GILA RIVER BASIN

09517500 CENTENNIAL WASH NEAR ARLINGTON, AZ

LOCATION.--Lat 33°16'12", long 112°47'50", in sec.7, T.2 S., R.5 W., Maricopa County, Hydrologic Unit 15070104, on upstream side of ford on former U.S. Highway 80, 3.0 mi upstream from Gillespie Dam and 4.4 mi southwest of Arlington.

DRAINAGE AREA.--1,810 mi^2, approximately.

PERIOD OF RECORD.--January 1961 to September 1979 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 773.22 ft above sea level.

REMARKS.--Flow regulated by several small retention dams in upper end of basin. Records do not include irrigation return flow past station.

AVERAGE DISCHARGE.--18 years, 3.73 ft^3/s, 2,700 acre-ft/yr; median of yearly mean discharges, 1.9 ft^3/s, 1,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum dsicharge, 14,500 ft^3/s July 23, 1961, gage height, 4.70 ft, from rating curve extended above 5,500 ft^3/s; maximum gage height, 4.71 ft Sept. 5, 1970; no flow for most of 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
1961	07-23-61	14,500		1971	08-20-71	2,040	
1962	09-06-62	1,100		1972	00-00-72	0	
1963	00-00-63	0		1973	10-07-72	9,340	
1964	07-31-64	2,890		1974	08-04-74	105	
1965	02-07-65	1,040		1975	10-28-74	755	
1966	09-13-66	5,500		1976	09-26-76	7,800	
1967	09-05-67	1,040		1977	00-00-77	0	
1968	12-19-67	5,330		1978	03-02-78	10,900	
1969	08-29-69	990		1979	01-17-79	818	
1970	09-05-70	11,900					

GILA RIVER BASIN

09517500 CENTENNIAL WASH NEAR ARLINGTON, AZ--Continued

MEAN MONTHLY AND ANNUAL DISCHARGES 1961-79

MONTH	MAXIMUM (FT3/S)	MINIMUM (FT3/S)	MEAN (FT3/S)	STANDARD DEVIATION (FT3/S)	COEFFICIENT OF VARIATION	PERCENT OF ANNUAL RUNOFF
OCTOBER	121	0.00	6.6	28	4.2	13.5
NOVEMBER	0.00	0.00	0.00	0.00	---	0.00
DECEMBER	55	0.00	3.0	13	4.2	6.2
JANUARY	6.6	0.00	0.69	2.1	3.0	1.4
FEBRUARY	19	0.00	1.3	4.5	3.3	2.8
MARCH	115	0.00	6.1	26	4.4	12.4
APRIL	0.00	0.00	0.00	0.00	---	0.00
MAY	0.00	0.00	0.00	0.00	---	0.00
JUNE	0.00	0.00	0.00	0.00	---	0.00
JULY	122	0.00	8.5	28	3.3	17.5
AUGUST	55	0.00	5.3	13	2.4	10.9
SEPTEMBER	146	0.00	17	40	2.3	35.4
ANNUAL	12.7	0.00	4.1	4.7	1.1	100

MAGNITUDE AND PROBABILITY OF ANNUAL LOW FLOW
BASED ON PERIOD OF RECORD 1962-79

PERIOD (CONSECUTIVE DAYS)	DISCHARGE, IN FT3/S, FOR INDICATED RECURRENCE INTERVAL, IN YEARS, AND NON-EXCEEDANCE PROBABILITY, IN PERCENT: 2 50%	5 20%	10# 10%	20# 5%	50# 2%	100# 1%
1						
3						
7						
14						
30						
60	0.00	0.00	0.00	0.00	0.00	0.00
90	0.00	0.00	0.00	0.00	0.00	0.00
120	0.00	0.00	0.00	0.00	0.00	0.00
183	0.00	0.00	0.00	0.00	0.00	0.00

MAGNITUDE AND PROBABILITY OF INSTANTANEOUS PEAK FLOW
BASED ON PERIOD OF RECORD

DISCHARGE, IN FT3/S, FOR INDICATED RECURRENCE INTERVAL IN YEARS, AND EXCEEDANCE PROBABILITY, IN PERCENT: 2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
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WEIGHTED SKEW (LOGS) = ----
MEAN (LOGS) = ----
STANDARD DEV. (LOGS) = ----

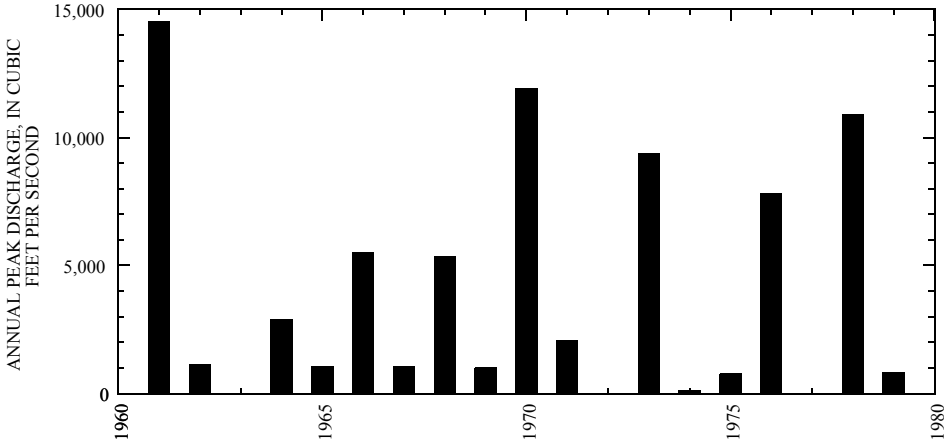
MAGNITUDE AND PROBABILITY OF ANNUAL HIGH FLOW
BASED ON PERIOD OF RECORD 1962-79

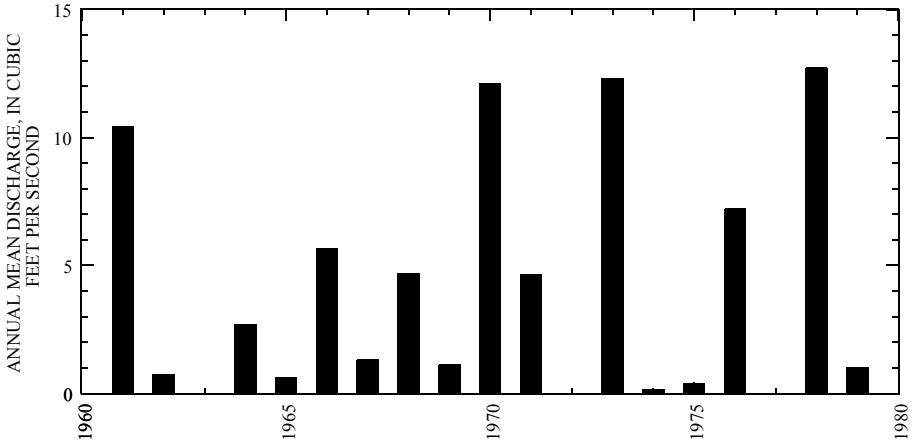
PERIOD (CONSECUTIVE DAYS)	DISCHARGE, IN FT3/S, FOR INDICATED RECURRENCE INTERVAL, IN YEARS, AND EXCEEDANCE PROBABILITY, IN PERCENT: 2 50%	5 20%	10# 10%	25# 4%	50# 2%	100# 1%
1	612	1,980	3,490	6,170	8,750	11,800
3	279	859	1,470	2,510	3,480	4,610
7	125	388	666	1,140	1,590	2,100
15	58	181	311	534	741	982
30	31	93	157	264	362	473
60	15	47	80	134	183	240
90	10	31	53	89	122	160

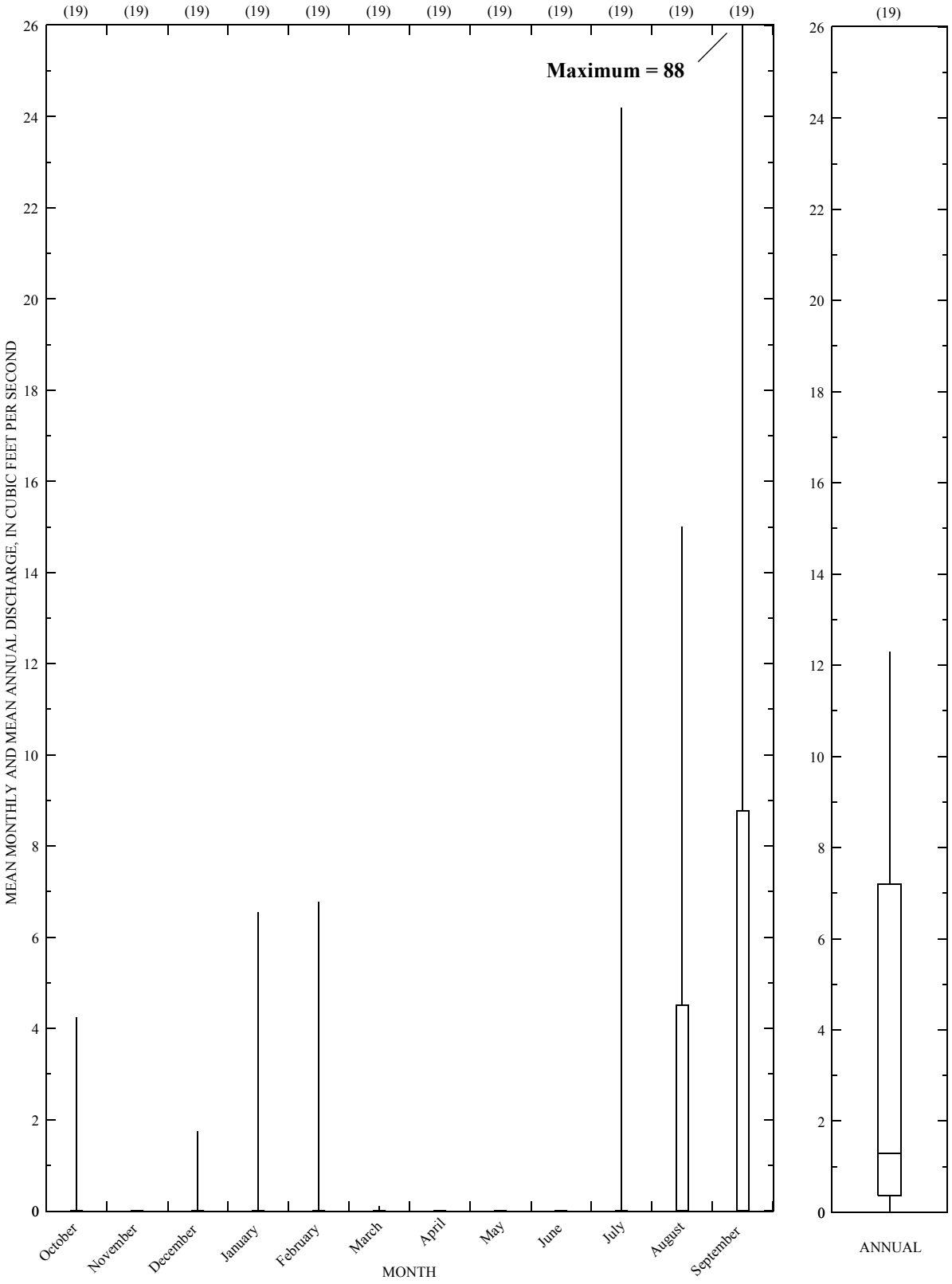
DURATION TABLE OF DAILY MEAN FLOW FOR PERIOD OF RECORD 1962-79

DISCHARGE, IN FT3/S, WHICH WAS EQUALED OR EXCEEDED FOR INDICATED PERCENT OF TIME: 1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
1.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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


ANNUAL PEAK DISCHARGE, IN CUBIC FEET PER SECOND
15,000
10,000
5,000
0
1960
1965
1970
1975
1980


ANNUAL MEAN DISCHARGE, IN CUBIC FEET PER SECOND
15
10
5
0
1960
1965
1970
1975
1980


(19)
Maximum = 88
MEAN MONTHLY AND MEAN ANNUAL DISCHARGE, IN CUBIC FEET PER SECOND
0
2
4
6
8
10
12
14
16
18
20
22
24
26
October
November
December
January
February
March
April
May
June
July
August
September
MONTH
ANNUAL