



Water-Data Report 2006

06401000 ANGOSTURA RESERVOIR NEAR HOT SPRINGS, SD

Cheyenne Basin
Angostura Reservoir Subbasin

LOCATION.--Lat 43°20'35", long 103°26'16" referenced to North American Datum of 1927, in SW ¼ NW ¼ sec.20, T.8 S., R.6 E., Fall River County, SD, Hydrologic Unit 10120106, at dam on Cheyenne River, 6.5 mi southeast of Hot Springs.

DRAINAGE AREA.--9,100 mi², approximately.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1949 to current year (monthend contents only).

REVISED RECORDS.--WDR SD-04-01: 1960-2003 minimum observed contents; 1962-2003 maximum observed contents.

GAGE.--Water-stage recorder. Elevations listed to NGVD of 1929. Prior to Aug. 26, 1965, nonrecording gage at same site and datum.

COOPERATION.--Records of elevation, contents, and diversions to Angostura project provided by Bureau of Reclamation.

REMARKS.--Reservoir formed by concrete gravity dam with earth embankment with gated concrete gravity spillway section. Storage began Oct. 3, 1949; dam completed December 1949. Conservation capacity, 80,800 acre-ft between elevations 3,163.0 ft and 3,187.2 ft (top of spillway gates). Inactive storage, 36,500 acre-ft between elevations 3,139.75 ft (invert of lowest outlet) and 3,163.0 ft. Dead storage below elevation 3,139.75 ft, 5,700 acre-ft. Surcharge capacity, 57,300 acre-ft between elevations 3,187.2 ft and 3,198.1 ft (maximum water surface). Figures given herein represent contents above elevation 3,139.75 ft. Capacities adjusted from sediment survey by the United States Bureau of Reclamation in 2004. Water stored for irrigation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 160,400 acre-ft, June 18, 1962, elevation, 3,189.00 ft; minimum since normal operating level reached, 37,600 acre-ft, Aug. 25, 2006.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 60,400 acre-ft, May 22, elevation, 3,172.07 ft; minimum, 37,600 acre-ft, Aug. 25.

**MONTHEND ELEVATION AND CONTENTS AT 2400 HOURS
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006**

Date	Elevation	Contents (acre feet)	Change in contents (acre-feet)
Sept. 30.....	3,166.70	*52,100	--
Oct. 31.....	3,167.30	47,100	*-5,000
Nov. 30.....	3,167.74	48,200	+1,100
Dec. 31.....	3,168.39	50,000	+1,800
CAL YR 2005	--	--	*-4,200
Jan. 31.....	3,169.30	52,400	+2,400
Feb. 28.....	3,169.97	54,300	+1,900
Mar. 31.....	3,171.31	58,100	+3,800
Apr. 30.....	3,171.86	59,700	+1,600
May 31.....	3,171.62	59,000	-700
June 30.....	3,168.89	51,300	-7,700
July 31.....	3,165.36	42,100	-9,200
Aug. 31.....	3,163.59	37,900	-4,200
Sept. 30.....	3,163.69	38,100	+200
WTR YR 2006	--	--	*-14,000

* Computed on basis of revised capacity table put into use Oct. 1, 2005.