

Water-Data Report 2012

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, on Youghiogheny River, at bridge on U.S. Highway 40, 500 ft upstream from Stuck Hollow Run, 0.6 mi upstream from Tub Run, 1.2 mi upstream from Confluence, PA and 7.5 mi upstream from Youghiogheny River Dam.

DRAINAGE AREA.--434 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--December 1942 to current year. Prior to October 1970 published as "Youghiogheny River Reservoir."

GAGE.--Water-stage recorder since Mar 9, 1948. Prior to Mar 9, 1948, non-recording gage at dam at same datum. Datum of gage is referenced to North American Vertical Datum of 1988 (U.S. Army Corps of Engineers benchmark). Auxillary recorder and transmitter (station 03076850) at Lat 39°45'21", long 79°24'00". Satellite telemetry at station. Prior to 2009, datum of gage was referenced to National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers benchmark).

Conversion from NGVD29 to NAVD88 at this location is: NGVD29 elevation - 0.65 ft = NAVD elevation.

COOPERATION.--Station established and maintained by the U.S. Geological Survey in cooperation with the U.S. Army Corps of Engineers, Pittsburgh District. Capacity tables 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 is normally attained sometime 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.--(2005 record not available) Maximum contents, 222,600 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, 164,900 acre-ft, May 16 elevation, 1,442.89 ft; minimum, 71,100 acre-ft, Sep 30, elevation, 1,404.37 ft.

03077000 YOUGHIOGHENY RIVER LAKE, PA—ContinuedMONTHEND ELEVATION ABOVE SEA LEVEL, AND CONTENTS AT 2400 HOURS
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Date	Elevation, in ft	Contents, in acre-ft	Change in contents, in ft ³ /s
Sep 30	1,421.86	108,600	
Oct 31	1,427.30	122,000	+218
Nov 30	1,420.58	105,500	-277
Dec 31	1,420.67	105,700	+3
CAL YR 2011			+81
Jan 31	1,417.47	98,310	-120
Feb 29	1,422.25	109,500	+195
Mar 31	1,434.45	140,900	+511
Apr 30	1,439.40	154,800	+234
May 31	1,439.38	154,700	-2
Jun 30	1,432.38	135,300	-326
Jul 31	1,427.48	122,500	-208
Aug 31	1,417.03	97,320	-410
Sep 30	1,404.37	71,100	-441
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