LITTLE COLORADO RIVER BASIN

09388000 LITTLE COLORADO RIVER NEAR HUNT, AZ

LOCATION.--Lat 34°38'50", long 109°42'10", in NE$^1/_4$NW$^1/_4$, sec.4, T.14 N., R.25 E. (unsurveyed), Apache County, Hydrologic Unit 15020002, near left bank on upstream side of pier of bridge on U.S. Highway 180, 2 mi downstream from Zuni River and 5 mi northwest of Hunt.

DRAINAGE AREA.--6,383 mi^2 , of which 210 mi^2 is noncontributing.

REMARKS.--Diversions for irrigation above station of about 14,000 acres. Considerable regulation by many reservoirs (combined capacity, about 59,000 acre-ft).

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
1929	07-28-29	8,000	UR	1954	07-26-54	214	UR
1930	08-07-30	965	UR	1955	08-08-55	2,550	UR
1931	08-05-31	3,600	UR	1956	07-22-56	145	UR
1932	08-29-32	1,200	UR	1957	09-01-57	882	UR
1933	07-24-33	3,600	UR	1958	08-21-58	1,400	UR
1940	07-26-40	2,110	UR	1959	08-04-59	235	UR
1941	07-25-41	1,560	UR	1960	10-30-59	453	UR
1942	10-04-41	725	UR	1961	08-15-61	272	UR
1943	08-11-43	508	UR	1962	10-31-61	112	UR
1944	09-30-44	451	UR	1963	08-21-63	232	UR
1945	08-13-45	1,590	UR	1964	08-04-64	580	UR
1946	08-05-46	2,390	UR	1965	09-04-65	545	UR
1947	08-23-47	1,290	UR	1966	08-15-66	570	UR
1948	10-14-47	925	UR	1967	08-14-67	748	UR
1949	08-09-49	4,050	UR	1968	08-04-68	1,140	UR
1950	07-24-50	119	UR	1969	07-24-69	2,360	UR
1951	08-28-51	531	UR	1970	08-17-70	378	UR
1952	09-22-52	395	UR	1971	09-03-71	1,900	UR
1953	07-18-53	42	UR	1972	10-01-71	1,230	UR

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)
37.6	90.4	7,060	27.0	2.9	13.4	1.4	2.8

LITTLE COLORADO RIVER BASIN

09388000 LITTLE COLORADO RIVER NEAR HUNT, AZ--Continued

MEAN MONTHLY AND ANNUAL DISCHARGES 1930-33, 1941-72

MONTH	MAXIMUM (FT3/S)	MINIMUM (FT3/S)	MEAN (FT3/S)	STANDARD DEVIATION (FT3/S)	COEFFICIENT OF VARIATION	PERCENT OF ANNUAL RUNOFF
OCTOBER	105	0.00	11	24	2.1	6.6
NOVEMBER	10	0.00	3.1	3.3	1.0	1.8
DECEMBER	20	0.00	4.2	4.6	1.1	2.4
JANUARY	33	0.00	5.4	6.7	1.2	3.2
FEBRUARY	149	0.00	9.1	25	2.7	5.3
MARCH	223	0.00	14	47	3.3	8.3
APRIL	315	0.00	16	59	3.7	9.1
MAY	239	0.00	7.6	40	5.3	4.4
JUNE	9.1	0.00	0.93	1.8	1.9	0.5
JULY	68	0.00	11	17	1.6	6.4
AUGUST	524	0.00	63	105	1.7	36.4
SEPTEMBER	170	0.00	27	42	1.6	15.5
ANNUAL	79	0.44	14	18	1.2	100

MAGNITUDE AND PROBABILITY OF ANNUAL LOW FLOW
BASED ON PERIOD OF RECORD 1931-33, 1941-72

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	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	0.00	0.00
60	0.10	0.00	0.00	0.00	0.00	0.00
90	0.19	0.00	0.00	0.00	0.00	0.00
120	0.70	0.09	0.01	0.00	0.00	0.00
183	2.4	0.47	0.15	0.00	0.00	0.00

MAGNITUDE AND PROBABILITY OF INSTANTANEOUS PEAK FLOW
BASED ON PERIOD OF RECORD 1929-33, 1940-72

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%
801	1,930	3,040	4,890	6,630	8,700

WEIGHTED SKEW (LOGS)= -0.08
MEAN (LOGS)= 2.90
STANDARD DEV. (LOGS)= 0.46

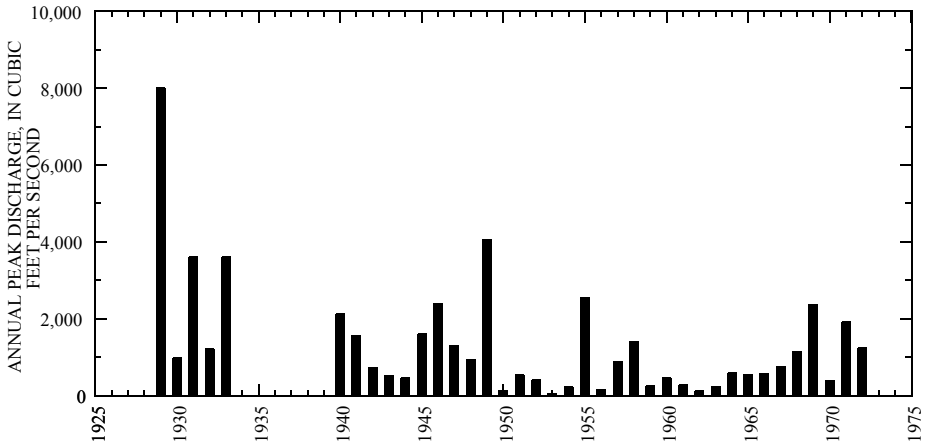
MAGNITUDE AND PROBABILITY OF ANNUAL HIGH FLOW
BASED ON PERIOD OF RECORD 1930-33, 1941-72

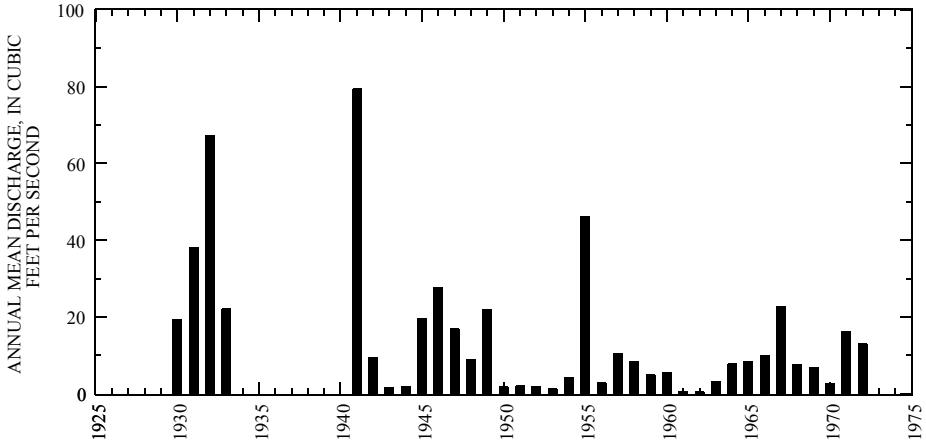
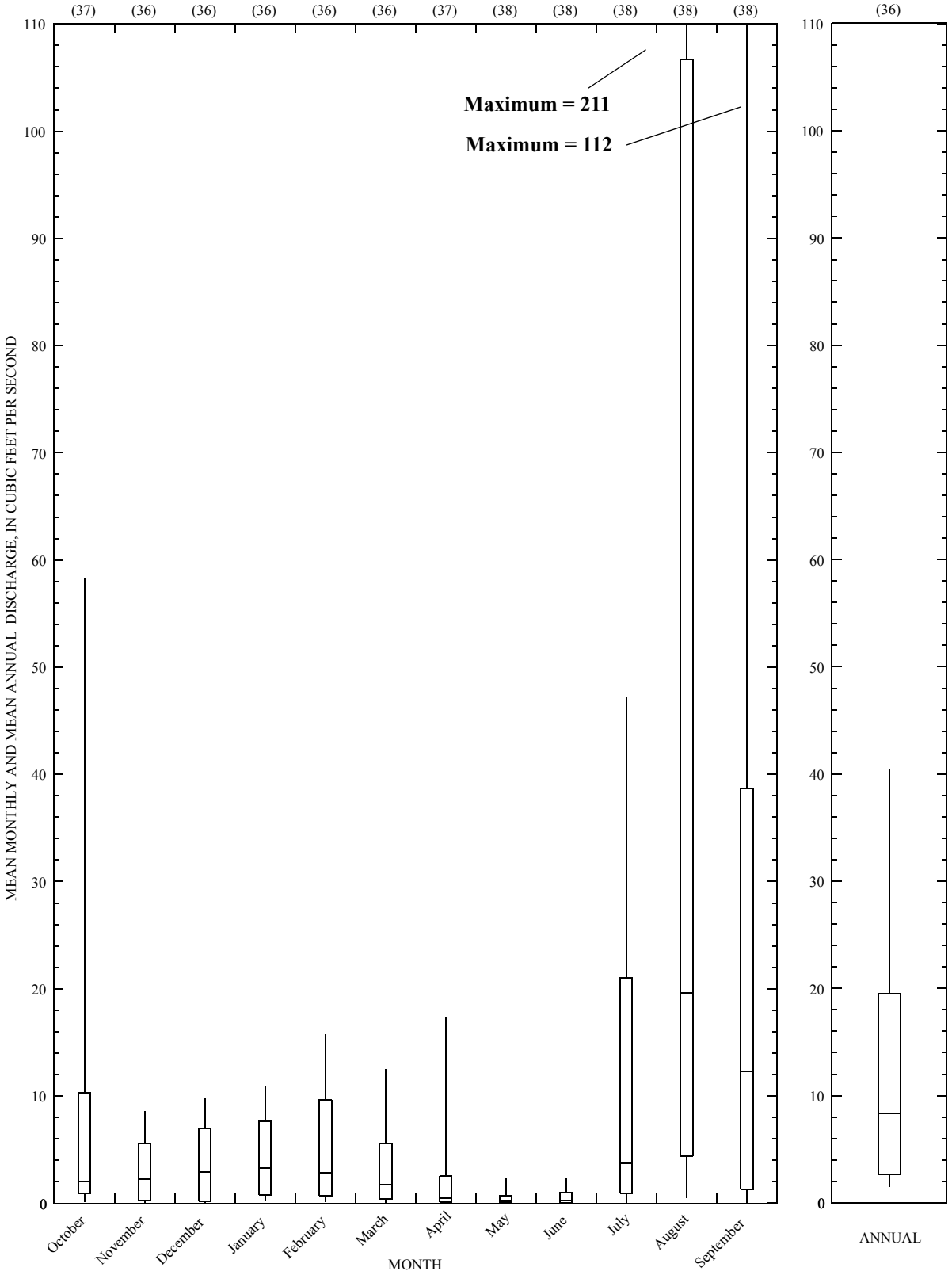
PERIOD (CONSECUTIVE DAYS)	DISCHARGE, IN FT3/S, FOR INDICATED RECURRENCE INTERVAL, IN YEARS, AND EXCEEDANCE PROBABILITY, IN PERCENT					
	2 50%	5 20%	10 10%	25# 4%	50# 2%	100# 1%
1	374	904	1,320	1,870	2,270	2,660
3	229	600	922	1,380	1,740	2,110
7	132	373	603	962	1,270	1,610
15	77	230	392	670	932	1,240
30	47	146	258	466	677	941
60	30	95	170	314	463	653
90	22	68	122	223	328	462

DURATION TABLE OF DAILY MEAN FLOW FOR PERIOD OF RECORD 1930-33, 1941-72

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%
347	49	16	10	7.7	3.3	1.5	0.67	0.23	0.11	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
1925
1930
1935
1940
1945
1950
1955
1960
1965
1970
1975


ANNUAL MEAN DISCHARGE, IN CUBIC FEET PER SECOND
100
80
60
40
20
0
1925
1930
1935
1940
1945
1950
1955
1960
1965
1970
1975

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