January 2004

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

Adjusted streamflow in the upper Delaware River Basin during January was in the normal range. The maximum daily mean discharge of 19,000 cfs occurred on January 6. The minimum daily mean discharge was 3,800 cfs on January 30 and 31.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during January was 8,202 cfs, which is 168 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs was 8,030 cfs, or 132 percent of median (water years 1971-2000).

On the basis of an 5-station average, precipitation during January was 2.36 inches, which is 79 percent of the 63-year average. The maximum daily-average precipitation during the month was 0.85 inches on January 5. Precipitation in the upper Delaware River Basin during the past 12 months was 12.05 inches more than the long-term average. Precipitation during January was 0.62 inches less than the long-term average for the month.

Combined storage February 1, 2004 in Pepacton, Cannonsville, and Neversink Reservoirs was 96 percent of capacity above the point of maximum depletion. The combined storage of 261 billion gallons was 14 billion gallons less than that of one month ago and 19 billion gallons more than that of one year ago. Median storage on the first day of February in 36 years of record is 214 billion gallons. Pepacton, Cannonsville and Neversink Reservoirs spilled 1, 13 and 5 billion gallons, respectively, in January.

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 January were above average in 10 of the wells. Water levels in 10 of the wells were below December 2003 levels, and water levels in 10 of the wells were above January 2003 levels.

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

(Preliminary data - subject to revision)

PRECIPITATION, IN INCHES

	Dec. 1940 to Jan. 2003			F	February 2003	to January 200	4	
	Average		Actual		Percent of average		Excess (+) or deficit (-)	
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative
Feb	2.63	43.19	2.97	55.24	113	128	+.34	+12.05
Mar.	3.36	40.56	3.03	52.27	90	129	33	+11.71
Apr.	3.74	37.20	2.80	49.24	75	132	94	+12.04
May	4.22	33.46	3.71	46.44	88	139	51	+12.98
June	3.99	29.24	6.57	42.73	165	146	+2.58	+13.49
July	4.02	25.25	*4.37	36.16	109	143	+.35	+10.91
Aug.	3.82	21.23	4.80	31.79	126	150	+.98	+10.56
Sept.	3.88	17.41	10.39	26.99	268	155	+6.51	+9.58
Oct.	3.39	13.53	5.63	16.60	166	123	+2.24	+3.07
Nov.	3.79	10.14	3.98	10.97	105	108	+.19	+.83
Dec.	3.37	6.35	4.63	6.99	137	110	+1.26	+.64
Jan.	2.98	2.98	2.36	2.36	79	79	62	62

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

		1940-2002	2004	Percent of	
Month	Maximum	Median	Minimum	Monthly mean	median
January (observed)	15,600 (1996)	4,885	1,318 (1981)	8,202	168
January (adjusted)	21,330 (1996)	5,767	1,064 (1981)	8,030	139
February (observed)	15,120 (1976)	5,456	1,748 (1980)		
February (adjusted)	20,330 (1981)	5,616	1,373 (1980)		

^{*} Revised since last month.

SUMMARY OF HYDROLOGIC CONDITIONS IN THE UPPER DELAWARE RIVER BASIN February 2004

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

Adjusted streamflow in the upper Delaware River Basin during February was deficient. The maximum daily mean discharge of 3,500 cfs occurred on February 3. The minimum daily mean discharge was 1,870 cfs on February 29.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during February was 2,779 cfs, which is 51 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs was 2,920 cfs, or 40 percent of median (water years 1971-2000).

On the basis of an 5-station average, precipitation during February was 1.38 inches, which is 52 percent of the 63-year average. The maximum daily-average precipitation during the month was 0.51 inches on February 4. Precipitation in the upper Delaware River Basin during the past 12 months was 10.46 inches more than the long-term average. Precipitation during February was 1.26 inches less than the long-term average for the month.

Combined storage March 1, 2004 in Pepacton, Cannonsville, and Neversink Reservoirs was 90 percent of capacity above the point of maximum depletion. The combined storage of 244 billion gallons was 17 billion gallons less than that of one month ago and 6 billion gallons more than that of one year ago. Median storage on the first day of March in 36 years of record is 221 billion gallons. Neversink Reservoir spilled 2.1 billion gallons in February.

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 February were above average in 8 of the wells. Water levels in all of the wells were below January 2004 levels, and water levels in 9 of the wells were above February 2003 levels.

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

(Preliminary data - subject to revision)

PRECIPITATION, IN INCHES

	Dec. 1940 to Feb. 2003			March 2003 to February 2004							
Î	Average		Actual		Percent of average		Excess (+) or deficit (-)				
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative			
Mar.	3.36	43.20	3.03	53.66	90	124	33	+10.46			
Apr.	3.74	39.84	2.80	50.63	75	127	94	+10.79			
May	4.22	36.10	3.71	47.83	88	132	51	+11.73			
June	3.99	31.88	6.57	44.12	165	138	+2.58	+12.24			
July	4.02	27.89	4.37	37.55	109	135	+.35	+9.66			
Aug.	3.82	23.87	*4.81	33.18	126	139	+.99	+9.31			
Sept.	3.88	20.05	10.39	28.37	268	141	+6.51	+8.32			
Oct.	3.39	16.17	5.63	17.98	166	111	+2.24	+1.81			
Nov.	3.79	12.78	3.98	12.35	105	97	+.19	43			
Dec.	3.37	8.99	4.63	8.37	137	93	+1.26	62			
Jan.	2.98	5.62	2.36	3.74	79	67	62	-1.88			
Feb.	2.64	2.64	1.38	1.38	52	52	-1.26	-1.26			

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

		1940-2002	2004	Percent of	
Month	Maximum	Median	Minimum	Monthly mean	median
February (observed)	15,120 (1976)	5,456	1,748 (1980)	2,779	51
February (adjusted)	20,330 (1981)	5,616	1,373 (1980)	2,920	52
March (observed)	24,480 (1945)	9,135	3,191 (1981)		
March (adjusted)	25,910 (1945)	11,000	4,428 (1981)		

^{*} Revised since last month.

SUMMARY OF HYDROLOGIC CONDITIONS IN THE UPPER DELAWARE RIVER BASIN March 2004

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

Adjusted streamflow in the upper Delaware River Basin during March was in the normal range. The maximum daily mean discharge of 19,400 cfs occurred on March 7. The minimum daily mean discharge was 2,000 cfs on March 1.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during March was 8,133 cfs, which is 89 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs was 10,610 cfs, or 96 percent of median (water years 1971-2000).

On the basis of a 5-station average, precipitation during March was 2.10 inches, which is 63 percent of the 63-year average. The maximum daily-average precipitation during the month was 0.36 inches on March 17. Precipitation in the upper Delaware River Basin during the past 12 months was 10.15 inches more than the long-term average. Precipitation during March was 1.25 inches less than the long-term average for the month.

Combined storage April 1, 2004 in Pepacton, Cannonsville, and Neversink Reservoirs was 99 percent of capacity above the point of maximum depletion. The combined storage of 268 billion gallons was 25 billion gallons more than that of one month ago and 8 billion gallons less than that of one year ago. Median storage on the first day of April in 36 years of record is 253 billion gallons. Cannonsville and Neversink Reservoirs spilled 20.6 and 0.3 billion gallons, respectively, in March.

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 March were above average in 8 of the wells. Water levels in 9 of the wells were below February 2004 levels, and water levels in 6 of the wells were above March 2003 levels.

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

(Preliminary data - subject to revision)

PRECIPITATION, IN INCHES

	Dec. 1940 to Mar. 2003			April 2003 to March 2004							
	Average		Actual		Percent of average		Excess (+)	or deficit (-)			
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative			
Apr.	3.74	43.19	2.80	53.34	75	124	94	+10.15			
May	4.22	39.45	3.71	50.54	88	128	51	+11.09			
June	3.99	35.23	6.57	46.83	165	133	+2.58	+11.60			
July	4.02	31.24	4.37	40.26	109	129	+.35	+9.02			
Aug.	3.82	27.22	4.81	35.89	126	132	+.99	+8.67			
Sept.	3.88	23.40	*10.69	31.08	276	133	+6.81	+7.68			
Oct.	3.39	19.52	*5.94	20.39	175	104	+2.55	+.87			
Nov.	3.79	16.13	3.98	14.45	105	90	+.19	-1.68			
Dec.	3.37	12.34	4.63	10.47	137	85	+1.26	-1.87			
Jan.	2.98	8.97	2.36	5.84	79	65	62	-3.13			
Feb.	2.64	5.99	1.38	3.48	52	58	-1.26	-2.51			
Mar.	3.35	3.35	2.10	2.10	63	63	-1.25	-1.25			

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

		1940-2002	2004	Percent of	
Month	Maximum	Median	Minimum	Monthly mean	median
March (observed)	24,480 (1945)	9,135	3,191 (1981)	8,133	89
March (adjusted)	25,910 (1945)	11,000	4,428 (1981)	10,610	96
April (observed)	31,560 (1940)	11,640	3,322 (1985)		
April (adjusted)	33,010 (1940)	13,840	3,847 (1946)		

^{*} Revised since last month.

SUMMARY OF HYDROLOGIC CONDITIONS IN THE UPPER DELAWARE RIVER BASIN April 2004

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 11,600 cfs occurred on April 27. The minimum daily mean discharge was 4,200 cfs on April 12.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during April was 7,464 cfs, which is 64 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs, was 8,626 cfs, or 67 percent of median (water years 1971-2000).

On the basis of a 5-station average, precipitation during April was 3.69 inches, which is 99 percent of the 63-year average. The maximum daily-average precipitation during the month was 0.75 inches on April 26. Precipitation in the upper Delaware River Basin during the past 12 months was 11.46 inches more than the long-term average. Precipitation during April was 0.03 inches less than the long-term average for the month.

Combined storage May 1, 2004 in Pepacton, Cannonsville, and Neversink Reservoirs was 101 percent of capacity above the point of maximum depletion. The combined storage of 272 billion gallons was 4 billion gallons more than that of one month ago and 0.5 billion gallons more than that of one year ago. Median storage on the first day of May in 36 years of record is 271 billion gallons. Pepacton and Cannonsville Reservoirs spilled 7.0 and 17.5 billion gallons, respectively, in April.

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 above average in 7 of the wells. Water levels in 9 of the wells were above March 2004 levels, and water levels in 6 of the wells were above April 2003 levels.

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

(Preliminary data - subject to revision)

PRECIPITATION, IN INCHES

	Dec. 1940 to Apr. 2003				May 2003 t	o April 2004		
Ī	Ave	erage	Actual		Percent of average		Excess (+) or deficit (-)	
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative
May	4.22	43.17	3.71	54.63	88	127	51	+11.46
June	3.99	38.95	6.57	50.92	165	131	+2.58	+11.97
July	4.02	34.96	4.37	44.35	109	127	+.35	+9.39
Aug.	3.82	30.94	4.81	39.98	126	129	+.99	+9.04
Sept.	3.88	27.12	10.69	35.17	276	130	+6.81	+8.05
Oct.	3.39	23.24	5.94	24.48	175	105	+2.55	+1.24
Nov.	3.79	19.85	*4.38	18.54	116	93	+.59	-1.31
Dec.	3.37	16.06	4.63	14.16	137	88	+1.26	-1.90
Jan.	2.98	12.69	2.36	9.53	79	75	62	-3.16
Feb.	2.64	9.71	1.38	7.17	52	74	-1.26	-2.54
Mar.	3.35	7.07	2.10	5.79	63	82	-1.25	-1.28
Apr.	3.72	3.72	3.69	3.69	99	99	03	03

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

		1940-2002	2004	Percent of	
Month	Maximum	Median	Minimum	Monthly mean	median
April (observed)	31,560 (1940)	11,640	3,322 (1985)	7,464	64
April (adjusted)	33,010 (1940)	13,840	3,847 (1946)	8,626	62
May (observed)	16,090 (1943)	7,019	2,215 (1965)		
May (adjusted)	18,970 (1989)	8,256	2,944 (1941)		

^{*} Revised since last month.

SUMMARY OF HYDROLOGIC CONDITIONS IN THE UPPER DELAWARE RIVER BASIN May 2004

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

Adjusted streamflow in the upper Delaware River Basin during May was in the normal range. The maximum daily mean discharge of 10,800 cfs occurred on May 4. The minimum daily mean discharge was 3,650 cfs on May 23.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during May was 6,835 cfs, which is 97 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs, was 7,895 cfs, or 96 percent of median (water years 1971-2000).

On the basis of a 5-station average, precipitation during May was 4.58 inches, which is 109 percent of the 63-year average. The maximum daily-average precipitation during the month was 0.85 inches on May 27. Precipitation in the upper Delaware River Basin during the past 12 months was 12.61 inches more than the long-term average. Precipitation during May was 0.37 inches more than the long-term average for the month.

Combined storage June 1, 2004 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 0.3 billion gallons less than that of one month ago and 0.9 billion gallons less than that of one year ago. Median storage on the first day of June in 37 years of record is 269 billion gallons. Pepacton and Cannonsville Reservoirs spilled 3.6 and 13.3 billion gallons, respectively, in May.

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 above average in 8 of the wells. Water levels in 9 of the wells were below April 2004 levels, and water levels in 10 of the wells were above May 2003 levels.

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

(Preliminary data - subject to revision)

PRECIPITATION, IN INCHES

	Dec. 1940 t	to May 2003			June 2003	to May 2004		
	Ave	erage	Actual		Percent of average		Excess (+) or deficit (-)	
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative
June	3.99	43.16	6.57	55.77	165	129	+2.58	+12.61
July	4.02	39.17	4.37	49.20	109	126	+.35	+10.03
Aug.	3.82	35.15	4.81	44.83	126	128	+.99	+9.68
Sept.	3.88	31.33	10.69	40.02	276	128	+6.81	+8.69
Oct.	3.39	27.45	5.94	29.33	175	107	+2.55	+1.88
Nov.	3.79	24.06	4.38	23.39	116	97	+.59	67
Dec.	3.37	20.27	*4.90	19.01	145	94	+1.53	-1.26
Jan.	2.98	16.90	2.36	14.11	79	83	62	-2.79
Feb.	2.64	13.92	1.38	11.75	52	84	-1.26	-2.17
Mar.	3.35	11.28	2.10	10.37	63	92	-1.25	91
Apr.	3.72	7.93	3.69	8.27	99	104	03	+.34
May	4.21	4.21	4.58	4.58	109	109	+.37	+.37

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

		1940-2002	2004	Percent of	
Month	Maximum	Median	Minimum	Monthly mean	median
May (observed)	16,090 (1943)	7,019	2,215 (1965)	6,835	97
May (adjusted)	18,970 (1989)	8,256	2,944 (1941)	7,895	96
June (observed)	15,200 (1972)	3,368	1,214 (1965)		
June (adjusted)	16,010 (1972)	3,973	1,024 (1962)		

^{*} Revised since last month.

SUMMARY OF HYDROLOGIC CONDITIONS IN THE UPPER DELAWARE RIVER BASIN June 2004

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 mean discharge of 5,630 cfs occurred on June 3. The minimum daily mean discharge was 1,700 cfs on June 30.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during June was 3,033 cfs, which is 90 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs, was 3,313 cfs, or 84 percent of median (water years 1971-2000).

On the basis of a 10-station average, precipitation during June was 3.29 inches, which is 82 percent of the 63-year average. The maximum daily-average precipitation during the month was 0.83 inches on June 18. Precipitation in the upper Delaware River Basin during the past 12 months was 9.56 inches more than the long-term average. Precipitation during June was 0.74 inches less than the long-term average for the month.

Combined storage July 1, 2004 in Pepacton, Cannonsville, and Neversink Reservoirs was 95 percent of capacity above the point of maximum depletion. The combined storage of 257 billion gallons was 15 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 July in 37 years of record is 257 billion gallons. Pepacton and Cannonsville Reservoirs spilled 0.7 and 2.6 billion gallons, respectively, in June.

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 all of the wells were below May 2004 levels, and water levels in 10 of the wells were below June 2003 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 2003		July 2003 to June 2004						
	Ave	rage	Actual		Percent of average		Excess (+)	or deficit (-)		
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative		
July	4.02	43.20	4.37	52.76	109	122	+.35	+9.56		
Aug.	3.82	39.18	4.81	48.39	126	124	+.99	+9.21		
Sept.	3.88	35.36	10.69	43.58	276	123	+6.81	+8.22		
Oct.	3.39	31.48	5.94	32.89	175	104	+2.55	+1.41		
Nov.	3.79	28.09	4.38	26.95	116	96	+.59	-1.14		
Dec.	3.37	24.30	4.90	22.57	145	93	+1.53	-1.73		
Jan.	2.98	20.93	*2.60	17.67	87	84	38	-3.26		
Feb.	2.64	17.95	*1.41	15.07	53	84	-1.23	-2.88		
Mar.	3.35	15.31	2.10	13.66	63	89	-1.25	-1.65		
Apr.	3.72	11.96	3.69	11.56	99	97	03	40		
May	4.21	8.24	4.58	7.87	109	96	+.37	37		
June	4.03	4.03	3.29	3.29	82	82	74	74		

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

		1940-2002	2004	Percent of	
Month	Maximum	Median	Minimum	Monthly mean	median
June (observed)	15,200 (1972)	3,368	1,214 (1965)	3,033	90
June (adjusted)	16,010 (1972)	3,973	1,024 (1962)	3,313	83
July (observed)	11,220 (1945)	2,397	864 (1954)		
July (adjusted)	11,470 (1945)	2,082	391 (1965)		

^{*} Revised since last month.

SUMMARY OF HYDROLOGIC CONDITIONS IN THE UPPER DELAWARE RIVER BASIN July 2004

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

Adjusted streamflow in the upper Delaware River Basin during July was excessive. The maximum daily mean discharge of 11,900 cfs occurred on July 29. The minimum daily mean discharge was 1,590 cfs on July 3.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during July was 3,491 cfs, which is 146 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs, was 3,980 cfs, or 174 percent of median (water years 1971-2000).

On the basis of an 11-station average, precipitation during July was 6.12 inches, which is 152 percent of the 63-year average. The maximum daily-average precipitation during the month was 1.43 inches on July 28. Precipitation in the upper Delaware River Basin during the past 12 months was 11.30 inches more than the long-term average. Precipitation during July was 2.09 inches more than the long-term average for the month.

Combined storage August 1, 2004 in Pepacton, Cannonsville, and Neversink Reservoirs was 94 percent of capacity above the point of maximum depletion. The combined storage of 254 billion gallons was 3 billion gallons less than that of one month ago and 5 billion gallons less than that of one year ago. Median storage on the first day of August in 37 years of record is 230 billion gallons. Neversink Reservoir spilled 7 million gallons in July.

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 above average in 9 of the wells. Water levels in all of the wells were below June 2004 levels, and water levels in 8 of the wells were below July 2003 levels.

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

(Preliminary data - subject to revision)

PRECIPITATION, IN INCHES

	Dec. 1940 to July 2003			August 2003 to July 2004							
	Ave	erage	Actual		Percent of average		Excess (+) or deficit (-)				
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative			
Aug.	3.82	43.21	4.81	54.51	126	126	+.99	+11.30			
Sept.	3.88	39.39	10.69	49.70	276	126	+6.81	+10.31			
Oct.	3.39	35.51	5.94	39.01	175	110	+2.55	+3.50			
Nov.	3.79	32.12	4.38	33.07	116	103	+.59	+.95			
Dec.	3.37	28.33	4.90	28.69	145	101	+1.53	+.36			
Jan.	2.98	24.96	2.60	23.79	87	95	38	-1.17			
Feb.	2.64	21.98	1.41	21.19	53	96	-1.23	79			
Mar.	3.35	19.34	2.10	19.78	63	102	-1.25	+.44			
Apr.	3.72	15.99	3.69	17.68	99	111	03	+1.69			
May	4.21	12.27	4.58	13.99	109	114	+.37	+1.72			
June	4.03	8.06	3.29	9.41	82	117	74	+1.35			
July	4.03	4.03	6.12	6.12	152	152	+2.09	+2.09			

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

		1940-2002	2004	Percent of	
Month	Maximum	Median	Minimum	Monthly mean	median
July (observed)	11,220 (1945)	2,397	864 (1954)	3,491	146
July (adjusted)	11,470 (1945)	2,082	391 (1965)	3,980	191
August (observed)	14,230 (1955)	2,088	715 (1954)		
August (adjusted)	17,410 (1955)	1,341	364 (1964)		

SUMMARY OF HYDROLOGIC CONDITIONS IN THE UPPER DELAWARE RIVER BASIN August 2004

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

Adjusted streamflow in the upper Delaware River Basin during August was excessive. The maximum daily mean discharge of 32,300 cfs occurred on August 13. The minimum daily mean discharge was 2,100 cfs on August 9.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during August was 8,190 cfs, which is 392 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs, was 9,494 cfs, or 601 percent of median (water years 1971-2000).

On the basis of an 11-station average, precipitation during August was 7.49 inches, which is 195 percent of the 63-year average. The maximum daily-average precipitation during the month was 2.87 inches on August 13. Precipitation in the upper Delaware River Basin during the past 12 months was 14.23 inches more than the long-term average. Precipitation during August was 3.65 inches more than the long-term average for the month.

Combined storage September 1, 2004 in Pepacton, Cannonsville, and Neversink Reservoirs was 99 percent of capacity above the point of maximum depletion. The combined storage of 269 billion gallons was 16 billion gallons more than that of one month ago and 7 billion gallons more than that of one year ago. **Combined storage on September 1, 2004, was the highest of record for the first day of September.** Median storage on the first day of September in 37 years of record is 202 billion gallons. Pepacton, Cannonsville, and Neversink Reservoirs spilled 5.1, 0.02, and 2.3 billion gallons, respectively, in August.

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 above average in all of the wells. Water levels in 11 of the wells were above July 2004 levels, and water levels in 7 of the wells were above August 2003 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. 2003		S	eptember 2003	3 to August 200)4	
	Ave	rage	Actual		Percent of average		Excess (+) or deficit (-)	
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative
Sept.	3.88	43.23	10.69	57.46	276	133	+6.81	+14.23
Oct.	3.39	39.35	5.94	46.77	175	119	+2.55	+7.42
Nov.	3.79	35.96	4.38	40.83	116	114	+.59	+4.87
Dec.	3.37	32.17	4.90	36.45	145	113	+1.53	+4.28
Jan.	2.98	28.80	2.60	31.55	87	110	38	+2.75
Feb.	2.64	25.82	1.41	28.95	53	112	-1.23	+3.13
Mar.	3.35	23.18	*2.22	27.54	66	119	-1.13	+4.36
Apr.	3.72	19.83	*3.84	25.32	103	128	+.12	+5.49
May	4.21	16.11	4.58	21.48	109	133	+.37	+5.37
June	4.03	11.90	3.29	16.90	82	142	74	+5.00
July	4.03	7.87	6.12	13.61	152	173	+2.09	+5.74
Aug.	3.84	3.84	7.49	7.49	195	195	+3.65	+3.65

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

		1940-2002	2004	Percent of	
Month	Maximum	Median	Minimum	Monthly mean	median
August (observed)	14,230 (1955)	2,088	715 (1954)	8,190	392
August (adjusted)	17,410 (1955)	1,341	364 (1964)	9,494	708
September (observed)	9,167 (1960)	1,994	892 (1941)		
September (adjusted)	10,720 (1960)	1,428	324 (1964)		

^{*} Revised since last month.

SUMMARY OF HYDROLOGIC CONDITIONS IN THE

UPPER DELAWARE RIVER BASIN September 2004

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

Adjusted streamflow in the upper Delaware River Basin during September was excessive for the third consecutive month. The maximum daily mean discharge of 116,000 cfs occurred on September 19. The minimum daily mean discharge was 2,840 cfs on September 7.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during September was 17,190 cfs, which is 862 percent of median and setting a new maximum for the month of September. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs, was 18,300 cfs, or 1,212 percent of median (water years 1971-2000).

On the basis of an 11-station average, precipitation during September was 9.64 inches, which is 242 percent of the 63-year average. The maximum daily-average precipitation during the month was 4.54 inches on September 18, caused by the remnants of tropical storm Ivan. Precipitation in the upper Delaware River Basin during the past 12 months was 13.30 inches more than the long-term average. Precipitation during September was 5.65 inches more than the long-term average for the month.

Combined storage October 1, 2004 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 3 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 October in 37 years of record is 177 billion gallons. Pepacton, Cannonsville, and Neversink Reservoirs spilled 22, 21, and 2.6 billion gallons, respectively, in September. For the period of record, Pepacton Reservoir established a new maximum storage of 145.2 billion gallons on September 19.

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 above average in all of the wells. Water levels in 8 of the wells were below August 2004 levels, and water levels in 10 of the wells were above September 2003 levels.

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

(Preliminary data - subject to revision)

PRECIPITATION, IN INCHES

	Dec. 1940 t	o Sept. 2003		O	ctober 2003 to	September 20	04	_
	Ave	erage	Actual		Percent of average		Excess (+) or deficit (-)	
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative
Oct.	3.39	43.34	5.94	56.64	175	131	+2.55	+13.30
Nov.	3.79	39.95	4.38	50.70	116	127	+.59	+10.75
Dec.	3.37	36.16	4.90	46.32	145	128	+1.53	+10.16
Jan.	2.98	32.79	2.60	41.42	87	126	38	+8.63
Feb.	2.64	29.81	1.41	38.82	53	130	-1.23	+9.01
Mar.	3.35	27.17	2.22	37.41	66	138	-1.13	+10.24
Apr.	3.72	23.82	3.84	35.19	103	148	+.12	+11.37
May	4.21	20.10	*4.81	31.35	114	156	+.60	+11.25
June	4.03	15.89	3.29	26.54	82	167	74	+10.65
July	4.03	11.86	6.12	23.25	152	196	+2.09	+11.39
Aug.	3.84	7.83	7.49	17.13	195	219	+3.65	+9.30
Sept.	3.99	3.99	9.64	9.64	242	242	+5.65	+5.65

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

		1940-2002	2004	Percent of	
Month	Maximum	Median	Minimum	Monthly mean	median
September (observed)	9,167 (1960)	1,994	892 (1941)	17,190	862
September (adjusted)	10,720 (1960)	1,428	324 (1964)	18,300	1,282
October (observed)	15,690 (1955)	2,348	807 (1941)		
October (adjusted)	18,570 (1955)	2,147	322 (1964)		

^{*} Revised since last month.

SUMMARY OF HYDROLOGIC CONDITIONS IN THE UPPER DELAWARE RIVER BASIN October 2004

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

Adjusted streamflow in the upper Delaware River Basin during October was excessive for the fourth consecutive month. The maximum daily mean discharge of 15,700 cfs occurred on October 1. The minimum daily mean discharge was 3,790 cfs on October 15.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during October was 6,593 cfs, which is 280 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs, was 6,721 cfs, or 261 percent of median (water years 1971-2000).

On the basis of an 5-station average, precipitation during October was 2.02 inches, which is 59 percent of the 63-year average. The maximum daily-average precipitation during the month was 0.84 inches on October 19. Precipitation in the upper Delaware River Basin during the past 12 months was 9.07 inches more than the long-term average. Precipitation during October was 1.41 inches less than the long-term average for the month.

Combined storage November 1, 2004 in Pepacton, Cannonsville, and Neversink Reservoirs was 99 percent of capacity above the point of maximum depletion. The combined storage of 268 billion gallons was 4 billion gallons less than that of one month ago and 10 billion gallons less than that of one year ago. Median storage on the first day of November in 37 years of record is 148 billion gallons. Pepacton, Cannonsville, and Neversink Reservoirs spilled 2.0, 6.9, and 0.01 billion gallons, respectively, in October.

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 above average in all of the wells. Water levels in all of the wells were above September 2004 levels, and water levels in 7 of the wells were above October 2003 levels.

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

(Preliminary data - subject to revision)

PRECIPITATION, IN INCHES

	Dec. 1940 to Oct. 2003			N	ovember 2003	to October 200)4	
	Ave	rage	Actual		Percent of average		Excess (+) or deficit (-)	
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative
Nov.	3.79	43.38	4.38	52.45	116	121	+.59	+9.07
Dec.	3.37	39.59	4.90	48.07	145	121	+1.53	+8.48
Jan.	2.98	36.22	2.60	43.17	87	119	38	+6.95
Feb.	2.64	33.24	1.41	40.57	53	122	-1.23	+7.33
Mar.	3.35	30.60	2.22	39.16	66	128	-1.13	+8.56
Apr.	3.72	27.25	3.84	36.94	103	136	+.12	+9.69
May	4.21	23.53	4.81	33.10	114	141	+.60	+9.57
June	4.03	19.32	*3.02	28.29	75	146	-1.01	+8.97
July	4.03	15.29	6.12	25.27	152	165	+2.09	+9.98
Aug.	3.84	11.26	7.49	19.15	195	170	+3.65	+7.89
Sept.	3.99	7.42	9.64	11.66	242	157	+5.65	+4.24
Oct.	3.43	3.43	2.02	2.02	59	59	-1.41	-1.41

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

		1940-2003	2004	Percent of	
Month	Maximum	Median	Minimum	Monthly mean	median
October (observed)	15,690 (1955)	2,352	807 (1941)	6,593	280
October (adjusted)	18,570 (1955)	2,199	322 (1964)	6,721	306
November (observed)	11,760 (1951)	4,476	995 (1964)		
November (adjusted)	16,160 (1972)	5,806	390 (1964)		

^{*} Revised since last month.

SUMMARY OF HYDROLOGIC CONDITIONS IN THE UPPER DELAWARE RIVER BASIN November 2004

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

Adjusted streamflow in the upper Delaware River Basin during November was in the normal range. The maximum daily mean discharge of 33,200 cfs occurred on November 29. The minimum daily mean discharge was 2,790 cfs on November 15.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during November was 5,449 cfs, which is 122 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs, was 6,711 cfs, or 106 percent of median (water years 1971-2000).

On the basis of a 5-station average, precipitation during November was 3.64 inches, which is 96 percent of the 63-year average. The maximum daily-average precipitation during the month was 1.01 inches on November 29. Precipitation in the upper Delaware River Basin during the past 12 months was 9.02 inches more than the long-term average. Precipitation during November was 0.16 inches less than the long-term average for the month.

Combined storage December 1, 2004 in Pepacton, Cannonsville, and Neversink Reservoirs was 99 percent of capacity above the point of maximum depletion. The combined storage of 268 billion gallons was 0.1 billion gallons less than that of one month ago and 7 billion gallons less than that of one year ago. Median storage on the first day of December in 37 years of record is 177 billion gallons. Cannonsville Reservoir spilled 9.7 billion gallons in November.

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 above average in all of the wells. Water levels in 10 of the wells were below October 2004 levels, and water levels in 11 of the wells were below November 2003 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. 2003		De	cember 2003 1	to November 20	004	
	Ave	rage	Actual		Percent of average		Excess (+) or deficit (-)	
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative
Dec.	3.37	43.39	4.90	52.41	145	121	+1.53	+9.02
Jan.	2.98	40.02	2.60	47.51	87	119	38	+7.49
Feb.	2.64	37.04	1.41	44.91	53	121	-1.23	+7.87
Mar.	3.35	34.40	2.22	43.50	66	126	-1.13	+9.10
Apr.	3.72	31.05	3.84	41.28	103	133	+.12	+10.23
May	4.21	27.33	4.81	37.44	114	137	+.60	+10.11
June	4.03	23.12	3.02	32.63	75	141	-1.01	+9.51
July	4.03	19.09	*6.82	29.61	169	155	+2.79	+10.52
Aug.	3.84	15.06	7.49	22.79	195	151	+3.65	+7.73
Sept.	3.99	11.22	9.64	15.30	242	136	+5.65	+4.08
Oct.	3.43	7.23	2.02	5.66	59	78	-1.41	-1.57
Nov.	3.80	3.80	3.64	3.64	96	96	16	16

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

		1940-2003	2004	Percent of	
Month	Maximum	Median	Minimum	Monthly mean	median
November (observed)	11,760 (1951)	4,476	995 (1964)	5,449	122
November (adjusted)	16,160 (1972)	5,806	390 (1964)	6,711	116
December (observed)	18,830 (1996)	4,916	1,665 (1998)		
December (adjusted)	20,880 (1973)	6,506	1,624 (1998)		

^{*} Revised since last month.

SUMMARY OF HYDROLOGIC CONDITIONS IN THE UPPER DELAWARE RIVER BASIN December 2004

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

Adjusted streamflow in the upper Delaware River Basin during December was excessive. The maximum daily mean discharge of 26,800 cfs occurred on December 2. The minimum daily mean discharge was 6,230 cfs on December 22.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during December was 13,180 cfs, which is 268 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs, was 13,790 cfs, or 224 percent of median (water years 1971-2000).

On the basis of a 5-station average, precipitation during December was 4.04 inches, which is 119 percent of the 64-year average. The maximum daily-average precipitation during the month was 1.30 inches on December 24. Precipitation in the upper Delaware River Basin during the past 12 months was 8.13 inches more than the long-term average. Precipitation during December was 0.64 inches more than the long-term average for the month.

Combined storage January 1, 2005 in Pepacton, Cannonsville, and Neversink Reservoirs was 100 percent of capacity above the point of maximum depletion. The combined storage of 271 billion gallons was 3 billion gallons more than that of one month ago and 3 billion gallons less than that of one year ago. Median storage on the first day of January in 37 years of record is 190 billion gallons. Pepacton and Cannonsville Reservoirs spilled 22 and 38 billion gallons, respectively, in December.

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 above average in all of the wells. Water levels in all of the wells were above November 2004 levels, and water levels in 7 of the wells were below December 2003 levels.

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

(Preliminary data - subject to revision)

PRECIPITATION, IN INCHES

	Dec. 1940 to Dec. 2003			January 2004 to December 2004							
	Ave	rage	Actual		Percent of average		Excess (+) or deficit (-)				
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative			
Jan.	2.98	43.42	2.60	51.55	87	119	38	+8.13			
Feb.	2.64	40.44	1.41	48.95	53	121	-1.23	+8.51			
Mar.	3.35	37.80	2.22	47.54	66	126	-1.13	+9.74			
Apr.	3.72	34.45	3.84	45.32	103	132	+.12	+10.87			
May	4.21	30.73	4.81	41.48	114	135	+.60	+10.75			
June	4.03	26.52	3.02	36.67	75	138	-1.01	+10.15			
July	4.03	22.49	6.82	33.65	169	150	+2.79	+11.16			
Aug.	3.84	18.46	7.49	26.83	195	145	+3.65	+8.37			
Sept.	3.99	14.62	9.64	19.34	242	132	+5.65	+4.72			
Oct.	3.43	10.63	2.02	9.70	59	91	-1.41	93			
Nov.	3.80	7.20	3.64	7.68	96	107	16	+.48			
Dec.	3.40	3.40	4.04	4.04	119	119	+.64	+.64			

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

		1940-2003	2004	Percent of	
Month	Maximum	Median	Minimum	Monthly mean	median
December (observed)	18,830 (1996)	4,916	1,665 (1998)	13,180	268
December (adjusted)	20,880 (1973)	6,506	1,624 (1998)	13,790	212
January (observed)	15,600 (1996)	4,922	1,318 (1981)		
January (adjusted)	21,330 (1996)	5,821	1,064 (1981)		

^{*} Revised since last month.