

Water-Data Report 2012

09355500 SAN JUAN RIVER NEAR ARCHULETA, NM

Upper San Juan Basin
Upper San Juan Subbasin

LOCATION.--Lat 36°48'06.80", long 107°41'55.10" referenced to North American Datum of 1983, San Juan County, NM, Hydrologic Unit 14080101, on left bank 0.5 mi upstream from Gobernador Canyon, 0.8 mi northeast of Archuleta, 7.2 mi downstream from Navajo Dam, and at mile 291.4.

DRAINAGE AREA.--3,260 mi², approximately.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--December 1954 to current year.

REVISED RECORDS.--The annual runoff for water year 1958, as published in table 2, WSP 1733, was 455,000 acre-ft. The correct value is 1,455,000 acre-ft.

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Elevation of gage is 5,653 ft above NGVD of 1929, from river-profile survey. Prior to Dec. 29, 1959, at site 5.0 mi upstream at elevation 55 ft higher. Dec. 29, 1959, to Nov. 15, 1964, at site 0.4 mi upstream at elevation 5 ft higher. Prior to Nov. 28, 1966, at elevation 2.0 ft higher.

REMARKS.--Discharge records good. Flow completely regulated by Navajo Reservoir (station 09355100) 7.0 mi upstream except for minor in flow from 30-mi² intervening drainage area. High-water diversions through Azotea tunnel (station 08284160) into Rio Grande Basin began in Mar. 1971. Diversions for irrigation of about 47,000 acres upstream from station.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	730	437	449	457	471	476	488	506	1,740	1,000	778	934
2	730	336	489	456	475	477	492	500	553	1,000	776	969
3	732	339	490	457	477	477	495	492	533	1,000	779	963
4	738	351	486	457	475	477	499	497	539	1,000	772	970
5	669	353	483	454	476	473	499	498	545	1,010	769	1,000
6	584	348	482	455	480	469	501	497	520	1,010	769	999
7	525	353	481	454	476	466	504	499	476	1,030	824	997
8	524	348	481	453	477	465	506	501	476	1,010	870	1,000
9	524	348	480	453	479	464	507	508	476	916	869	993
10	524	350	477	452	482	469	507	510	475	818	874	990
11	523	351	478	453	482	466	509	508	472	811	876	990
12	521	350	477	453	488	464	510	509	474	808	880	1,020
13	522	352	478	453	488	464	510	506	472	811	879	991
14	523	348	475	454	488	463	515	505	469	817	880	988
15	524	348	474	456	488	464	518	504	470	813	880	982
16	525	348	472	458	487	464	519	500	592	809	879	977
17	527	345	470	460	487	462	522	499	623	780	876	973
18	528	345	471	459	484	465	522	505	604	753	879	965
19	529	347	471	461	484	468	522	505	707	750	881	962
20	531	345	471	463	484	470	522	505	775	750	880	961
21	530	346	470	462	484	471	522	1,380	790	763	781	965
22	530	345	469	467	483	473	520	2,410	798	772	1,010	968
23	531	345	468	468	481	473	517	3,810	939	777	1,020	980
24	532	345	470	470	480	473	516	5,170	994	767	1,010	981
25	536	348	470	467	482	477	513	5,110	987	766	1,010	981
26	542	343	469	465	480	478	513	5,100	1,000	777	1,000	980
27	537	343	469	466	479	479	513	5,080	1,010	777	1,010	862
28	538	342	468	467	482	482	511	5,070	1,010	779	977	765
29	538	342	466	468	476	487	509	5,060	1,000	780	889	767
30	538	340	460	469	---	492	506	4,290	1,000	780	849	764
31	538	---	459	472	---	484	---	2,840	---	780	850	---
Total	17,423	10,481	14,673	14,259	13,955	14,632	15,307	55,374	21,519	26,214	27,276	28,637
Mean	562	349	473	460	481	472	510	1,786	717	846	880	955
Max	738	437	490	472	488	492	522	5,170	1,740	1,030	1,020	1,020
Min	521	336	449	452	471	462	488	492	469	750	769	764
Ac-ft	34,560	20,790	29,100	28,280	27,680	29,020	30,360	109,800	42,680	52,000	54,100	56,800

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 2012, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	790	778	862	903	935	1,031	1,211	1,710	1,831	1,102	935	896
Max	2,131	3,018	2,886	2,768	2,382	4,216	4,768	4,962	5,169	5,126	3,508	3,241
(WY)	(1966)	(1966)	(1966)	(1986)	(1987)	(1993)	(1979)	(1985)	(1979)	(1979)	(1973)	(1999)
Min	298	240	162	115	149	207	244	279	300	320	353	338
(WY)	(1963)	(1963)	(1963)	(1963)	(1963)	(1964)	(1964)	(1967)	(1967)	(1967)	(1963)	(1963)

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SUMMARY STATISTICS

	Calendar Year 2011		Water Year 2012		Water Years 1963 - 2012	
Annual total	233,994		259,750			
Annual mean	641		710		^a 1,082	
Highest annual mean					2,686	1987
Lowest annual mean					280	1963
Highest daily mean	5,340	Jun 9	5,170	May 24	6,420	Jun 21, 1965
Lowest daily mean	336	Nov 2	336	Nov 2	30	Mar 12, 1964
Annual seven-day minimum	343	Nov 24	343	Nov 24	108	Jan 10, 1963
Maximum peak flow			5,280	May 24	^b 18,900	Jul 27, 1957
Maximum peak stage			6.86	May 24	^c 11.00	Jul 27, 1957
Instantaneous low flow			317	Nov 1	8.0	Feb 28, 1963
Annual runoff (ac-ft)	464,100		515,200		783,900	
10 percent exceeds	781		995		2,450	
50 percent exceeds	499		506		621	
90 percent exceeds	465		453		363	

^a Average discharge for 7 years (water years 1956-62), 1,304 ft³/s, 944,700 acre-ft/yr, prior to closure of Navajo Dam.

^b Site and datum then in use.

^c Maximum discharge since construction of Navajo Dam in 1962, 6,500 ft³/s, June 20, 1965, gage height, 4.75 ft.

