

Water-Data Report 2011

**03195500 ELK RIVER AT SUTTON, WV**

Kanawha Basin  
Elk Subbasin

LOCATION.--Lat 38°39'47", long 80°42'35" referenced to North American Datum of 1927, Braxton County, WV, Hydrologic Unit 05050007, on left bank of Elk River, 150 ft upstream from highway bridge across Elk River on U. S. Route 19, in the town of Sutton, 0.5 mi upstream from Granny Creek, 2.5 mi downstream from Wolf Creek, and 0.9 mi downstream from Sutton Dam, and at mile 102.1.

DRAINAGE AREA.--542 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--October 1938 to February 1939 (monthly discharge published in WSP 1305), March 1939 to September 1960 (daily discharge and peaks except annual maxima for 1939), October 1960 to September 1992 (daily discharge and annual maxima), October 1992 to September 1993 (daily mean gage height and annual maxima), October 1993 to September 2000 (annual maxima), October 2000 to September 2001 (annual maximum gage height), October 2001 to September 2002 (annual maxima), October 2002 to September 2008 (annual maximum gage height), October 2008 to current year (annual maximum and minimum gage height).

REVISED RECORDS.--WSP 1305: 1942(M), 1948-50(M). WDR WV82-1: Drainage area.

GAGE.--Water-stage recorder with satellite telemeter. Datum of gage is 799.39 ft above NAVD 88 (VERTCON conversion of 800.00 ft above NGVD 29). Prior to Apr. 5, 1940, nonrecording gage. Prior to Oct. 1, 1960, at site 150 ft downstream at datum 8.03 ft higher.

REMARKS.--Flow regulated since October 1960 by Sutton Dam.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--20 years (water years 1939-58), 1,107 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 34,200 ft<sup>3</sup>/s, Jan. 29, 1957, gage height, 39.30 ft, highest since 1932.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 13, 1918, reached a stage of 45.2 ft, present datum (37.2 ft at datum then in use), from floodmarks, discharge, 49,000 ft<sup>3</sup>/s, from rating curve extended above 28,000 ft<sup>3</sup>/s.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 21.18 ft, Mar. 1; minimum gage height, 11.11 ft, June 27, 28, 29, 30, July 1.