GILA RIVER BASIN

09505350 DRY BEAVER CREEK NEAR RIMROCK, AZ

LOCATION.--Lat 34°43'43", long 111°46'30", in NE$^1/_4$NW$^1/_4$ sec.1, T.15 N., R.5 E., Yavapai County, Hydrologic Unit 15060202, in Coconino National Forest, on left upstream abutment of abandoned highway bridge, 1,000 ft upstream from present State Highway 179, and 5.5 mi north of Rimrock.

DRAINAGE AREA.--142 mi^2.

PERIOD OF RECORD.--October 1960 to current year.

REVISED RECORDS.--WRD Ariz. 1969: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 3,694.38 ft above sea level (Arizona Highway Department bench mark).

REMARKS.--Records good. No known diversions above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,600 ft^3/s Sept. 5, 1970, gage height, 14.35 ft, from rating curve extended above 6,000 ft^3/s on basis of computation of peak flow over weir at gage height 9.07 ft and 9.69 ft and slope-area measurement at gage height 14.35 ft; no flow for many days 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	07-14-61	1,610		1979	12-18-78	24,200	
1962	02-12-62	2,510		1980	02-14-80	18,600	
1963	08-17-63	3,260		1981	08-11-81	1,250	
1964	03-30-64	1,160		1982	03-12-82	7,790	
1965	01-06-65	7,970		1983	11-30-82	8,190	
1966	11-23-65	9,670		1984	12-04-83	5,780	
1967	12-07-66	9,460		1985	12-27-84	4,250	
1968	02-11-68	652		1986	11-30-85	4,340	
1969	01-25-69	10,600		1987	03-09-87	1,160	
1970	09-05-70	26,600		1988	04-25-88	2,650	
1971	09-01-71	537		1989	03-29-89	404	
1972	12-26-71	2,740		1990	03-18-90	801	
1973	12-28-72	6,160		1991	03-01-91	6,180	
1974	04-03-74	253		1992	03-04-92	3,770	
1975	04-14-75	1,220		1993	01-08-93	11,600	
1976	02-09-76	7,020		1994	04-29-94	842	
1977	04-07-77	304		1995	03-06-95	20,600	
1978	03-01-78	8,410		1996	09-05-96	1,170	

Discharge rating table developed October 1988

Gage height (ft)	Discharge (ft^3/s)	Gage height (ft)	Discharge (ft^3/s)
4.0	409	10.0	10,350
5.0	1,180	11.0	13,240
6.0	2,280	12.0	16,580
7.0	3,800	13.0	20,450
8.0	5,680	14.0	25,060
9.0	7,860	14.4	27,100

09505350 DRY BEAVER CREEK NEAR RIMROCK, AZ--Continued

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)
137	32.5	6,220	56.0	2.8	23.1	2.5	5.1

GILA RIVER BASIN

09505350 DRY BEAVER CREEK NEAR RIMROCK, AZ--Continued

MEAN MONTHLY AND ANNUAL DISCHARGES 1961-96

MONTH	MAXIMUM (FT3/S)	MINIMUM (FT3/S)	MEAN (FT3/S)	STANDARD DEVIATION (FT3/S)	COEFFICIENT OF VARIATION	PERCENT OF ANNUAL RUNOFF
OCTOBER	246	0.00	9.4	41	4.4	1.7
NOVEMBER	251	0.00	19	51	2.7	3.4
DECEMBER	602	0.00	66	134	2.0	11.6
JANUARY	814	0.00	63	154	2.4	11.1
FEBRUARY	850	0.00	120	184	1.5	21.1
MARCH	678	0.00	162	159	0.98	28.6
APRIL	598	0.00	106	135	1.3	18.7
MAY	208	0.00	8.6	35	4.1	1.5
JUNE	0.17	0.00	0.01	0.03	4.9	0.0
JULY	2.5	0.00	0.19	0.46	2.5	0.0
AUGUST	35	0.00	2.0	6.1	3.1	0.3
SEPTEMBER	224	0.00	12	46	3.9	2.1
ANNUAL	144	0.35	47	43	0.92	100

MAGNITUDE AND PROBABILITY OF ANNUAL LOW FLOW
BASED ON PERIOD OF RECORD 1962-96

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	0.09	0.00	0.00	0.00	0.00	0.00

MAGNITUDE AND PROBABILITY OF INSTANTANEOUS PEAK FLOW
BASED ON PERIOD OF RECORD 1961-96

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%
3,380	9,590	16,100	27,400	38,400	51,400

WEIGHTED SKEW (LOGS)= -0.22
MEAN (LOGS)= 3.51
STANDARD DEV. (LOGS)= 0.56

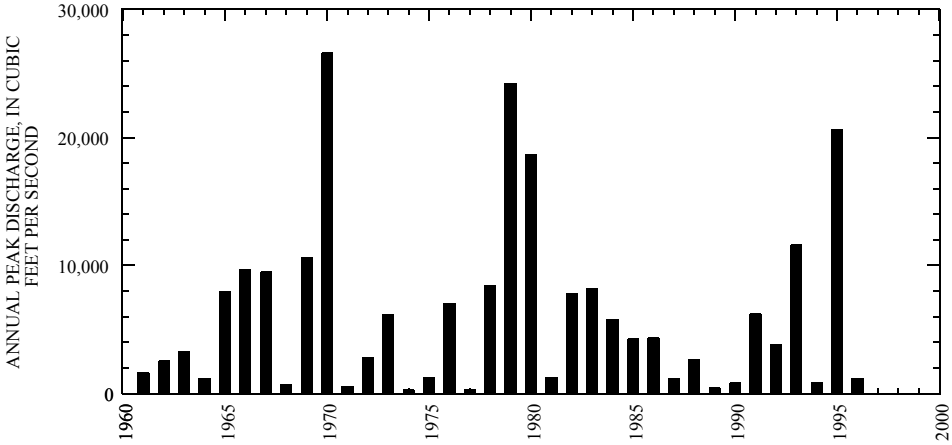
MAGNITUDE AND PROBABILITY OF ANNUAL HIGH FLOW
BASED ON PERIOD OF RECORD 1961-96

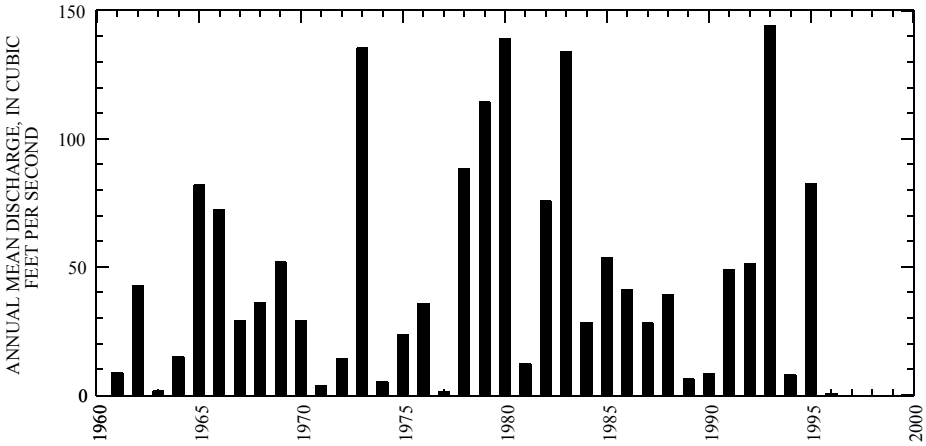
PERIOD (CONSECUTIVE DAYS)	DISCHARGE, IN FT3/S, FOR INDICATED RECURRENCE INTERVAL, IN YEARS, AND EXCEEDANCE PROBABILITY, IN PERCENT: 2 50%	5 20%	10 10%	25 4%	50# 2%	100# 1%
1	1,290	3,760	6,310	10,600	14,600	19,200
3	873	2,280	3,510	5,290	6,730	8,210
7	561	1,320	1,860	2,530	2,980	3,380
15	364	790	1,060	1,340	1,500	1,630
30	242	538	720	904	1,010	1,090
60	154	372	517	672	765	839
90	115	288	405	534	612	675

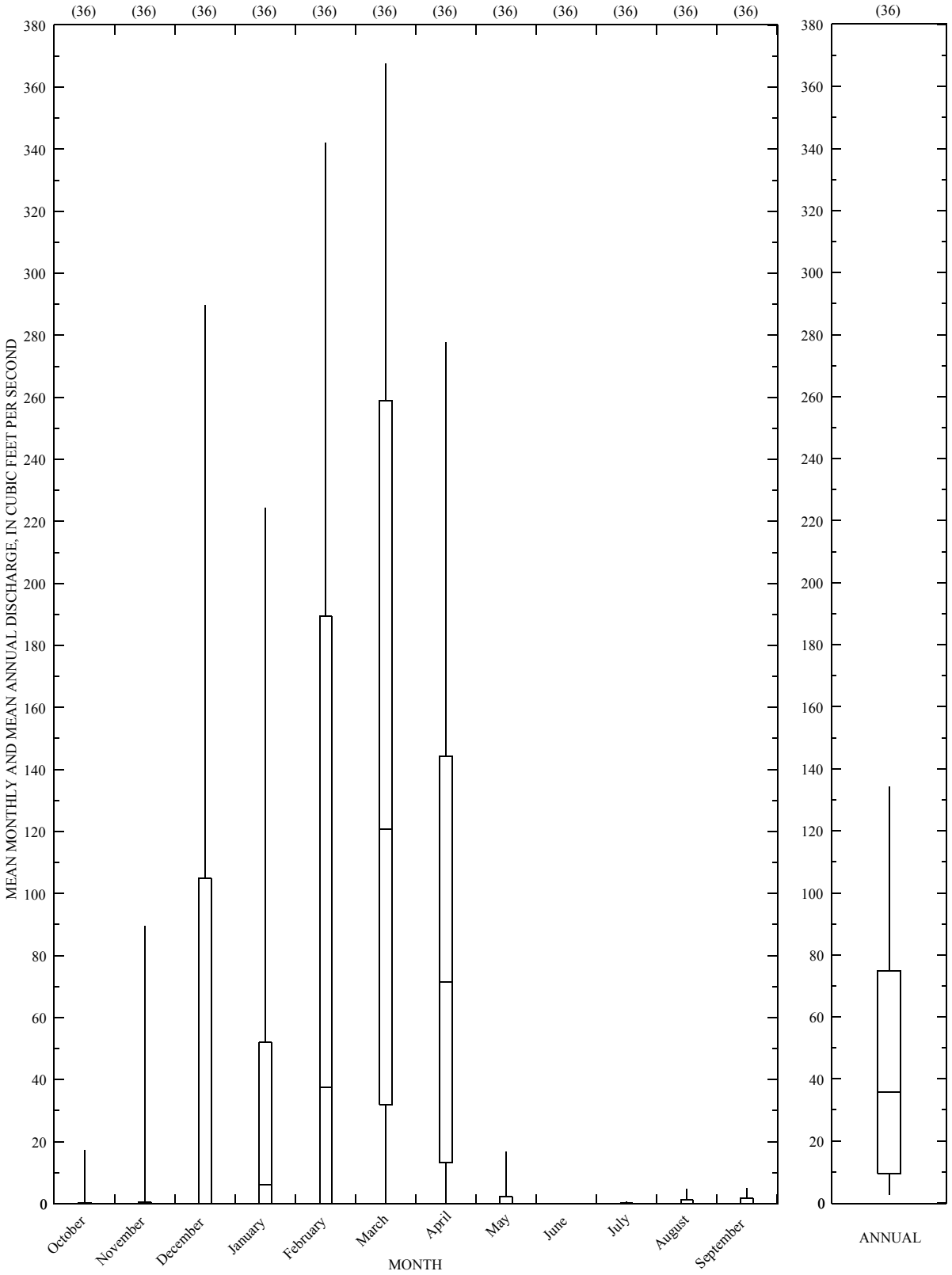
DURATION TABLE OF DAILY MEAN FLOW FOR PERIOD OF RECORD 1961-96

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%
750	244	102	35	8.3	0.02	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
30,000
20,000
10,000
0
1960
1965
1970
1975
1980
1985
1990
1995
2000


ANNUAL MEAN DISCHARGE, IN CUBIC FEET PER SECOND
150
100
50
0
1960
1965
1970
1975
1980
1985
1990
1995
2000


(36)
MEAN MONTHLY AND MEAN ANNUAL DISCHARGE, IN CUBIC FEET PER SECOND
0
20
40
60
80
100
120
140
160
180
200
220
240
260
280
300
320
340
360
380
October
November
December
January
February
March
April
May
June
July
August
September
MONTH
ANNUAL