

## JAMES RIVER BASIN

02011795 LAKE MOOMAW NEAR HOT SPRINGS, VA

LOCATION.--Lat 37°57'04", long 79°59'21", Alleghany County, Hydrologic Unit 02080201, in control tower at Gath-right Dam on Jackson River, 0.9 mi upstream from Cedar Creek, 7.6 mi southwest of Hot Springs, and 19 mi upstream from Covington.

DRAINAGE AREA.--344 mi<sup>2</sup>.

PERIOD OF RECORD.--December 1979 to current year.

GAGE.--Water-stage recorder. Datum of gage is at sea level (U.S. Army Corps of Engineers bench mark).

REMARKS.--Lake is formed by rolled rockfill dam with an impervious compacted earth (clay) core. Spillway with crest at elevation 1,667.5 ft is in a divide about 2.5 mi south of the dam, ungated, and 2,450 ft long with a base width of 100 ft. Except for flood flows, all discharge will be through a diversion tunnel with the invert of the entrance being in an intake tower 260 ft high. Elevation of invert is 1,430.5 ft. Portals in the tower at nine levels permit oxygenated water from the surface and cold water from the bottom of the lake to be mixed for water-quality control. Sluice gates in the tower control flood flow releases. Storage began Dec. 10, 1979. Total capacity at top of dam, elevation 1,684.5 ft, is 502,600 acre-ft of which 81,100 acre-ft is above spillway crest. Capacity at maximum conservation pool, elevation 1,582.0 ft, is 123,700 acre-ft; capacity at minimum conservation pool, elevation 1,554.0 ft, is 63,000 acre-ft. Lake is used for flood control, low-water augmentation for water-quality control, and recreation. U.S. Army Corps of Engineers satellite precipitation and elevation telemeter at station.

COOPERATION.--Records were provided by the U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 168,400 acre-ft, Jan. 20, 1996, elevation, 1,598.4 ft; minimum, (after first filling to minimum conservation pool), 68,500 acre-ft, Jan. 8-14, 1999, elevation, 1,557.0 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 124,800 acre-ft, Mar. 22, elevation, 1,582.4 ft; minimum, 68,500 acre-ft, Jan. 8-14, elevation, 1,557.0 ft.

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MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

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Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sep. 30.....	1,567.4	89,500	-
Oct. 31.....	1,563.5	81,300	-8,200
Nov. 30.....	1,560.4	75,000	-6,300
Dec. 31.....	1,557.5	69,400	-5,600
CAL YR 1998.....			-14,600
Jan. 31.....	1,567.9	90,600	+21,200
Feb. 28.....	1,573.1	102,200	+11,600
Mar. 31.....	1,581.8	123,200	+21,000
Apr. 30.....	1,581.8	123,200	0
May 31.....	1,581.0	121,200	-2,000
Jun. 30.....	1,575.5	107,800	-13,400
Jul. 31.....	1,568.6	92,100	-15,700
Aug. 31.....	1,562.0	78,200	-13,900
Sep. 30.....	1,557.2	68,900	-9,300
WTR YR 1999.....			-20,600

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