GILA RIVER BASIN

09471800 SAN PEDRO RIVER NEAR BENSON, AZ

LOCATION.--Lat 32°07'35", long 110°17'22", SW$^1/_4$ sec.15, T.15 S., R.20 E., Cochise County, Hydrologic Unit 15050203, on right bank, 6 mi downstream from Tres Alamo Wash, and 11 mi north of Benson.

DRAINAGE AREA.--2,490 mi^2, of which 696 mi^2 is in Mexico.

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
1966	08-06-66	5,470		1972	08-26-72	9,800	
1967	07-26-67	4,560		1973	07-16-73	2,140	
1968	08-10-68	5,900		1974	07-20-74	9,520	
1969	07-28-69	2,640		1975	07-23-85	8,920	
1970	07-20-70	8,200		1976	07-28-76	5,110	
1971	08-11-71	7,390					

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)
17.3	84.0	4,800	12.0	1.9	15.6	1.9	4.4

GILA RIVER BASIN

09471800 SAN PEDRO RIVER NEAR BENSON, AZ--Continued

MEAN MONTHLY AND ANNUAL DISCHARGES 1967-76

MONTH	MAXIMUM (FT3/S)	MINIMUM (FT3/S)	MEAN (FT3/S)	STANDARD DEVIATION (FT3/S)	COEFFICIENT OF VARIATION	PERCENT OF ANNUAL RUNOFF
OCTOBER	71	0.00	8.6	22	2.6	2.3
NOVEMBER	23	0.00	2.3	7.2	3.2	0.6
DECEMBER	196	0.00	20	62	3.1	5.4
JANUARY	28	0.00	2.8	8.9	3.1	0.8
FEBRUARY	47	0.00	8.2	18	2.1	2.2
MARCH	46	0.00	8.1	17	2.1	2.1
APRIL	0.01	0.00	0.00	0.00	3.2	0.0
MAY	0.08	0.00	0.01	0.03	2.3	0.0
JUNE	34	0.00	4.6	11	2.3	1.2
JULY	260	11	124	85	0.68	32.8
AUGUST	555	2.0	165	177	1.1	43.6
SEPTEMBER	81	0.00	34	25	0.74	9.0
ANNUAL	61	15	32	14	0.43	100

MAGNITUDE AND PROBABILITY OF ANNUAL LOW FLOW
BASED ON PERIOD OF RECORD 1967-76

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						
90						
120	0.00	0.00	0.00	0.00	0.00	0.00
183	0.20	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)= ----

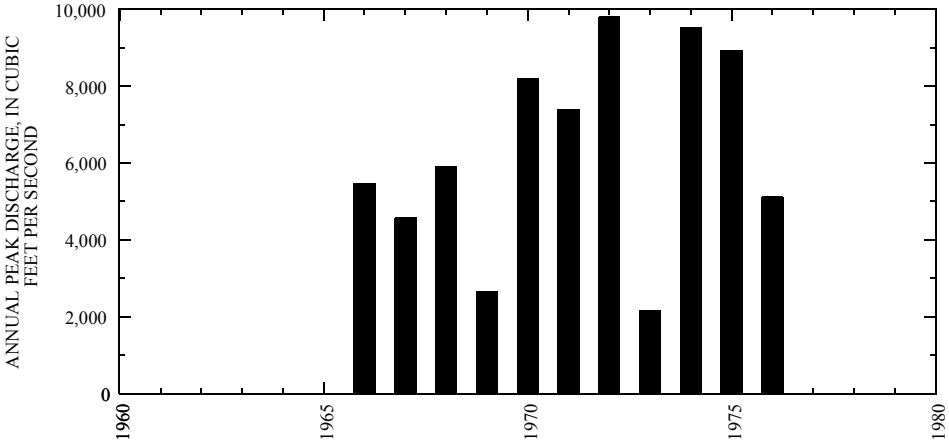
MAGNITUDE AND PROBABILITY OF ANNUAL HIGH FLOW
BASED ON PERIOD OF RECORD 1967-76

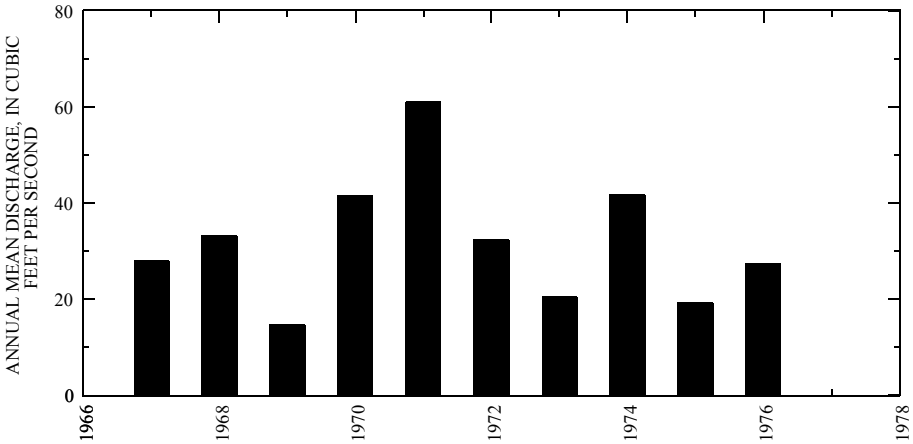
PERIOD (CONSECUTIVE DAYS)	DISCHARGE, IN FT3/S, FOR INDICATED RECURRENCE INTERVAL, IN YEARS, AND EXCEEDANCE PROBABILITY, IN PERCENT					
	2 50%	5 20%	10# 10%	25# 4%	50# 2%	100# 1%
1	1,970	2,910	3,440	4,030	4,400	4,730
3	1,100	1,620	1,930	2,260	2,470	2,660
7	608	915	1,100	1,330	1,480	1,620
15	392	619	774	974	1,120	1,270
30	251	414	532	688	810	934
60	153	243	302	374	427	477
90	110	170	207	250	279	306

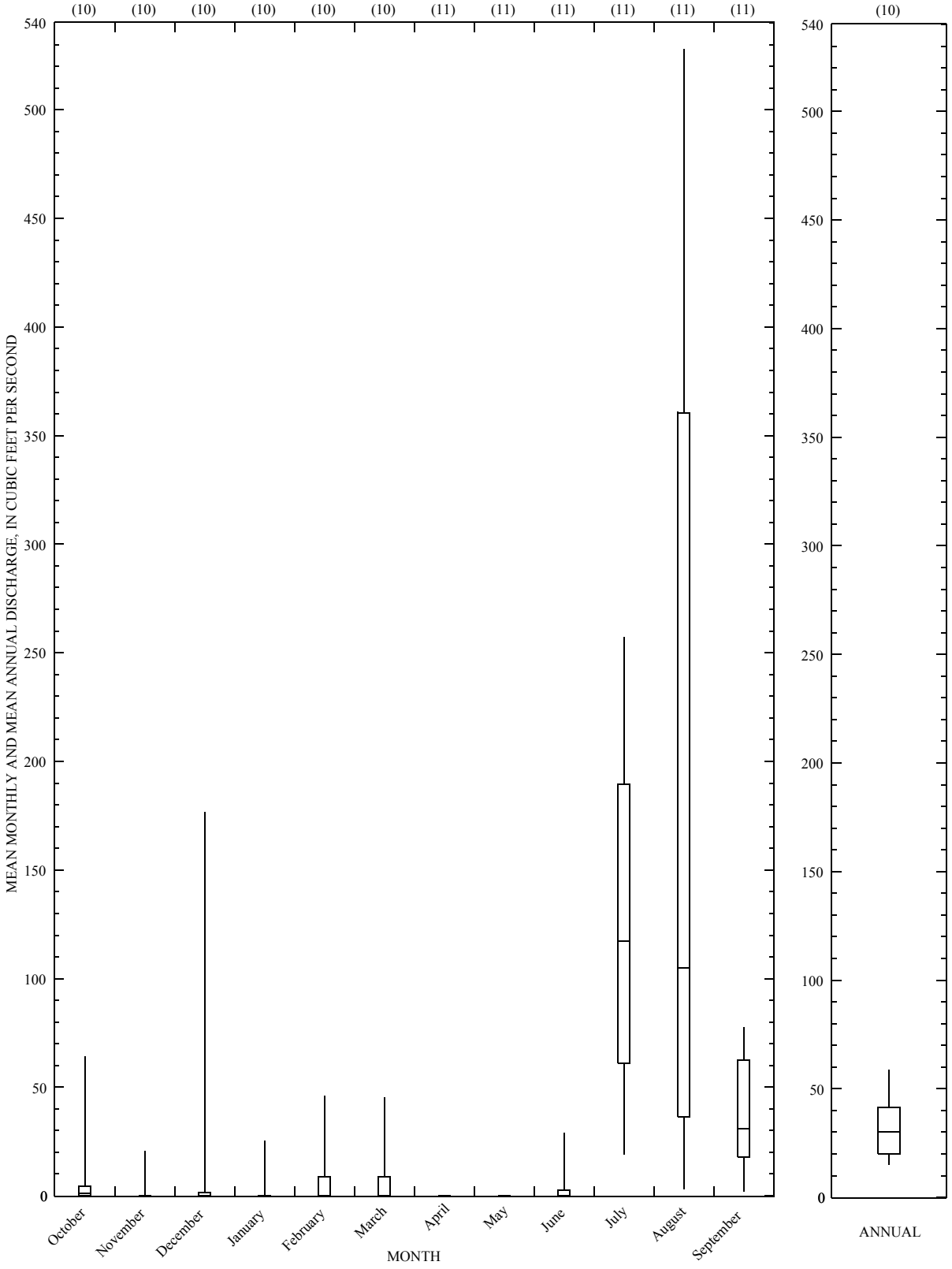
DURATION TABLE OF DAILY MEAN FLOW FOR PERIOD OF RECORD 1967-76

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%
777	126	41	16	2.3	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
10,000
8,000
6,000
4,000
2,000
0
1960
1965
1970
1975
1980


ANNUAL MEAN DISCHARGE, IN CUBIC FEET PER SECOND
80
60
40
20
0
1966
1968
1970
1972
1974
1976
1978

GILA RIVER BASIN

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