

GILA RIVER BASIN

09513910 NEW RIVER NEAR GLENDALE, AZ

LOCATION.--Lat 33°32'12", long 112°16'52", in NE¹/₄NW¹/₄ sec.8, T.2 N., R.1 E., Maricopa County, Hydrologic Unit 15070102, on downstream side of bridge at Glendale Avenue, 2 mi upstream from mouth, 4 mi southwest of Peoria and 1.5 mi west of Glendale.

DRAINAGE AREA.--600 mi².

PERIOD OF RECORD.--Water years 1961-63, 1971-79 (annual maximums only); February 1964 to October 1970, April 1990 to current year.

REVISED RECORDS.--WDR AZ-89-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,046.44 ft above sea level. Apr. 26, 1961, to Feb. 12, 1964, crest-stage gage at same site and different datum. Feb. 13 to Nov. 12, 1964, water-stage recorder on downstream or upstream side of bridge at different datums. Nov. 13, 1964, to Sept. 8, 1969, water-stage recorder at same site at datum 3.47 ft higher. Sept. 9, 1969, to Sept. 30, 1979, water-stage recorder at same site at datum 0.24 ft lower. Prior to Dec. 31, 1991 at datum 1.00 ft higher.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,800 ft³/s Dec. 19, 1967, gage height, 10.4 ft, datum then in use, from rating curve extended above 2,100 ft³/s on basis of slope-area measurement of peak flow; no flow most of the time each year.

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
1943	08-00-43	38,000	ES,HP	1973	10-07-72	8,650	
1955	07-00-55	12,000	ES,HP	1974	08-05-74	775	
1960	12-25-59	5,500	ES	1975	10-29-74	490	
1961	00-00-61	0		1976	09-25-76	1,550	
1962	00-00-62	0		1977	10-23-76	168	
1963	08-30-63	690		1978	03-02-78	12,300	
1964	08-01-64	7,000		1979	12-19-78	3,620	
1965	01-08-65	1,100		1990	09-03-90	10,000	
1966	12-23-65	3,000		1991	03-02-91	1,400	
1967	00-00-67	0		1992	07-24-92	2,110	
1968	12-19-67	19,800		1993	01-11-93	5,450	
1969	00-00-69	0		1994	10-06-93	1,770	
1970	09-05-70	19,200		1995	09-28-95	1,690	
1971	08-21-71	7,000	ES	1996	11-02-95	2,540	
1972	07-17-72	6,300					

Discharge rating table developed November 1993

Gage height (ft)	Discharge (ft ³ /s)	Gage height (ft)	Discharge (ft ³ /s)
1.1	50	1.6	2,020
1.2	209	1.7	2,780
1.3	483	1.8	3,660
1.4	874	1.9	4,670
1.5	1,390	2.0	5,800

GILA RIVER BASIN

09513910 NEW RIVER NEAR GLENDALE, AZ--Continued

Magnitude and probability of instantaneous peak flow based on period of record 1943, 1955, 1960-79, 1990-96

Discharge, in ft ³ /s, for indicated recurrence interval in years, and exceedance probability, in percent					
2 50%	5 20%	10 10%	25 4%	50† 2%	100† 1%
2,890	8,410	14,400	25,400	36,300	49,800
Weighted skew	(logs) =	-0.14			
Mean	(logs) =	3.45			
Standard dev.	(logs) =	0.56			

† Reliability of values in column is uncertain, and potential errors are large.

Basin characteristics

Main channel slope (ft/mi)	Stream length (mi)	Mean basin elevation (ft)	Forested area (percent)	Soil index	Mean annual precipitation (in)	Rainfall intensity, 24-hour	
						2-year (in)	50-year (in)
66.9	49.6	2,130	0.0	1.5	13.8	1.8	4.0

