



Water-Data Report 2007

01455400 LAKE HOPATCONG AT LANDING, NJ

DELAWARE RIVER BASIN

LOCATION.--Lat 40°55'03", long 74°39'51" referenced to North American Datum of 1983, Roxbury Township, Morris County, NJ, Hydrologic Unit 02040105, in gatehouse of Lake Hopatcong Dam on Musconetcong River at Landing.

DRAINAGE AREA.--25.3 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--February 1887 to current year.

REVISED RECORDS.--WDR NJ-82-2: Drainage area; WDR NJ-83-2: Corrections 1981 (M/m).

GAGE.--Staff gage and water-stage recorder re-installed March 12, 2004. Prior to June 24, 1928, daily readings obtained by measuring from high-water mark to water surface converted to gage height, present datum. Datum of gage is 914.57 ft above National Geodetic Vertical Datum of 1929.

COOPERATION.--From 1887-1928, data provided by Morris Canal employees; 1985-2004, data provided by Lake Hopatcong State Park. Beginning in 2004, cooperation provided by Lake Hopatcong Commission.

REMARKS.--Lake is formed by concrete spillway and earthfill dam completed about 1828. Crest of spillway was lowered 0.11 ft in 1925. Usable capacity, 7,459,000,000 gal between gage height -2.6 ft, sills of gates and 9.00 ft, crest of spillway. Flow regulated by four gates (3 by 5 ft), also by one 24-inch pipe with gate valve to recreation fountain 250 ft downstream from dam. Dead storage, about 8,117,000,000 gal. Figures given herein represent usable capacity. Data collected at 0700 on the first day of the following month between Jan. 1985 and Feb. 2004. Subsequent data collected at 2400 on the last day of each month. Lake used for recreation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 9,745,000,000 gal, Aug. 13, 2000, gage height, 11.80 ft; minimum, 1,525,000,000 gal, Dec. 29, 1960, gage height, 0.65 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 8,190,000,000 gal, Apr 18, gage height, 9.87 ft; minimum, 5,690,000,000 gal, Dec 11, gage height, 6.82 ft.

MONTHEND ELEVATION AND CONTENTS

Month	Elevation, feet	Contents, million gallons	Change in contents, equivalent in ft ³ /s
September	8.87	7,350	
October	9.14	7,580	+11.5
November	7.86	6,520	-54.7
December	7.23	6,020	-25.0
CALENDAR YEAR 2006			+1.0
January	7.31	6,080	+3.0
February	7.38	6,140	+3.3
March	7.75	6,430	+14.5
April	9.39	7,790	+70.1
May	8.93	7,400	-19.5
June	8.74	7,240	-8.3
July	9.08	7,530	+14.5
August	9.06	7,510	-1.0
September	8.58	7,110	-20.6
WATER YEAR 2007			-1.0