

Water-Data Report 2009

08317200 SANTA FE RIVER ABOVE COCHITI LAKE, NM

Rio Grande-Elephant Butte Basin
Rio Grande-Santa Fe Subbasin

LOCATION.--Lat 35°32'50", long 106°13'44" referenced to North American Datum of 1983, Santa Fe County, NM, Hydrologic Unit 13020201, in Mesita de Juana Lopez Grant, on right bank at foot of La Bajada Hill, 5.0 mi upstream from Cochiti Dam, 6.3 mi east of Pena Blanca, and at mile 7.9.

DRAINAGE AREA.--231 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--March 1970 to September 1999, March 2004 to current year.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 5,505 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Water-discharge records fair. Surface and ground-water diversions and returns for municipal supply of City of Santa Fe in upper part of basin. Diversions for irrigation of about 400 acres upstream from station. See tabulation below for the results of discharge measurements made during year at point adjacent to gage of an unnamed ditch on right bank which diverts water 0.4 mi upstream and bypasses gage; ditch flow not included in record. Lowest flow for period of record, no flow July 16-18, 1971.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009
DAILY MEAN VALUES

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	0.08	4.4	9.1	11	11	9.6	8.1	2.2	e0.08	0.09	1.8	0.00
2	0.04	4.5	8.6	10	11	8.9	6.8	2.9	e0.18	0.09	0.62	0.01
3	0.04	5.8	8.4	11	11	7.8	6.0	2.3	0.44	0.09	0.42	0.00
4	0.04	6.0	8.4	11	11	7.1	6.6	2.1	0.25	0.09	0.13	0.00
5	5.7	4.8	9.4	10	11	7.6	6.1	2.5	0.12	0.10	0.03	0.00
6	3.4	5.4	8.8	9.9	11	8.2	6.8	1.7	0.17	14	0.03	0.34
7	4.4	6.7	8.6	9.6	11	8.8	6.6	2.3	0.14	1.8	0.02	0.09
8	5.0	6.2	8.9	10	11	8.9	4.9	2.0	0.15	0.62	0.02	0.25
9	5.5	6.2	8.8	9.9	11	8.9	4.8	2.4	0.16	1.0	0.02	0.09
10	3.7	6.7	8.5	9.9	10	11	3.9	2.5	0.41	0.22	0.02	0.47
11	4.8	7.5	8.7	9.9	10	8.7	5.3	2.7	4.7	0.15	0.02	0.65
12	8.4	8.0	8.5	10	10	8.0	7.6	1.1	1.2	0.07	0.02	0.94
13	6.8	7.7	9.1	9.3	9.8	7.9	8.0	0.61	0.74	0.07	0.01	1.2
14	12	7.7	8.8	9.0	10	9.0	6.8	0.33	0.30	0.07	0.01	0.52
15	9.1	7.2	8.8	9.3	10	9.6	5.6	0.36	0.66	0.07	0.03	0.04
16	7.6	7.6	9.4	9.5	9.6	9.0	3.9	0.29	1.2	0.07	0.01	0.20
17	7.1	7.7	9.4	9.7	10	8.6	5.4	0.25	0.50	e0.07	0.01	3.4
18	5.2	6.2	9.0	9.7	9.7	6.2	6.5	0.19	0.43	0.05	0.01	13
19	5.2	6.8	14	10	9.8	7.5	6.5	0.25	0.31	0.05	0.01	7.0
20	3.4	5.5	9.0	10	10	4.8	7.2	0.14	0.15	0.05	0.00	3.3
21	6.3	5.2	9.6	9.8	9.8	4.4	6.1	0.16	0.25	0.05	0.00	2.7
22	5.4	7.2	9.5	9.9	10	4.8	4.4	0.25	0.18	12	0.00	2.2
23	5.6	8.1	10	9.7	10	5.6	4.2	2.8	0.43	0.30	0.00	2.2
24	6.1	8.5	10	9.9	7.8	5.4	5.2	0.59	0.32	0.40	0.00	0.39
25	5.9	6.6	9.7	9.9	7.7	5.6	5.2	0.06	0.24	0.05	0.02	0.27
26	5.4	8.1	9.4	11	8.0	6.8	2.3	0.08	0.42	0.04	0.54	0.33
27	6.4	8.6	11	9.9	7.6	7.7	2.0	e0.04	0.09	0.04	0.19	0.65
28	4.4	10	11	9.5	8.6	8.9	2.2	e0.04	0.12	0.04	0.17	0.82
29	5.3	8.5	12	9.6	---	9.1	1.5	e0.04	0.18	0.04	0.14	1.0
30	4.2	8.8	11	10	---	8.8	1.3	e0.08	0.27	0.11	0.01	0.27
31	4.5	---	11	10	---	8.4	---	e0.08	---	2.7	0.02	---
Total	157.00	208.2	296.4	307.9	277.4	241.6	157.8	33.34	14.79	34.59	4.33	42.33
Mean	5.06	6.94	9.56	9.93	9.91	7.79	5.26	1.08	0.49	1.12	0.14	1.41
Max	12	10	14	11	11	11	8.1	2.9	4.7	14	1.8	13
Min	0.04	4.4	8.4	9.0	7.6	4.4	1.3	0.04	0.08	0.04	0.00	0.00
Ac-ft	311	413	588	611	550	479	313	66	29	69	8.6	84

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2009, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	7.27	8.83	10.3	10.3	10.3	11.3	19.2	16.6	12.7	7.68	7.01	6.84
Max	16.4	15.5	15.4	14.6	16.6	28.6	306	69.3	75.3	28.0	32.8	19.2
(WY)	(1986)	(1995)	(1997)	(1997)	(1992)	(1992)	(1992)	(1973)	(1979)	(1971)	(1991)	(1990)
Min	0.32	0.33	6.84	6.51	7.17	6.15	3.61	1.08	0.20	0.30	0.14	0.88
(WY)	(2008)	(2008)	(1971)	(1971)	(1971)	(1971)	(2006)	(2009)	(2006)	(2005)	(2009)	(2007)

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SUMMARY STATISTICS

	Calendar Year 2008		Water Year 2009		Water Years 1970 - 2009	
Annual total	2,601.64		1,775.68			
Annual mean	7.11		4.86		10.9	
Highest annual mean					40.1	1992
Lowest annual mean					4.86	2009
Highest daily mean	33	Sep 1	14	Dec 19	1,000	Apr 17, 1992
Lowest daily mean	0.02	Jul 1	0.00	Aug 20	0.00	Jul 16, 1971
Annual seven-day minimum	0.02	Jul 1	0.00	Aug 18	0.00	Aug 18, 2009
Maximum peak flow			115	Jul 6	11,400	Jul 26, 1971
Maximum peak stage			2.00	Jul 6	9.58	Jul 26, 1971
Instantaneous low flow			0.00	May 25	0.00	Jul 16, 1971
Annual runoff (ac-ft)	5,160		3,520		7,900	
10 percent exceeds	13		10		16	
50 percent exceeds	8.2		5.2		8.1	
90 percent exceeds	0.05		0.04		2.5	

