SUMMARY OF HYDROLOGIC CONDITIONS IN THE UPPER DELAWARE RIVER BASIN January 2010

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 38,900 cfs was recorded on January 26. The minimum daily mean discharge was 4,230 cfs on January 23.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during January was 8,328 cfs, which is 147 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs, was 9,024 cfs, or 149 percent of median (water years 1971-2000).

On the basis of a 5-station average, precipitation during January was 2.71 inches, which is 89 percent of the 69-year average. The maximum daily-average precipitation during the month was 1.03 inches on January 26. Precipitation in the upper Delaware River Basin during the past 12 months was 4.54 inches more than the long-term average. Precipitation during January was 0.34 inches less than the long-term average for the month.

Combined storage February 1, 2010 in Pepacton, Cannonsville, and Neversink Reservoirs was 94 percent of capacity above the point of maximum depletion. The combined storage of 256 billion gallons was 10 billion gallons more than that of one month ago and 26 billion gallons more than that of one year ago. Median storage on the first day of February in 42 years of record is 225 billion gallons.

As part of statewide networks, the USGS operates ground-water observation wells in the Pennsylvania and New Jersey parts of the Delaware River Basin. Mean water levels during January were above average in 18 of 20 observation wells. Water levels in 16 of the wells were above December 2009 levels, and water levels in 19 of the wells were above January 2009 levels.

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

(Preliminary data - subject to revision)

PRECIPITATION, IN INCHES

	Dec. 1940	to Jan. 2009		F	February 2009	to January 201	0	
	Ave	rage	Actual		Percent of average		Excess (+) or deficit (-)	
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative
Feb.	2.65	43.99	1.51	48.53	57	110	-1.14	+4.54
Mar.	3.38	41.34	2.53	47.02	75	114	85	+5.68
Apr.	3.78	37.96	2.36	44.49	62	117	-1.42	+6.53
May	4.13	34.18	6.14	42.13	149	123	+2.01	+7.95
June	4.09	30.05	7.08	35.99	173	120	+2.99	+5.94
July	4.10	25.96	6.49	28.91	158	111	+2.39	+2.95
Aug.	3.89	21.86	*7.03	22.42	181	103	+3.14	+.56
Sept.	4.05	17.97	2.22	15.39	55	86	-1.83	-2.58
Oct.	3.62	13.92	4.68	13.17	129	95	+1.06	75
Nov.	3.80	10.30	1.50	8.49	39	82	-2.30	-1.81
Dec.	3.45	6.50	4.28	6.99	124	108	+.83	+.49
Jan.	3.05	3.05	2.71	2.71	89	89	34	34

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

		1940-2008	2010	Percent of	
Month	Maximum	Median	Minimum	Monthly mean	median
January (observed)	16,060 (2006)	5,672	1,318 (1981)	8,328	147
January (adjusted)	21,330 (1996)	6,144	1,064 (1981)	9,024	147
February (observed)	15,430 (2008)	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 2010

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 8,650 cfs was recorded on February 2. The minimum daily mean discharge was 3,040 cfs on February 22.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during February was 4,950 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 4,357 cfs, or 60 percent of median (water years 1971-2000).

On the basis of a 5-station average, precipitation during February was 3.00 inches, which is 114 percent of the 69-year average. The maximum daily-average precipitation during the month was 1.20 inches on February 26. Precipitation in the upper Delaware River Basin during the past 12 months was 6.05 inches more than the long-term average. Precipitation during February was 0.36 inches more than the long-term average for the month.

Combined storage March 1, 2010 in Pepacton, Cannonsville, and Neversink Reservoirs was 87 percent of capacity above the point of maximum depletion. The combined storage of 234 billion gallons was 21 billion gallons less than that of one month ago and 5 billion gallons more than that of one year ago. Median storage on the first day of March in 42 years of record is 227 billion gallons.

As part of statewide networks, the USGS operates ground-water observation wells in the Pennsylvania and New Jersey parts of the Delaware River Basin. Mean water levels during February were above average in 15 of 20 observation wells. Water levels in 16 of the wells were below January 2010 levels, and water levels in 19 of the wells were above February 2009 levels.

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

(Preliminary data - subject to revision)

PRECIPITATION, IN INCHES

	Dec. 1940 t	o Feb. 2009			March 2009 to	February 2010)	
	Ave	rage	Actual		Percent of average		Excess (+) or deficit (-)	
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative
Mar.	3.38	43.98	2.53	50.03	75	114	85	+6.05
Apr.	3.78	40.60	2.36	47.50	62	117	-1.42	+6.90
May	4.13	36.82	6.14	45.14	149	123	+2.01	+8.32
June	4.09	32.69	7.08	39.00	173	119	+2.99	+6.31
July	4.10	28.60	6.49	31.92	158	112	+2.39	+3.32
Aug.	3.89	24.50	7.03	25.43	181	104	+3.14	+.93
Sept.	4.05	20.61	*2.23	18.40	55	89	-1.82	-2.21
Oct.	3.62	16.56	4.68	16.17	129	98	+1.06	39
Nov.	3.80	12.94	1.50	11.49	39	89	-2.30	-1.45
Dec.	3.45	9.14	4.28	9.99	124	109	+.83	+.85
Jan.	3.05	5.69	2.71	5.71	89	100	34	+.02
Feb.	2.64	2.64	3.00	3.00	114	114	+.36	+.36

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

		1940-2008	2010	Percent of	
Month	Maximum	Median	Minimum	Monthly mean	median
February (observed)	15,430 (2008)	5,456	1,748 (1980)	4,950	91
February (adjusted)	20,330 (1981)	5,616	1,373 (1980)	4,357	78
March (observed)	24,480 (1945)	9,168	3,191 (1981)		
March (adjusted)	25,910 (1945)	11,000	3,928 (2006)		

^{*} Revised since last month.

SUMMARY OF HYDROLOGIC CONDITIONS IN THE UPPER DELAWARE RIVER BASIN March 2010

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

Adjusted streamflow in the upper Delaware River Basin during March was excessive. The maximum daily mean discharge of 37,100 cfs was recorded on March 31. The minimum daily mean discharge was 4,980 cfs on March 7.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during March was 16,520 cfs, which is 180 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs, was 19,560 cfs, or 176 percent of median (water years 1971-2000).

On the basis of a 5-station average, precipitation during March was 5.11 inches, which is 152 percent of the 69-year average. The maximum daily-average precipitation during the month was 1.68 inches on March 23. Precipitation in the upper Delaware River Basin during the past 12 months was 8.79 inches more than the long-term average. Precipitation during March was 1.75 inches more than the long-term average for the month.

Combined storage April 1, 2010 in Pepacton, Cannonsville, and Neversink Reservoirs was 102 percent of capacity above the point of maximum depletion. The combined storage of 277 billion gallons was 43 billion gallons more than that of one month ago and 13 billion gallons more than that of one year ago. Median storage on the first day of April in 42 years of record is 261 billion gallons. Pepacton, Cannonsville, and Neversink Reservoirs spilled a total of 20.6, 10.2, and 6.6 billion gallons, respectively, during the month.

As part of statewide networks, the USGS operates ground-water observation wells in the Pennsylvania and New Jersey parts of the Delaware River Basin. Mean water levels during March were above average in 14 of 20 observation wells. Water levels in 16 of the wells were above February 2010 levels, and water levels in 17 of the wells were above March 2009 levels. Water levels in one observation well in Pennsylvania and three observation wells in New Jersey reached new record highs for their respective periods of record, 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 Mar. 2009				April 2009 t	o March 2010		
Ī	Ave	rage	Actual		Percent of average		Excess (+) or deficit (-)	
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative
Apr.	3.78	43.96	2.36	52.75	62	120	-1.42	+8.79
May	4.13	40.18	6.14	50.39	149	125	+2.01	+10.21
June	4.09	36.05	7.08	44.25	173	123	+2.99	+8.20
July	4.10	31.96	6.49	37.17	158	116	+2.39	+5.21
Aug.	3.89	27.86	7.03	30.68	181	110	+3.14	+2.82
Sept.	4.05	23.97	2.23	23.65	55	99	-1.82	32
Oct.	3.62	19.92	*4.82	21.42	133	108	+1.20	+1.50
Nov.	3.80	16.30	1.50	16.60	39	102	-2.30	+.30
Dec.	3.45	12.50	4.28	15.10	124	121	+.83	+2.60
Jan.	3.05	9.05	2.71	10.82	89	120	34	+1.77
Feb.	2.64	6.00	3.00	8.11	114	135	+.36	+2.11
Mar.	3.36	3.36	5.11	5.11	152	152	+1.75	+1.75

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

		1940-2008	2010	Percent of	
Month	Maximum	Median	Minimum	Monthly mean	median
March (observed)	24,480 (1945)	9,168	3,191 (1981)	16,520	180
March (adjusted)	25,910 (1945)	11,000	3,928 (2006)	19,560	178
April (observed)	31,560 (1940)	11,130	3,322 (1985)		
April (adjusted)	33,010 (1940)	13,780	3,847 (1946)		

^{*} Revised since last month.

SUMMARY OF HYDROLOGIC CONDITIONS IN THE UPPER DELAWARE RIVER BASIN April 2010

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

Adjusted streamflow in the upper Delaware River Basin during April was in the normal range. The maximum daily mean discharge of 33,500 cfs was recorded on April 1. The minimum daily mean discharge was 3,370 cfs on April 25.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during April was 9,093 cfs, which is 82 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs, was 9,811 cfs, or 77 percent of median (water years 1971-2000).

On the basis of a 5-station average, precipitation during April was 2.89 inches, which is 77 percent of the 69-year average. The maximum daily-average precipitation during the month was 0.68 inches on April 27. Precipitation in the upper Delaware River Basin during the past 12 months was 9.35 inches more than the long-term average. Precipitation during April was 0.86 inches less than the long-term average for the month.

Combined storage May 1, 2010 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 8 billion gallons less than that of one month ago and 3 billion gallons more than that of one year ago. Median storage on the first day of May in 42 years of record is 271 billion gallons. Pepacton, Cannonsville, and Neversink Reservoirs spilled a total of 9.3, 4.9, and 2.8 billion gallons, respectively, during the month.

As part of statewide networks, the USGS operates ground-water observation wells in the Pennsylvania and New Jersey parts of the Delaware River Basin. Mean water levels during April were above average in 14 of 20 observation wells. Water levels in 12 of the wells were above March 2010 levels, and water levels in 18 of the wells were above April 2009 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. 2009			May 2009 t	o April 2010		
	Ave	rage	Actual		Percent of average		Excess (+) or deficit (-)	
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative
May	4.13	43.93	6.14	53.28	149	121	+2.01	+9.35
June	4.09	39.80	7.08	47.14	173	118	+2.99	+7.34
July	4.10	35.71	6.49	40.06	158	112	+2.39	+4.35
Aug.	3.89	31.61	7.03	33.57	181	106	+3.14	+1.96
Sept.	4.05	27.72	2.23	26.54	55	96	-1.82	-1.18
Oct.	3.62	23.67	4.82	24.31	133	103	+1.20	+.64
Nov.	3.80	20.05	1.50	19.49	39	97	-2.30	56
Dec.	3.45	16.25	4.28	17.99	124	111	+.83	+1.74
Jan.	3.05	12.80	2.71	13.71	89	107	34	+.91
Feb.	2.64	9.75	3.00	11.00	114	113	+.36	+1.25
Mar.	3.36	7.11	5.11	8.00	152	113	+1.75	+.89
Apr.	3.75	3.75	2.89	2.89	77	77	86	86

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

		1940-2008	2010	Percent of	
Month	Maximum	Median	Minimum	Monthly mean	median
April (observed)	31,560 (1940)	11,130	3,322 (1985)	9,093	82
April (adjusted)	33,010 (1940)	13,780	3,847 (1946)	9,811	71
May (observed)	16,090 (1943)	6,743	2,215 (1965)		
May (adjusted)	18,970 (1989)	8,015	2,944 (1941)		

SUMMARY OF HYDROLOGIC CONDITIONS IN THE UPPER DELAWARE RIVER BASIN May 2010

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 mean discharge of 5,380 cfs was recorded on May 1. The minimum daily mean discharge was 2,250 cfs on May 30.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during May was 3,669 cfs, which is 54 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs, was 4,491 cfs, or 55 percent of median (water years 1971-2000).

On the basis of a 5-station average, precipitation during May was 2.71 inches, which is 65 percent of the 69-year average. The maximum daily-average precipitation during the month was 0.54 inches on May 12. Precipitation in the upper Delaware River Basin during the past 12 months was 6.01 inches more than the long-term average. Precipitation during May was 1.45 inches less than the long-term average for the month.

Combined storage June 1, 2010 in Pepacton, Cannonsville, and Neversink Reservoirs was 98 percent of capacity above the point of maximum depletion. The combined storage of 266 billion gallons was 3 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 June in 43 years of record is 269 billion gallons. Cannonsville Reservoir spilled a total of 1.1 billion gallons during the month.

As part of statewide networks, the USGS operates ground-water observation wells in the Pennsylvania and New Jersey parts of the Delaware River Basin. Mean water levels during May were above average in 11 of 20 observation wells. Water levels in 19 of the wells were below April 2010 levels, and water levels in 10 of the wells were above May 2009 levels.

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

(Preliminary data - subject to revision)

PRECIPITATION, IN INCHES

	Dec. 1940 t	o May 2009			June 2009	to May 2010		
	Ave	rage	Actual		Percent of average		Excess (+) or deficit (-)	
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative
June	4.09	43.96	7.08	49.97	173	114	+2.99	+6.01
July	4.10	39.87	6.49	42.89	158	108	+2.39	+3.02
Aug.	3.89	35.77	7.03	36.40	181	102	+3.14	+.63
Sept.	4.05	31.88	2.23	29.37	55	92	-1.82	-2.51
Oct.	3.62	27.83	4.82	27.14	133	98	+1.20	69
Nov.	3.80	24.21	*1.62	22.32	43	92	-2.18	-1.89
Dec.	3.45	20.41	4.28	20.70	124	101	+.83	+.29
Jan.	3.05	16.96	2.71	16.42	89	97	34	54
Feb.	2.64	13.91	3.00	13.71	114	99	+.36	20
Mar.	3.36	11.27	5.11	10.71	152	95	+1.75	56
Apr.	3.75	7.91	2.89	5.60	77	71	86	-2.31
May	4.16	4.16	2.71	2.71	65	65	-1.45	-1.45

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

		1940-2008	2010	Percent of	
Month	Maximum	Median	Minimum	Monthly mean	median
May (observed)	16,090 (1943)	6,743	2,215 (1965)	3,669	54
May (adjusted)	18,970 (1989)	8,015	2,944 (1941)	4,491	56
June (observed)	20,130 (2006)	3,199	1,214 (1965)		
June (adjusted)	21,350 (2006)	3,948	1,024 (1962)		

^{*} Revised since last month.

SUMMARY OF HYDROLOGIC CONDITIONS IN THE UPPER DELAWARE RIVER BASIN June 2010

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 6,210 cfs was recorded on June 14. The minimum daily mean discharge was 1,980 cfs on June 28.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during June was 2,809 cfs, which is 86 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs, was 2,612 cfs, or 66 percent of median (water years 1971-2000).

On the basis of a 10-station average, precipitation during June was 3.94 inches, which is 95 percent of the 69-year average. The maximum daily-average precipitation during the month was 0.90 inches on June 10. Precipitation in the upper Delaware River Basin during the past 12 months was 3.08 inches more than the long-term average. Precipitation during June was 0.20 inches less than the long-term average for the month.

Combined storage July 1, 2010 in Pepacton, Cannonsville, and Neversink Reservoirs was 91 percent of capacity above the point of maximum depletion. The combined storage of 247 billion gallons was 19 billion gallons less than that of one month ago and 23 billion gallons less than that of one year ago. Median storage on the first day of July in 43 years of record is 257 billion gallons.

As part of statewide networks, the USGS operates ground-water observation wells in the Pennsylvania and New Jersey parts of the Delaware River Basin. Mean water levels during June were below average in 11 of 20 observation wells. Water levels in 19 of the wells were below May 2010 levels, and water levels in 12 of the wells were below June 2009 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 2009			July 2009 1	to June 2010		
	Ave	rage	Actual		Percent of average		Excess (+) or deficit (-)	
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative
July	4.10	44.01	6.49	47.09	158	107	+2.39	+3.08
Aug.	3.89	39.91	7.03	40.60	181	102	+3.14	+.69
Sept.	4.05	36.02	2.23	33.57	55	93	-1.82	-2.45
Oct.	3.62	31.97	4.82	31.34	133	98	+1.20	63
Nov.	3.80	28.35	1.62	26.52	43	94	-2.18	-1.83
Dec.	3.45	24.55	*4.35	24.90	126	101	+.90	+.35
Jan.	3.05	21.10	*2.90	20.55	95	97	15	55
Feb.	2.64	18.05	3.00	17.65	114	98	+.36	40
Mar.	3.36	15.41	5.11	14.65	152	95	+1.75	76
Apr.	3.75	12.05	2.89	9.54	77	79	86	-2.51
May	4.16	8.30	2.71	6.65	65	80	-1.45	-1.65
June	4.14	4.14	3.94	3.94	95	95	20	20

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

		1940-2009	2010	Percent of	
Month	Maximum	Median	Minimum	Monthly mean	median
June (observed)	20,130 (2006)	3,284	1,214 (1965)	2,809	86
June (adjusted)	21,350 (2006)	3,961	1,024 (1962)	2,612	66
July (observed)	11,220 (1945)	2,504	864 (1954)		
July (adjusted)	11,470 (1945)	2,234	391 (1965)		

^{*} Revised since last month.

SUMMARY OF HYDROLOGIC CONDITIONS IN THE UPPER DELAWARE RIVER BASIN July 2010

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 2,760 cfs was recorded on July 24. The minimum daily mean discharge was 1,440 cfs on July 30.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during July was 1,912 cfs, which is 76 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs, was 1,273 cfs, or 56 percent of median (water years 1971-2000).

On the basis of a 10-station average, precipitation during July was 4.12 inches, which is 100 percent of the 69-year average. The maximum daily-average precipitation during the month was 1.15 inches on July 24. Precipitation in the upper Delaware River Basin during the past 12 months was 0.68 inches more than the long-term average. Precipitation during July was 0.01 inches less than the long-term average for the month.

Combined storage August 1, 2010 in Pepacton, Cannonsville, and Neversink Reservoirs was 81 percent of capacity above the point of maximum depletion. The combined storage of 219 billion gallons was 28 billion gallons less than that of one month ago and 51 billion gallons less than that of one year ago. Median storage on the first day of August in 43 years of record is 233 billion gallons.

As part of statewide networks, the USGS operates ground-water observation wells in the Pennsylvania and New Jersey parts of the Delaware River Basin. Mean water levels during July were below average in 13 of 21 observation wells. Water levels in 20 of the wells were below June 2010 levels, and water levels in 13 of the wells were below July 2009 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 2009		August 2009 to July 2010						
	Ave	rage	Actual		Percent of average		Excess (+) or deficit (-)			
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative		
Aug.	3.89	44.04	7.03	44.72	181	102	+3.14	+.68		
Sept.	4.05	40.15	2.23	37.69	55	94	-1.82	-2.46		
Oct.	3.62	36.10	4.82	35.46	133	98	+1.20	64		
Nov.	3.80	32.48	1.62	30.64	43	94	-2.18	-1.84		
Dec.	3.45	28.68	4.35	29.02	126	101	+.90	+.34		
Jan.	3.05	25.23	2.90	24.67	95	98	15	56		
Feb.	2.64	22.18	3.00	21.77	114	98	+.36	41		
Mar.	3.36	19.54	5.11	18.77	152	96	+1.75	77		
Apr.	3.75	16.18	2.89	13.66	77	84	86	-2.52		
May	4.16	12.43	2.71	10.77	65	87	-1.45	-1.66		
June	4.14	8.27	3.94	8.06	95	97	20	21		
July	4.13	4.13	4.12	4.12	100	100	01	01		

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

		1940-2009	2010	Percent of	
Month	Maximum	Median	Minimum	Monthly mean	median
July (observed)	11,220 (1945)	2,504	864 (1954)	1,912	76
July (adjusted)	11,470 (1945)	2,234	391 (1965)	1,273	57
August (observed)	14,230 (1955)	2,129	715 (1954)		
August (adjusted)	17,410 (1955)	1,545	364 (1964)		

SUMMARY OF HYDROLOGIC CONDITIONS IN THE UPPER DELAWARE RIVER BASIN August 2010

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

Adjusted streamflow in the upper Delaware River Basin during August was in the normal range. The maximum daily mean discharge of 7,850 cfs was recorded on August 24. The minimum daily mean discharge was 1,600 cfs on August 1.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during August was 2,475 cfs, which is 116 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs, was 1,900 cfs, or 120 percent of median (water years 1971-2000).

On the basis of a 10-station average, precipitation during August was 5.10 inches, which is 129 percent of the 69-year average. The maximum daily-average precipitation during the month was 1.38 inches on August 23. Precipitation in the upper Delaware River Basin during the past 12 months was 0.58 inches less than the long-term average. Precipitation during August was 1.16 inches more than the long-term average for the month.

Combined storage September 1, 2010 in Pepacton, Cannonsville, and Neversink Reservoirs was 68 percent of capacity above the point of maximum depletion. The combined storage of 185 billion gallons was 34 billion gallons less than that of one month ago and 73 billion gallons less than that of one year ago. Median storage on the first day of September in 43 years of record is 205 billion gallons.

As part of statewide networks, the USGS operates ground-water observation wells in the Pennsylvania and New Jersey parts of the Delaware River Basin. Mean water levels during August were below average in 14 of 21 observation wells. Water levels in all of the wells were below July 2010 levels, and water levels in 16 of the wells were below August 2009 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. 2009	September 2009 to August 2010						
	Ave	rage	Actual		Percent of average		Excess (+) or deficit (-)		
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative	
Sept.	4.05	44.09	2.23	43.51	55	99	-1.82	58	
Oct.	3.62	40.04	4.82	41.28	133	103	+1.20	+1.20	
Nov.	3.80	36.42	1.62	36.46	43	100	-2.18	+.04	
Dec.	3.45	32.62	4.35	34.84	126	107	+.90	+2.22	
Jan.	3.05	29.17	2.90	30.49	95	105	15	+1.32	
Feb.	2.64	26.12	*3.47	27.59	131	106	+.83	+1.47	
Mar.	3.36	23.48	*5.36	24.12	160	103	+2.00	+.64	
Apr.	3.75	20.12	2.89	18.76	77	93	86	-1.36	
May	4.16	16.37	2.71	15.87	65	97	-1.45	50	
June	4.14	12.21	3.94	13.16	95	108	20	+.95	
July	4.13	8.07	4.12	9.22	100	114	01	+1.15	
Aug.	3.94	3.94	5.10	5.10	129	129	+1.16	+1.16	

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

		1940-2009	2010	Percent of	
Month	Maximum	Median	Minimum	Monthly mean	median
August (observed)	14,230 (1955)	2,129	715 (1954)	2,475	116
August (adjusted)	17,410 (1955)	1,545	364 (1964)	1,900	123
September (observed)	17,200 (2004)	2,016	892 (1941)		
September (adjusted)	18,310 (2004)	1,531	324 (1964)		

^{*}Revised since last month.

SUMMARY OF HYDROLOGIC CONDITIONS IN THE UPPER DELAWARE RIVER BASIN September 2010

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 2,250 cfs was recorded on September 12. The minimum daily mean discharge was 1,450 cfs on September 30.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during September was 1,954 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 1,684 cfs, or 112 percent of median (water years 1971-2000).

On the basis of a 10-station average, precipitation during September was 2.40 inches, which is 60 percent of the 69-year average. The maximum daily-average precipitation during the month was 0.58 inches on September 28. Precipitation in the upper Delaware River Basin during the past 12 months was 0.42 inches less than the long-term average. Precipitation during September was 1.63 inches less than the long-term average for the month.

Combined storage October 1, 2010 in Pepacton, Cannonsville, and Neversink Reservoirs was 60 percent of capacity above the point of maximum depletion. The combined storage of 163 billion gallons was 22 billion gallons less than that of one month ago and 74 billion gallons less than that of one year ago. Median storage on the first day of October in 43 years of record is 180 billion gallons.

As part of statewide networks, the USGS operates ground-water observation wells in the Pennsylvania and New Jersey parts of the Delaware River Basin. Mean water levels during September were below average in 16 of 21 observation wells. Water levels in 20 of the wells were below August 2010 levels, and water levels in 18 of the wells were below September 2009 levels.

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

(Preliminary data - subject to revision)

PRECIPITATION, IN INCHES

	Dec. 1940 to Sept. 2009			October 2009 to September 2010							
	Average		Actual		Percent of average		Excess (+) or deficit (-)				
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative			
Oct.	3.62	44.07	4.82	43.65	133	99	+1.20	42			
Nov.	3.80	40.45	1.62	38.83	43	96	-2.18	-1.62			
Dec.	3.45	36.65	4.35	37.21	126	102	+.90	+.56			
Jan.	3.05	33.20	2.90	32.86	95	99	15	34			
Feb.	2.64	30.15	3.47	29.96	131	99	+.83	19			
Mar.	3.36	27.51	5.36	26.49	160	96	+2.00	-1.02			
Apr.	3.75	24.15	*2.86	21.13	76	87	89	-3.02			
May	4.16	20.40	2.71	18.27	65	90	-1.45	-2.13			
June	4.14	16.24	3.94	15.56	95	96	20	68			
July	4.13	12.10	4.12	11.62	100	96	01	48			
Aug.	3.94	7.97	5.10	7.50	129	94	+1.16	47			
Sept.	4.03	4.03	2.40	2.40	60	60	-1.63	-1.63			

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

		1940-2009	2010	Percent of	
Month	Maximum	Median	Minimum	Monthly mean	median
September (observed)	17,200 (2004)	2,016	892 (1941)	1,954	97
September (adjusted)	18,310 (2004)	1,531	324 (1964)	1,684	110
October (observed)	15,690 (1955)	2,472	807 (1941)		
October (adjusted)	18,570 (1955)	2,452	322 (1964)		

^{*}Revised since last month.

SUMMARY OF HYDROLOGIC CONDITIONS IN THE UPPER DELAWARE RIVER BASIN October 2010

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 48,600 cfs was recorded on October 1. The minimum daily mean discharge was 2,800 cfs on October 26.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during October was 9,531 cfs, which is 386 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs, was 13,450 cfs, or 521 percent of median (water years 1971-2000).

On the basis of a 10-station average, precipitation during October was 9.07 inches, which is 249 percent of the 69-year average. The maximum daily-average precipitation during the month was 5.39 inches on October 1. Precipitation in the upper Delaware River Basin during the past 12 months was 4.12 inches more than the long-term average. Precipitation during October was 5.43 inches more than the long-term average for the month.

Combined storage November 1, 2010 in Pepacton, Cannonsville, and Neversink Reservoirs was 79 percent of capacity above the point of maximum depletion. The combined storage of 214 billion gallons was 52 billion gallons more than that of one month ago and 27 billion gallons less than that of one year ago. Median storage on the first day of November in 43 years of record is 166 billion gallons.

As part of statewide networks, the USGS operates ground-water observation wells in the Pennsylvania and New Jersey parts of the Delaware River Basin. Mean water levels during October were below average in 11 of 21 observation wells. Water levels in 19 of the wells were above September 2010 levels, and water levels in 17 of the wells were below October 2009 levels.

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

(Preliminary data - subject to revision)

PRECIPITATION, IN INCHES

	Dec. 1940 to Oct. 2009		November 2009 to October 2010							
	Average		Actual		Percent of average		Excess (+) or deficit (-)			
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative		
Nov.	3.80	44.09	1.62	48.21	43	109	-2.18	+4.12		
Dec.	3.45	40.29	4.35	46.59	126	116	+.90	+6.30		
Jan.	3.05	36.84	2.90	42.24	95	115	15	+5.40		
Feb.	2.64	33.79	3.47	39.34	131	116	+.83	+5.55		
Mar.	3.36	31.15	5.36	35.87	160	115	+2.00	+4.72		
Apr.	3.75	27.79	2.86	30.51	76	110	89	+2.72		
May	4.16	24.04	*3.02	27.65	73	115	-1.14	+3.61		
June	4.14	19.88	3.94	24.63	95	124	20	+4.75		
July	4.13	15.74	4.12	20.69	100	131	01	+4.95		
Aug.	3.94	11.61	5.10	16.57	129	143	+1.16	+4.96		
Sept.	4.03	7.67	2.40	11.47	60	150	-1.63	+3.80		
Oct.	3.64	3.64	9.07	9.07	249	249	+5.43	+5.43		

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

		1940-2009	2010	Percent of	
Month	Maximum	Median	Minimum	Monthly mean	median
October (observed)	15,690 (1955)	2,472	807 (1941)	9,531	386
October (adjusted)	18,570 (1955)	2,452	322 (1964)	13,450	549
November (observed)	13,010 (2003)	4,764	995 (1964)		
November (adjusted)	16,160 (1972)	6,359	390 (1964)		

^{*}Revised since last month.

SUMMARY OF HYDROLOGIC CONDITIONS IN THE UPPER DELAWARE RIVER BASIN November 2010

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 8,080 cfs was recorded on November 18. The minimum daily mean discharge was 3,070 cfs on November 16.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during November was 4,790 cfs, which is 101 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs, was 6,592 cfs, or 104 percent of median (water years 1971-2000).

On the basis of a 5-station average, precipitation during November was 2.83 inches, which is 75 percent of the 69-year average. The maximum daily-average precipitation during the month was 1.01 inches on November 17. Precipitation in the upper Delaware River Basin during the past 12 months was 5.32 inches more than the long-term average. Precipitation during November was 0.94 inches less than the long-term average for the month.

Combined storage December 1, 2010 in Pepacton, Cannonsville, and Neversink Reservoirs was 85 percent of capacity above the point of maximum depletion. The combined storage of 230 billion gallons was 16 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 December in 43 years of record is 186 billion gallons.

As part of statewide networks, the USGS operates ground-water observation wells in the Pennsylvania and New Jersey parts of the Delaware River Basin. Mean water levels during November were above average in 13 of 21 observation wells. Water levels in 16 of the wells were above October 2010 levels, and water levels in 17 of the wells were below November 2009 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. 2009	December 2009 to November 2010						
	Average		Actual		Percent of average		Excess (+) or deficit (-)		
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative	
Dec.	3.45	44.06	4.35	49.38	126	112	+.90	+5.32	
Jan.	3.05	40.61	2.90	45.03	95	111	15	+4.42	
Feb.	2.64	37.56	3.47	42.13	131	112	+.83	+4.57	
Mar.	3.36	34.92	5.36	38.66	160	111	+2.00	+3.74	
Apr.	3.75	31.56	2.86	33.30	76	106	89	+1.74	
May	4.16	27.81	3.02	30.44	73	109	-1.14	+2.63	
June	4.14	23.65	*3.90	27.42	94	116	24	+3.77	
July	4.13	19.51	4.12	23.52	100	121	01	+4.01	
Aug.	3.94	15.38	5.10	19.40	129	126	+1.16	+4.02	
Sept.	4.03	11.44	2.40	14.30	60	125	-1.63	+2.86	
Oct.	3.64	7.41	9.07	11.90	249	161	+5.43	+4.49	
Nov.	3.77	3.77	2.83	2.83	75	75	94	94	

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

		1940-2009	2010	Percent of	
Month	Maximum	Median	Minimum	Monthly mean	median
November (observed)	13,010 (2003)	4,764	995 (1964)	4,790	101
November (adjusted)	16,160 (1972)	6,359	390 (1964)	6,592	104
December (observed)	18,830 (1996)	5,389	1,665 (1998)		
December (adjusted)	20,880 (1973)	6,790	1,624 (1998)		

^{*}Revised since last month.

SUMMARY OF HYDROLOGIC CONDITIONS IN THE UPPER DELAWARE RIVER BASIN December 2010

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 34,900 cfs was recorded on December 2. The minimum daily mean discharge was 3,570 cfs on December 31.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during December was 8,947 cfs, which is 166 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs, was 10,380 cfs, or 168 percent of median (water years 1971-2000).

On the basis of a 5-station average, precipitation during December was 3.42 inches, which is 99 percent of the 69-year average. The maximum daily-average precipitation during the month was 1.45 inches on December 2. Precipitation in the upper Delaware River Basin during the past 12 months was 5.05 inches more than the long-term average. Precipitation during December was 0.04 inches less than the long-term average for the month.

Combined storage January 1, 2011 in Pepacton, Cannonsville, and Neversink Reservoirs was 88 percent of capacity above the point of maximum depletion. The combined storage of 239 billion gallons was 9 billion gallons more than that of one month ago and 7 billion gallons less than that of one year ago. Median storage on the first day of January in 43 years of record is 225 billion gallons.

As part of statewide networks, the USGS operates ground-water observation wells in the Pennsylvania and New Jersey parts of the Delaware River Basin. Mean water levels during December were below average in 12 of 21 observation wells. Water levels in 15 of the wells were above November 2010 levels, and water levels in 17 of the wells were below December 2009 levels.

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

(Preliminary data - subject to revision)

PRECIPITATION, IN INCHES

	Dec. 1940 to Dec. 2009			January 2010 to December 2010						
	Average		Actual		Percent of average		Excess (+) or deficit (-)			
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative		
Jan.	3.05	44.07	2.90	49.12	95	111	15	+5.05		
Feb.	2.64	41.02	3.47	46.22	131	113	+.83	+5.20		
Mar.	3.36	38.38	5.36	42.75	160	111	+2.00	+4.37		
Apr.	3.75	35.02	2.86	37.39	76	107	89	+2.37		
May	4.16	31.27	3.02	34.53	73	110	-1.14	+3.26		
June	4.14	27.11	3.90	31.51	94	116	24	+4.40		
July	4.13	22.97	*4.49	27.61	109	120	+.36	+4.64		
Aug.	3.94	18.84	*5.40	23.12	137	123	+1.46	+4.28		
Sept.	4.03	14.90	2.40	17.72	60	119	-1.63	+2.82		
Oct.	3.64	10.87	9.07	15.32	249	141	+5.43	+4.45		
Nov.	3.77	7.23	2.83	6.25	75	86	94	98		
Dec.	3.46	3.46	3.42	3.42	99	99	04	04		

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

		1940-2009	2010	Percent of	
Month	Maximum	Median	Minimum	Monthly mean	median
December (observed)	18,830 (1996)	5,389	1,665 (1998)	8,947	166
December (adjusted)	20,880 (1973)	6,790	1,624 (1998)	10,380	153
January (observed)	16,060 (2006)	5,743	1,318 (1981)		
January (adjusted)	21,330 (1996)	6,074	1,064 (1981)		

^{*}Revised since last month.