01382400 ECHO LAKE NEAR CHARLOTTEBURG, NJ

PASSAIC RIVER BASIN

LOCATION.--Lat 41°02′58″, long 74°24′25″ referenced to North American Datum of 1983, West Milford Township, Passaic County, NJ, Hydrologic Unit 02030103, at Echo Lake Dam on Macopin River, 1.6 mi north of Charlotteburg, and 1.9 mi upstream from mouth.

DRAINAGE AREA.--4.35 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1927 to current year.

REVISED RECORDS.--WDR NJ-99-1: 1998 (elevation, contents).

GAGE.--Staff gage. Datum of gage is National Geodetic Vertical Datum of 1929.

COOPERATION.--Records provided by City of Newark, Division of Water Supply.

REMARKS.--Lake is formed by earth-embankment type dam completed about 1925. Capacity at spillway level, 1,583,000,000 gal, elevation, 893.0 ft, with provision for additional storage of 180,000,000 gal at elevation 894.9 ft with flashboards. Usable contents, 1,045,000,000 gal above elevation 880.0 ft. Lake used for storage and water released for diversion at Macopin Intake Dam on Pequannock River prior to May 21, 1961 (see 01382370), and water diverted to Charlotteburg Reservoir on Pequannock River since May 21, 1961, for municipal supply of City of Newark. Outflow to Macopin River controlled by operation of gates in gatehouse at dam and water released through pipe and canal to Charlotteburg Reservoir. Some water is diverted into Echo Lake from Mathews Brook at the dam.

MONTHEND ELEVATION AND CONTENTS

Month	Elevation, feet	Contents, million gallons	Change in contents, equivalent in ft^3/s
September	893.5	1,630	
October	893.5	1,630	0
November	893.5	1,630	0
December	893.6	1,638	+0.4
CALENDAR YEAR 2007			0
January	893.5	1,630	-0.4
February	893.8	1,658	+1.5
March	893.7	1,648	-0.5
April	893.5	1,630	-0.9
May	893.5	1,630	0
June	893.5	1,630	0
July	893.5	1,630	0
August	893.5	1,630	0
September	893.5	1,630	0
WATER YEAR 2008			0