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U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

Statistical Summaries of Streamflow Data and Characteristics of Drainage Basins for Selected Streamflow-Gaging Stations in Arizona Through Water Year 1996

Water-Resources Investigations Report 98—4225

*Prepared in cooperation with the
Arizona Department of Water Resources,
Bureau of Reclamation,
Pima County Board of Supervisors,
Flood Control District of Maricopa County, and
Salt River Project*



GILA RIVER BASIN

09497500 SALT RIVER NEAR CHRYSOTILE, AZ

LOCATION.--Lat 33°47'53", long 110°29'57", in sec.25, T.5 N., R.17 E. (unsurveyed), Gila County, Hydrologic Unit 15060103, in San Carlos Indian Reservation, on left bank 1,200 ft upstream from bridge on U.S. Highway 60, 5.7 mi northeast of Chrysotile, 8 mi upstream from Cibecue Creek, and 33 mi downstream from confluence of Black and White Rivers.

DRAINAGE AREA.--2,849 mi².

PERIOD OF RECORD.--September 1924 to current year (monthly discharge only July to December 1954).

REVISED RECORDS.--WSP 859: 1926-27, 1929-30, 1934, 1936. WSP 899: 1927, 1932, 1937, 1938(M). WSP 1313: 1925-26(M), 1929-30(M), 1935-36(M), 1944(M). WSP 1343: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 3,354.57 ft above sea level.

REMARKS.--No estimated daily discharges. Records fair. Several diversions for irrigation above station of about 3,100 acres, one diversion into the basin (see record of Forestdale Creek diversion from Show Low Creek, near Show Low), and one diversion out of the basin (see record of Willow Creek diversion from Black River, near Morenci).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 76,600 ft³/s Jan. 8, 1993, gage height, 18.33 ft, from rating curve extended above 52,000 ft³/s; minimum, 49 ft³/s July 6, 7, 1955.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood peak of 74,000 ft³/s occurred prior to 1924 and is believed to be the peak of the flood of Jan. 19, 1916, gage height, 18 ft, from floodmarks, from rating curve extended above 52,000 ft³/s.

Annual peak discharges

Water year	Date	Annual peak discharge (ft ³ /s)	Discharge codes	Water year	Date	Annual peak discharge (ft ³ /s)	Discharge codes
1916	16-01-19	¹ 74,000	HP	1961	08-30-61	2,130	
1925	25-03-08	6,930		1962	01-25-62	5,630	
1926	26-04-06	13,600		1963	02-11-63	6,220	
1927	27-02-17	19,900		1964	07-26-64	2,780	
1928	28-07-21	1,670		1965	01-08-65	15,800	
1929	29-09-23	11,500		1966	12-30-65	41,100	
1930	30-08-11	11,700		1967	08-12-67	5,060	
1931	31-02-15	7,400		1968	01-28-68	8,730	
1932	32-02-10	40,000		1969	10-04-68	4,940	
1933	33-02-28	2,880		1970	09-06-70	5,000	
1934	34-08-20	3,850		1971	08-13-71	20,400	
1935	35-04-09	15,700		1972	12-26-71	23,300	
1936	36-02-17	13,200		1973	10-20-72	42,100	
1937	37-02-07	52,900		1974	08-06-74	1,680	
1938	38-03-04	19,000		1975	10-29-74	7,080	
1939	39-04-05	8,530		1976	02-10-76	6,070	
1940	40-08-15	6,300		1977	07-23-77	3,760	
1941	41-03-14	52,200		1978	03-02-78	46,700	
1942	42-01-13	5,380		1979	12-18-78	70,400	
1943	43-03-05	12,800		1980	02-15-80	58,300	
1944	43-10-19	2,380		1981	04-14-81	2,060	
1945	03-27-45	4,450		1982	02-11-82	13,200	
1946	09-19-46	9,600		1983	03-25-83	15,700	
1947	09-18-47	8,160		1984	10-02-83	56,600	
1948	04-12-48	5,730		1985	12-28-84	34,600	
1949	01-14-49	14,200		1986	02-16-86	14,000	
1950	07-21-50	2,500		1987	12-08-86	8,370	
1951	08-29-51	5,150		1988	09-02-88	10,600	
1952	01-14-52	51,500		1989	03-12-89	1,740	
1953	07-30-53	3,680		1990	07-22-90	8,610	
1954	03-23-54	28,700		1991	03-02-91	38,800	
1955	08-23-55	8,820		1992	02-14-92	21,300	
1956	01-29-56	1,640		1993	01-08-93	² 76,600	
1957	08-02-57	3,760		1994	03-21-94	7,760	
1958	03-22-58	19,700		1995	03-06-95	25,700	
1959	08-20-59	7,290		1996	09-14-96	2,940	
1960	12-26-59	26,200					

¹Highest since 1906.

²Highest since 1916.

GILA RIVER BASIN

09498500 SALT RIVER NEAR ROOSEVELT, AZ

LOCATION.--Lat 33°37'10", long 110°55'15", in SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.9, T.3 N., R.14 E. (unsurveyed), Gila County, Hydrologic Unit 15060103, in Tonto National Forest on left bank 100 ft downstream from bridge on State Highway 288, 0.3 mi downstream from Pinal Creek, 1 mi upstream from diversion dam for power canal, 14 mi east of village of Roosevelt, and 17 mi upstream from Roosevelt Dam.

DRAINAGE AREA.--4,306 mi².

PERIOD OF RECORD.--January 1913 to current year (monthly discharge only January to September 1913, published in WSP 1313).

REVISED RECORDS.--WSP 1049: 1914, 1916, 1918-19, 1926. WSP 1343: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 2,177.14 ft above sea level. Prior to 1925, nonrecording gage at diversion dam about 1 mi downstream at different datum. Nonrecording gage at present site and datum 1925 to Jan. 17, 1935. May 20, 1955, to July 30, 1959, supplementary water-stage recorder at diversion dam.

REMARKS.--No estimated daily discharges. Records good. Several small diversions for irrigation of about 4,000 acres above station and two trans basin diversions above station, one into basin from Show Low Creek and one out of basin to Willow Creek. Records show inflow to Roosevelt Lake. Tonto Creek also contributes to Roosevelt Lake; see records elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 143,000 ft³/s Jan. 8, 1993, gage height, 30.09 ft, from rating curve extended above 108,000 ft³/s; minimum discharge, 59 ft³/s all or part of each day, July 1-4, 7-12, 1955.

EXTREMES OUTSIDE PERIOD OF RECORD.--A discharge of about 42 ft³/s was reported Aug. 5, 1911.

GILA RIVER BASIN

09494000 WHITE RIVER NEAR FORT APACHE, AZ

LOCATION.--Lat 33°44'11", long 110°09'58", in SE¹/₄ sec.32, T.4 N., R.21 E. (unsurveyed), Gila County, Hydrologic Unit 15060102, in Fort Apache Indian Reservation, on right bank 2,200 ft downstream from highway bridge, 4.5 mi upstream from confluence with Black River, and 11 mi west of Fort Apache.

DRAINAGE AREA.--632 mi².

PERIOD OF RECORD.--October 1917 to September 1918 (published as "at Wanslee's Ranch"), October 1957 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WRD Ariz. 1971: 1967(M).

GAGE.--Water-stage recorder. Datum of gage is 4,365.99 ft above sea level. Oct. 12, 1917, to Aug. 31, 1918, nonrecording gage at site 2,100 ft upstream at different datum.

REMARKS.--Small diversions above station for irrigation of about 1,460 acres. Negligible storage above station in several small recreational lakes.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,600 ft³/s Dec. 18, 1978, gage height, 15.71 ft, from rating curve extended above 7,800 ft³/s on basis of slope-area measurement of peak flow; no flow July 18-21, 1963.

Annual peak discharges

Water year	Date	Annual peak discharge (ft ³ /s)	Discharge codes	Water year	Date	Annual peak discharge (ft ³ /s)	Discharge codes
1958	03-22-58	2,700		1978	03-01-78	6,590	
1959	07-28-59	4,900		1979	12-18-78	14,600	
1960	12-26-59	2,580		1980	02-15-80	8,160	
1961	08-29-61	3,590		1981	08-31-81	1,240	
1962	04-16-62	2,090		1982	03-13-82	2,130	
1963	08-26-63	1,970		1983	04-26-83	1,870	
1964	07-25-64	4,480		1984	10-02-83	9,410	
1965	07-28-65	2,870		1985	03-12-85	8,900	
1966	12-30-65	4,360		1986	08-27-86	3,780	
1967	07-22-67	8,180		1987	04-18-87	2,000	
1968	04-16-68	1,390		1988	08-31-88	1,590	
1969	04-07-69	1,190		1989	03-14-89	688	
1970	08-13-70	1,850		1990	07-07-90	1,640	
1971	08-12-71	8,670		1991	08-27-91	2,980	
1972	12-26-71	5,170		1992	08-24-92	3,020	
1973	04-29-73	4,680		1993	01-08-93	12,600	
1974	08-01-74	3,110		1994	09-03-94	1,770	
1975	04-27-75	1,930		1995	03-06-95	5,730	
1976	07-14-76	2,220		1996	09-03-96	1,770	
1977	07-24-77	1,980					

Discharge rating table developed January 1993

Gage height (ft)	Discharge (ft ³ /s)	Gage height (ft)	Discharge (ft ³ /s)
5.0	1,480	11.0	7,230
6.0	2,140	12.0	8,590
7.0	2,930	13.0	10,060
8.0	3,830	14.0	11,650
9.0	4,850	15.0	13,350
10.0	5,980	15.7	14,600