



Water-Data Report 2006

03077000 YOUGHIOGHENY RIVER LAKE, PA

Monongahela Basin
Youghiogheny Subbasin

LOCATION.--Lat 39°47'56", long 79°22'06" referenced to North American Datum of 1927, Somerset County, PA, Hydrologic Unit 05020006, remote control recorder at control house at dam, 1.2 mi upstream from Confluence, since June 1951. Water-stage recorder and transmitter at Lat 39°45'21", long 79°24'00", at bridge on U.S. Highway 40, 500 ft upstream from Stuck Hollow Run, 0.6 mi upstream from Tub Run, on Youghiogheny River, 7.5 mi upstream from Youghiogheny River Dam.

DRAINAGE AREA.--434 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1943 to current year. Prior to October 1970 published as "Youghiogheny River Reservoir."

GAGE.--Water-stage recorder since Mar 9, 1948. Datum of gage is at sea level. Prior to Mar 9, 1948, non-recording gage at dam at same datum.

COOPERATION.--Station established and maintained by the U.S. Geological Survey in cooperation with the U.S. Army Corps of Engineers, Pittsburgh District. Records furnished by U.S. Army Corps of Engineers.

REMARKS.--Lake is formed by a rock-faced earthfill dam with uncontrolled side channel spillway. Storage began during construction and lake acted as a retention basin from December 1942 to December 1947. Dam became fully operational in January 1948. Lake first reached minimum pool elevation, 1,344.0 ft (capacity, 5,230 acre-ft) in December 1942. Capacity 254,000 acre-ft between elevations 1,319.50 ft (invert at intake to outlet tunnel) and 1,470.00 ft (full pool). Winter low-water pool elevation is 1,419.0 ft, capacity, 103,000 acre-ft. Summer pool normally occurs during period Mar. 15 to Apr. 15. Depletion of low-water storage for Youghiogheny River flow augmentation occurs normally during the period July through November. Figures given herein represent total contents. Lake is used for flood control, for low-flow augmentation of Youghiogheny River and downstream rivers, and for recreation.

EXTREMES FOR PERIOD OF RECORD.--(1943-2004, 2006) Maximum contents, 222,610 acre-ft, May 16, 1967, elevation, 1,460.95; minimum (after dam became fully operational), 3,700 acre-ft, Oct 31, 1946, elevation 1,340.30 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 161,750 acre-ft, Apr 24, elevation, 1,442.47; minimum, 71,270 acre-ft, Sep 30, elevation 1,405.11 ft.

MONTHEND ELEVATION ABOVE SEA LEVEL, AND CONTENTS AT 2400 HOURS
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Date	Elevation, in ft	Contents, in acre-ft	Change in contents, in ft ³ /s
Sep 30	1,400.27	62,490	
Oct 31	1,392.80	50,290	-198
Nov 30	1,406.20	73,350	+388
Dec 31	1,416.80	95,350	+358
CAL YR 2005			-3.8
Jan 31	1,419.91	102,420	+115
Feb 28	1,417.09	96,000	-116
Mar 31	1,426.46	118,260	+362
Apr 30	1,440.28	155,430	+625
May 31	1,439.78	154,010	-23
Jun 30	1,440.19	155,170	+19
Jul 31	1,436.47	144,710	-170
Aug 31	1,421.42	105,960	-630
Sep 30	1,405.11	71,270	-583
WTR YR 2006			+12