

ALLEGHENY RIVER BASIN

LAKES AND RESERVOIRS IN ALLEGHENY RIVER BASIN

03012520 ALLEGHENY RESERVOIR.--Lat 41°50'17", long 79°00'15", Warren County, Hydrologic Unit 05010001, in Allegheny National Forest, at control house at Kinzua Dam on Allegheny River, 3 mi upstream from Hemlock Run, and 7 mi east of Warren. DRAINAGE AREA, 2,180 mi². PERIOD OF RECORD, October 1965 to current year. Prior to October 1966 published as Allegheny River Reservoir. GAGE, water-stage recorder. Datum of gage is sea level. Reservoir is formed by a concrete gravity dam with a gated spillway and with an earthfill section, rockfaced, at right side. Storage began during construction and reservoir acted as retention basin from October 1965 to December 1966. Dam became operational in January 1967. Reservoir first reached minimum pool elevation during period of construction. Capacity, 1,180,000 acre-ft between elevations 1,205.0 ft (invert of low level sluices) and 1,365.0 ft (full pool). Dead storage is 128 acre-ft. Minimum pool elevation, 1,240 ft (capacity, 24,240 acre-ft). Winter low-water pool elevation, 1,292 ft (capacity, 239,780 acre-ft). Summer low-water pool elevation, 1,328 ft (capacity, 572,610 acre-ft). Storage to summer pool normally occurs during period April to May. Depletion of low-water storage for augmenting flow in Allegheny River normally occurs during period July to December. Figures given herein represent total contents. Reservoir is used for flood control, low-flow augmentation and water-quality control of Allegheny River and downstream rivers, power generation, and recreation. Records furnished by U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 1,121,120 acre-ft June 27, 1972, elevation, 1,362.20 ft; minimum (after first filling), 113,310 acre-ft Jan. 26, 1968, elevation 1,268.68 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 731,270 acre-ft July 26, elevation, 1,339.99 ft; minimum, 312,680 acre-ft Feb. 23, elevation 1,301.97 ft.

03013946 CHAUTAUQUA LAKE.--Lat 42°09'23", long 79°23'39", Chautauqua County, N.Y., Hydrologic Unit 05010002, 6 ft east of lake shore, 30 ft south of the intersection of Pauline Ave. and Lakeside Ave., 950 ft southeast of the ferry landing, at Bemus Point, N.Y. DRAINAGE AREA, 189 mi². PERIOD OF RECORD, November 1949 to current year. GAGE, water-stage recorder. Datum of gage is sea level. Prior to Dec. 21, 1956, non-recording gage at site near mouth of Big Inlet at datum 1,300.00 ft above National Geodetic Vertical Datum of 1929. Dec. 21, 1956 to Sept. 30, 1975, water-stage recorder at site at outlet of Muddy Creek at datum 1,300.00 ft above National Geodetic Vertical Datum of 1929. Lake is regulated at outlet by Warner Dam. Capacity of lake not determined; area of water surface, 20.98 mi². Figures of change in contents computed from surface area multiplied by change in stage.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 1,311.23 ft, Mar. 5, 1976; minimum, 1,306.20 ft, Dec. 16, 1998.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,309.15 ft, Apr. 5, 6; minimum, 1,306.97 ft, Feb. 22.

MONTHEND ELEVATION, IN FEET ABOVE SEA LEVEL, AND CONTENTS AT 2400 HRS, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Elevation (feet) | Contents (acre- feet) | Change in contents (equivalent in ft ³ /s) | Elevation (feet) | Contents acre- feet) | Change in contents (equivalent in ft ³ /s) |
|-------------------------------------|---------------------|-----------------------------|--|---------------------------------|----------------------------|--|
| <u>03012520 Allegheny Reservoir</u> | | | | <u>03013946 Chautauqua Lake</u> | | |
| Sept. 30 | 1,311.99 | 402,960 | -- | 1,307.52 | -- | -- |
| Oct. 31 | 1,308.73 | 374,150 | -469 | 1,307.47 | -- | -11 |
| Nov. 30 | 1,304.06 | 334,140 | -672 | 1,307.84 | -- | +83 |
| Dec. 31 | 1,304.06 | 329,920 | -69 | 1,308.11 | -- | +59 |
| CAL YR 2002 | -- | -- | +456 | -- | -- | +11 |
| Jan. 31 | 1,303.00 | 321,060 | -144 | 1,307.28 | -- | -181 |
| Feb. 28 | 1,303.22 | 322,950 | +34 | 1,307.18 | -- | -24 |
| Mar. 31 | 1,329.34 | 588,930 | +4,330 | 1,309.03 | -- | +402 |
| Apr. 30 | 1,329.20 | 587,290 | -28 | 1,308.05 | -- | -220 |
| May 31 | 1,329.61 | 592,280 | +81 | 1,308.30 | -- | +54 |
| June 30 | 1,329.32 | 588,930 | -56 | 1,308.20 | -- | -22 |
| July 31 | 1,333.64 | 643,840 | +893 | 1,308.48 | -- | +61 |
| Aug. 31 | 1,328.53 | 579,010 | -1,050 | 1,308.38 | -- | -22 |
| Sept. 30 | 1,325.51 | 543,480 | -597 | 1,308.53 | -- | +34 |
| WTR YR 2003 | -- | -- | +194 | -- | -- | +19 |