	-1.13	-7.78		
June	3.96	26.30	*4.06	19.65	103	75	+.10	-6.65		
July	4.09	22.34	*2.49	15.59	61	70	-1.60	-6.75		
Aug.	3.85	18.25	2.58	13.10	67	72	-1.27	-5.15		
Sept.	3.83	14.40	5.31	10.52	139	73	+1.48	-3.88		
Oct.	3.38	10.57	1.18	5.21	35	49	-2.20	-5.36		
Nov.	3.83	7.19	1.32	4.03	34	56	-2.51	-3.16		
Dec.	3.36	3.36	2.71	2.71	81	81	65	65		

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

		1940-2000	2001	Percent of	
Month	Maximum	Median	Minimum	Monthly mean	median
December (observed)	18,830 (1996)	4,890	1,665 (1998)	2,167	44
December (adjusted)	20,880 (1973)	6,276	1,624 (1998)	3,061	49
January (observed)	15,600 (1996)	4,960	1,318 (1981)		
January (adjusted)	21,330 (1996)	5,874	1,064 (1981)		

^{*} Revised since last month.