

## HUDSON RIVER BASIN

## RESERVOIRS IN HUDSON RIVER BASIN

**01335900 DELTA RESERVOIR.**--Lat 43°16'29", long 75°25'43", Oneida County, Hydrologic Unit 02020004, on superstructure of gatehouse at Delta Dam on Mohawk River, and 4 mi upstream from Rome. **DRAINAGE AREA**, 148 mi<sup>2</sup>. **PERIOD OF RECORD**, May 1913 to current year. **REVISED RECORDS**, WDR NY-85-1: Drainage area. **GAGE**, nonrecording gage read daily at 0800. Datum of gage is Barge Canal datum.

Dam completed Aug. 3, 1912, and controlled storage for which records are available began May 1, 1913. Usable capacity 2,800 mil ft<sup>3</sup> at crest of spillway, elevation 550.0 ft. Reservoir is used for navigation in Barge Canal. Records provided by New York State Thruway Authority.

**EXTREMES FOR PERIOD OF RECORD** (1951 to current year).--Maximum contents observed, 3,136 mil ft<sup>3</sup>, June 22, 1972, Apr. 17, 1994, Jan. 9, 1998, elevation, 552.8 ft; minimum observed, 2.0 mil ft<sup>3</sup>, Jan. 10, 13, 16-21, Feb. 7-15, Feb. 22 to Mar. 2, 1959, elevation, 492.0 ft.

**EXTREMES FOR CURRENT YEAR.**--Maximum contents observed, 3,100 mil ft<sup>3</sup>, May 24, elevation, 552.5 ft; minimum observed, 1,322 mil ft<sup>3</sup>, Mar. 1, elevation, 534.9 ft.

**01343900 HINCKLEY RESERVOIR.**--Lat 43°18'41", long 75°06'30", Oneida County, Hydrologic Unit 02020004, on south side of north gatehouse at Hinckley Dam on West Canada Creek at Hinckley, and 2.2 mi east of Prospect. **DRAINAGE AREA**, 372 mi<sup>2</sup>. **PERIOD OF RECORD**, March 1914 to current year. **REVISED RECORDS**, WDR NY-85-1: Drainage area. **GAGE**, water-stage recorder. Datum of gage is Barge Canal datum.

Reservoir is formed by earth and concrete dam; storage began March 1914. Usable capacity 3,320 mil ft<sup>3</sup> between elevation 1,173.5 and 1,225.0 ft. Elevation of inverts of four 60-inch discharge pipes at north end of spillway is 1,169.5 ft, and elevation of inverts of two 42-inch pipes at south end for diverting water to city of Utica is 1,164.25 ft. Crest of Ogee spillway is at elevation 1,225.0 ft. Length of spillway is 400 ft. Area of water surface at crest elevation is 4.46 mi<sup>2</sup>. Telephone gage-height telemeter at station.

**EXTREMES FOR PERIOD OF RECORD.**--Maximum contents observed, 4,041 mil ft<sup>3</sup>, Oct. 2, 1945, elevation, 1,230.2 ft; minimum observed (after initial filling), not determined.

**EXTREMES FOR CURRENT YEAR.**--Maximum contents, 3,748 mil ft<sup>3</sup>, May 25, elevation, 1,228.2 ft; minimum, 955 mil ft<sup>3</sup>, Mar. 26, elevation, 1,197.8 ft.

**01350100 SCHOHARIE RESERVOIR** (see station for mean daily elevations, skeleton capacity table, monthly contents and change in contents).

**01363400 ASHOKAN RESERVOIR.**--Lat 41°57'01", long 74°12'30", Ulster County, Hydrologic Unit 02020006, at gatehouse located at Dividing Weir Dyke, and 1.6 mi south of Shokan. **DRAINAGE AREA**, 256 mi<sup>2</sup>. **PERIOD OF RECORD**, September 1913 to current year. **REVISED RECORDS**, WDR NY-72-1: 1968. WDR NY-83-1: (M)(m). **GAGE**, nonrecording gage read daily at 0800. Datum of gage is NGVD of 1929 (levels by Board of Water Supply, City of New York).

The reservoir is formed by the masonry Olive Bridge Dam across Esopus Creek and a series of earth embankments between hills. The reservoir is divided into two basins separated by a weir containing a gatehouse. Storage began Sept. 9, 1913. Usable capacity of West basin 47,180 mil gal between minimum operating level elevation 495.50 ft and crest of spillway to East basin, elevation 590.00 ft; dead storage below minimum operating level 2,237 mil gal. Usable capacity of East basin 80,678 mil gal between elevation 500.00 ft and crest of spillway, elevation 587.10 ft; no dead storage. Figures given herein represent total contents for each basin. Reservoir impounds water for diversion into Catskill Aqueduct for New York City water supply (see elsewhere in this section). Any flood spillage enters the Esopus Creek channel below Olive Bridge Dam. Records provided by Department of Environmental Protection, City of New York.

**EXTREMES FOR PERIOD OF RECORD.**--Maximum contents observed, in West basin, 54,001 mil gal, Mar. 31, 1951, elevation, 594.33 ft, in East basin, 89,411 mil gal, Mar. 31, 1951, elevation, 592.23 ft; minimum observed, in West basin, 9,098 mil gal, Oct. 24, 1926, elevation, 530.56 ft, in East basin, 8,394 mil gal, Oct. 24, 1926, elevation, 525.91 ft.

**EXTREMES FOR CURRENT YEAR.**--Maximum contents observed, in West basin, 51,038 mil gal, Nov. 20, elevation, 591.53 ft, in East basin, 83,882 mil gal, Sept. 19, elevation, 589.01 ft; minimum observed, in West basin, 44,906 mil gal, Mar. 2, elevation, 585.47 ft, in East basin, 75,977 mil gal, July 23, elevation, 584.27 ft.

**01366400 RONDOUT RESERVOIR.**--Lat 41°47'57", long 74°25'48", Ulster County, Hydrologic Unit 02020007, at release chamber at Merriman Dam on Rondout Creek, 1.1 mi upstream from Brandy Brook, and 1.3 mi northwest of Lackawack. **DRAINAGE AREA**, 95.4 mi<sup>2</sup>. **PERIOD OF RECORD**, May 1951 to current year. **GAGE**, water-stage recorder. Datum of gage is NGVD of 1929 (levels by Board of Water Supply, City of New York).

Reservoir is formed by an earthfill rockfaced dam; storage began May 10, 1951. Initial filling (to crest of spillway) Mar. 28, 1955. Usable capacity 50,048 mil gal between minimum operating level, elevation, 720.00 ft and crest of spillway, elevation, 840.00 ft. Dead storage below elevation 720.00 ft, 2,387 mil gal. Figures given herein represent total contents. Reservoir impounds water from Rondout Creek; water diverted from Cannonsville Reservoir in the Delaware River basin through West Delaware Tunnel; water diverted from Pepacton Reservoir through East Delaware Tunnel; and water diverted from Neversink Reservoir through Neversink-Grahamsville Tunnel. Water is diverted from Rondout Reservoir for New York City water supply through West Branch Tunnel of Delaware Aqueduct (see elsewhere in this section). Records provided by New York City Department of Environmental Protection.

**EXTREMES FOR PERIOD OF RECORD.**--Maximum contents observed, 53,458 mil gal, Apr. 5, 1987, elevation, 841.49 ft; minimum observed (after initial filling), 8,335 mil gal, Oct. 15, 1957, elevation, 748.75 ft.

**EXTREMES FOR CURRENT YEAR.**--Maximum contents observed, 52,668 mil gal, Sept. 19, elevation, 840.34 ft; minimum observed, 48,342 mil gal, Jan. 15, elevation, 833.88 ft.

**HUDSON RIVER BASIN**  
**RESERVOIRS IN HUDSON RIVER BASIN--Continued**  
**MONTH-END ELEVATION AND CONTENTS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

Date	Elevation (feet) †	Contents (million ft <sup>3</sup> )	Change in contents (equivalent in ft <sup>3</sup> /s)	Elevation (feet) *	Contents (million ft <sup>3</sup> )	Change in contents (equivalent in ft <sup>3</sup> /s)
<b>01335900 Delta Reservoir</b>			<b>01343900 Hinckley Reservoir</b>			
Sept. 30	546.1	2,361		1,219.7	2,720	
Oct 31.	545.0	2,240	-45.2	1,225.7	3,411	+258
Nov.30	546.6	2,416	+67.9	1,223.5	3,142	-104
Dec.31	E544.3	E2,170	E-91.8	1,222.5	3,027	-42.9
CAL YR 2003	--	--	E+8.24	--	--	+34.9
Jan.31	E543.4	E2,080	E-33.6	1,210.3	1,854	-438
Feb.29	E535.0	E1,330	E-299	1,198.7	1,012	-336
Mar.31	E548.5	E2,625	E+483	1,214.9	2,251	+463
Apr.30	550.6	2,872	E+95.3	1,223.7	3,165	+353
May 31	550.6	2,872	0.00	1,223.5	3,142	-8.58
June 30	549.1	2,692	-69.4	1,218.1	2,560	-225
July 31	549.6	2,752	+22.4	1,220.7	2,827	+99.7
Aug. 31	551.3	2,956	+76.2	1,223.9	3,188	+135
Sept. 30	547.8	2,548	-157	1,215.8	2,332	-330
WTR YR 2004	--	--	+5.91	--	--	-12.3

Date	Elevation (feet) ††	Contents (million gallons)	Change in contents (equivalent in ft <sup>3</sup> /s)	Elevation (feet) ††	Contents (million gallons)	Change in contents (equivalent in ft <sup>3</sup> /s)	Elevation (feet) **	Contents (million gallons)	Change in contents (equivalent in ft <sup>3</sup> /s)
<b>01363398 Ashokan Reservoir West Basin</b>			<b>01363399 Ashokan Reservoir East Basin</b>			<b>01366400 Rondout Reservoir</b>			
Sept. 30	590.51	49,958		588.15	82,440		838.22	51,227	
Oct 31.	590.58	50,032	+3.69	588.51	83,044	+30.1	839.52	52,109	+44.0
Nov.30	590.64	50,096	+3.30	587.95	82,104	-48.5	836.15	49,840	-117
Dec.31	589.79	49,209	-44.3	587.49	81,332	-38.5	835.68	49,528	-15.6
CAL YR 2003	--	--	-0.72	--	--	+25.0	--	--	+2.3
Jan.31	588.49	47,914	-64.6	586.33	79,386	-97.1	834.63	48,835	-34.6
Feb.29	585.88	45,315	-139	585.39	77,809	-84.1	836.20	49,873	+55.4
Mar.31	589.84	49,259	+197	586.72	80,041	+111	837.89	51,004	+56.4
Apr.30	590.02	49,439	+9.28	587.55	81,433	+71.8	838.65	51,517	+26.5
May 31	590.30	49,736	+14.8	587.52	81,383	-2.50	839.40	52,026	+25.4
June 30	590.01	49,428	-15.9	585.70	78,329	-158	839.08	51,808	-11.2
July 31	590.21	49,640	+10.6	585.91	78,682	+17.6	837.75	50,910	-44.8
Aug. 31	590.15	49,577	-3.14	586.68	79,974	+64.5	838.86	51,659	+37.4
Sept. 30	590.43	49,873	+15.3	587.71	81,701	+89.1	838.63	51,504	-8.0
WTR YR 2004	--	--	-0.36	--	--	-3.12	--	--	+1.2

† Elevation at 2400 hours by interpolation.

\* Elevation at 0000 hours on first day of following month.

E Estimated.

†† Elevation at 0800 hours on last day of month.

\*\* Elevation at daily reading on first day of following month.

**HUDSON RIVER BASIN**  
**DIVERSIONS IN HUDSON RIVER BASIN**

Undetermined diversion at Solsville from Chenango River in Susquehanna River basin into Oriskany Creek in Mohawk River Basin through Oriskany Creek Feeder.

Undetermined diversion from (and occasionally into) Oswego River, tributary to Lake Ontario, through Summit level of Erie (Barge) Canal.

Undetermined diversion from Black River tributary into Lake Ontario through Black River canal into Mohawk River in Hudson River basin.

Undetermined diversion from Hudson River basin to summit level of Champlain (Barge) Canal.

01343899 Diversion from Hinckley Reservoir (see preceding pages) for municipal supply of Utica. Diversion began prior to 1921. Records provided by Mohawk Valley Water Authority.

01362230 Diversion from Schoharie Reservoir (see station for mean daily discharges) on Schoharie Creek through Shandaken Tunnel to Esopus Creek at lat 42°06'52", long 74°21'51", near Phoenicia, Ulster County. No diversion prior to 1924.

01363401 Diversion from Ashokan Reservoir (see preceding pages) on Esopus Creek through the Catskill Aqueduct for municipal supply of New York City. Completed in 1917. Records provided by Department of Environmental Protection, City of New York.

01366399 Diversion from Rondout Reservoir. Total diversion from Rondout Reservoir to Delaware Aqueduct for municipal supply of City of New York. Rondout Reservoir is a collection basin for diversion from: Cannonsville Reservoir, Pepacton Reservoir, and Neversink Reservoir in the Delaware River basin and the Rondout Creek in the Hudson River basin. Diversion began April 1944 by means of temporary emergency connection to aqueduct. Records provided by Bureau of Water Resources Development, City of New York.

01367630 Diversion from Morris Lake, tributary to Wallkill River, by Newtown Water and Sewer Authority for municipal use in New Jersey. After use the water is released into the Paulins Kill (Delaware River basin). Records available from the Delaware River Basin Commission.

**DIVERSION, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

Month	<b>01343899</b> <b>Hinckley Reservoir</b>	<b>01363401</b> <b>Ashokan Reservoir</b>	<b>01366399</b> <b>Rondout Reservoir</b>
October	30.8	654	1,174
November	29.6	539	1,139
December	30.5	535	919
CAL YR 2003	31.7	685	997
January	33.1	530	1,242
February	35.7	542	1,179
March	36.8	544	1,024
April	30.3	545	971
May	28.8	544	1,176
June	30.2	651	1,244
July	29.6	656	1,206
August	30.3	835	959
September	29.6	701	1,001
WTR YR 2004	31.3	607	1,103