



Water-Data Report 2007

09442680 SAN FRANCISCO RIVER NEAR RESERVE, NM

Upper Gila Basin
San Francisco Subbasin

LOCATION.--Lat 33°44'12.19", long 108°46'16.23" referenced to North American Datum of 1983, Catron County, NM, Hydrologic Unit 15040004, on left bank 1,300 ft downstream from Rainbow Bridge Canyon, 1.7 mi northwest of Reserve, and at mile 563.1.

DRAINAGE AREA.--350 mi², approximately.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--March 1959 to current year.

REVISED RECORDS.--WDR NM-78-1: 1977. WDR NM-84-1: 1973, 1979-80.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,820 ft above NGVD of 1929, from topographic map. From Dec. 25, 1972 to Oct. 1, 2005, at site 1,320 ft downstream at different datum. Prior to Dec. 15, 1972, at site 480 ft upstream at different datum.

REMARKS.--Records poor. Possible minor regulation by Luna Lake, 27 mi upstream. Diversions for irrigation of about 280 acres upstream from station. Several observations of water temperature were made during the year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage, about 15 ft, as determined in 1962 from old floodmarks. Major floods of Nov. 26, 1905, and Dec. 3, 1906, exceeded 20,000 ft³/s at Alma (downstream). See WSP 1313.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
DAILY MEAN VALUES
[*e*, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	13	12	7.5	9.4	10	12	21	8.0	4.5	2.0	19	17
2	12	12	7.6	9.9	9.8	12	18	8.3	4.5	1.9	17	11
3	11	11	8.0	9.8	9.4	11	17	8.5	4.4	1.8	19	10
4	11	11	7.7	9.6	9.5	11	15	7.6	4.1	1.7	37	10
5	11	11	6.9	9.7	9.9	11	13	7.2	4.0	1.6	21	10
6	28	11	8.0	9.9	9.2	11	12	7.3	3.7	1.7	65	9.3
7	30	11	8.3	9.3	9.1	11	12	7.6	3.7	2.0	47	9.1
8	28	10	8.3	9.3	9.5	11	11	7.5	3.8	2.6	17	8.6
9	59	9.6	8.9	9.3	10	11	11	7.7	3.7	2.2	55	8.1
10	118	9.6	9.0	9.4	12	12	11	7.4	3.7	2.1	52	7.9
11	57	9.1	9.0	10	14	13	9.4	6.8	3.7	2.2	24	8.3
12	37	9.3	8.4	10	18	12	10	6.8	4.4	2.2	16	11
13	28	9.2	8.4	12	19	11	12	6.9	4.2	2.1	12	7.9
14	24	9.0	9.3	12	17	11	12	6.1	3.6	1.9	11	7.0
15	25	8.8	9.7	10	14	11	10	6.4	3.4	2.2	10	6.6
16	25	8.7	9.0	8.8	13	10	10	6.3	3.2	6.1	9.2	e6.0
17	23	8.7	9.0	10	13	12	9.8	7.4	3.3	4.3	9.2	6.0
18	21	8.6	9.0	11	12	12	9.7	7.1	3.0	4.6	9.6	5.7
19	19	8.6	9.9	11	13	12	9.4	6.9	3.0	3.9	10	5.1
20	18	8.8	9.3	11	13	11	8.9	6.6	2.6	4.1	8.3	4.6
21	17	8.1	9.0	11	13	12	9.0	6.4	2.4	18	7.4	4.1
22	16	8.3	9.2	11	13	15	8.5	6.1	2.6	6.9	7.3	5.2
23	15	8.2	9.2	10	14	26	8.7	5.8	2.1	5.1	7.5	10
24	14	8.3	8.9	10	14	49	8.6	5.7	2.5	21	9.8	6.5
25	14	8.2	8.8	11	13	56	8.5	5.5	2.3	27	7.8	5.9
26	15	8.1	9.1	12	13	44	8.1	5.4	e2.3	32	36	5.5
27	14	8.2	10	11	13	35	7.6	5.3	2.2	27	26	6.7
28	14	8.2	10	11	13	31	8.7	5.0	2.1	15	12	5.3
29	13	8.3	9.8	11	---	28	8.4	4.5	2.2	22	11	5.2
30	13	7.8	9.7	11	---	25	8.9	4.4	2.1	19	9.4	5.1
31	12	---	9.2	11	---	23	---	4.6	---	26	11	---
Total	755	278.7	274.1	321.4	350.4	572	327.2	203.1	97.3	272.2	613.5	228.7
Mean	24.4	9.29	8.84	10.4	12.5	18.5	10.9	6.55	3.24	8.78	19.8	7.62
Max	118	12	10	12	19	56	21	8.5	4.5	32	65	17
Min	11	7.8	6.9	8.8	9.1	10	7.6	4.4	2.1	1.6	7.3	4.1
Ac-ft	1,500	553	544	637	695	1,130	649	403	193	540	1,220	454

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 2007, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	26.1	17.9	18.5	20.0	37.6	68.6	46.7	17.5	6.12	7.81	17.3	18.1
Max	430	211	159	159	231	336	398	162	39.7	28.3	96.2	172
(WY)	(1984)	(1979)	(1979)	(1993)	(1993)	(1985)	(1973)	(1973)	(1992)	(1967)	(1999)	(1983)
Min	2.17	3.55	2.99	4.22	4.26	4.04	3.38	2.27	1.39	1.34	2.31	1.05
(WY)	(2004)	(2006)	(2006)	(2006)	(2004)	(1959)	(1967)	(2002)	(1990)	(1995)	(2003)	(2004)

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	Calendar Year 2006		Water Year 2007		Water Years 1959 - 2007	
Annual total	5,091.4		4,293.6			
Annual mean	13.9		11.8		25.4	
Highest annual mean					101	1973
Lowest annual mean					4.54	2004
Highest daily mean	264	Aug 15	118	Oct 10	5,000	Oct 20, 1972
Lowest daily mean	1.0	Jul 31	1.6	Jul 5	0.24	Jul 18, 1997
Annual seven-day minimum	1.5	Jun 10	1.8	Jul 1	0.43	Sep 21, 2000
Maximum peak flow			444	Aug 9	^a 9,830	Oct 1, 1983
Maximum peak stage			5.89	Aug 9	^b 11.71	Oct 1, 1983
Instantaneous low flow			1.6	Jul 4	0.00	Jul 5, 2003
Annual runoff (ac-ft)	10,100		8,520		18,390	
10 percent exceeds	30		21		48	
50 percent exceeds	4.6		9.5		8.0	
90 percent exceeds	2.3		3.7		3.2	

^a From rating curve extended above 1,400 ft³/s. on basis of slope-area measurement of peak flow.

^b Recorded, 11.30, from floodmarks.

