Water-Data Report 2012

08361000 RIO GRANDE BELOW ELEPHANT BUTTE DAM, NM

Rio Grande-Caballo Basin
Caballo Subbasin

LOCATION.--Lat 33°08'54.64", long 107°12'24.42" referenced to North American Datum of 1983, Sierra County, NM, Hydrologic Unit 13030101, in Pedro Armendaris Grant, on left bank 1.0 mi downstream from dam, 1.5 mi upstream from Cuchillo Negro River, and at mile 1,382.2.

DRAINAGE AREA.--29,450 mi^2 of which 2,940 mi^2 probably is noncontributing, from the closed basin in San Luis Valley, Colorado.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--January 1915 to current year. Monthly or annual discharge only for some periods, published in WSP 1732. Figures of daily discharge, published in WSP 458 for October to December 1916, are unreliable.

REVISED RECORDS.--WSP 1562: 1920. WSP 1632: drainage area. WSP 1732: 1917, 1920. See also PERIOD OF RECORD.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 4,241.09 ft above NGVD of 1929. Prior to Mar. 24, 1980, at datum 1.0 ft higher. See WSP 1732 for history of changes prior to Apr. 24, 1942.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated by Elephant Butte Reservoir (station 08360500). Diversion for irrigation of about 800,000 acres upstream from station. No flow at times prior to 1929, Mar. 2-4, 1979.

Suggested citation: U.S. Geological Survey, 2013, Water-resources data for the United States, Water Year 2012: U.S. Geological Survey Water-Data Report WDR-US-2012, site 08361000, accessed at http://wdr.water.usgs.gov/wy2012/pdfs/08361000.2012.pdf

08361000 RIO GRANDE BELOW ELEPHANT BUTTE DAM, NM—Continued

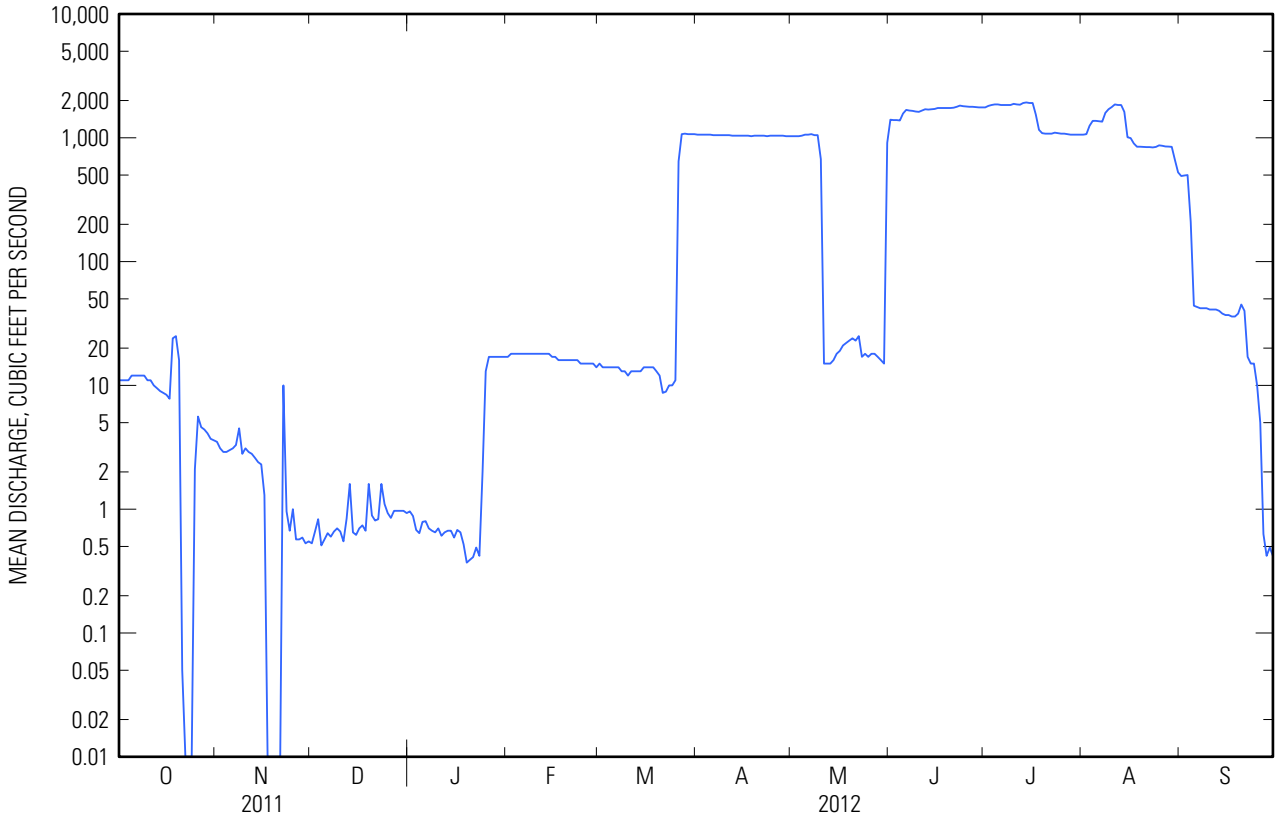
DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	11	3.5	0.53	0.96	17	15	1,060	1,030	1,400	1,760	1,060	491
2	11	3.1	0.66	0.88	18	14	1,060	1,030	1,390	1,810	1,070	496
3	11	2.9	0.83	0.68	18	14	1,060	1,030	1,390	1,840	1,250	500
4	11	2.9	0.51	0.64	18	14	1,060	1,040	1,380	1,860	1,370	209
5	12	3.0	0.57	0.79	18	14	1,060	1,060	1,570	1,860	1,370	44
6	12	3.1	0.64	0.80	18	14	1,050	1,060	1,680	1,840	1,360	43
7	12	3.3	0.60	0.70	18	14	1,050	1,070	1,660	1,840	1,350	42
8	12	4.5	0.66	0.67	18	13	1,050	1,050	1,650	1,840	1,590	42
9	12	2.8	0.70	0.65	18	13	1,050	1,050	1,630	1,840	1,700	42
10	11	3.1	0.66	0.70	18	12	1,050	672	1,620	1,880	1,770	41
11	11	2.9	0.55	0.61	18	13	1,050	15	1,660	1,860	1,860	41
12	10	2.8	0.84	0.65	18	13	1,040	15	1,700	1,850	1,840	41
13	9.5	2.6	1.6	0.67	18	13	1,040	15	1,690	1,910	1,840	40
14	9.0	2.4	0.65	0.67	18	13	1,040	16	1,700	1,930	1,620	38
15	8.7	2.3	0.62	0.59	17	14	1,040	18	1,710	1,910	1,010	37
16	8.4	1.3	0.70	0.68	17	14	1,040	19	1,740	1,910	994	37
17	7.8	0.00	0.74	0.65	16	14	1,040	21	1,740	1,540	900	36
18	24	0.00	0.67	0.52	16	14	1,030	22	1,740	1,160	847	36
19	25	0.00	1.6	0.37	16	13	1,040	23	1,740	1,090	847	38
20	16	0.00	0.89	0.39	16	12	1,040	24	1,740	1,080	844	45
21	0.05	0.00	0.81	0.41	16	8.7	1,040	23	1,750	1,080	841	40
22	0.00	10	0.83	0.49	16	8.9	1,040	25	1,780	1,080	841	17
23	0.00	0.96	1.6	0.42	16	10	1,030	17	1,820	1,100	836	15
24	0.00	0.67	1.1	2.0	15	10	1,040	e18	1,800	1,090	844	15
25	2.1	1.0	0.93	13	15	11	1,040	17	1,790	1,080	869	e10.0
26	5.6	0.57	0.85	17	15	645	1,040	18	1,780	1,080	862	e5.00
27	4.6	0.57	0.97	17	15	1,070	1,040	18	1,780	1,070	851	e0.63
28	4.4	0.59	0.97	17	15	1,080	1,040	17	1,770	1,060	849	e0.42
29	4.1	0.53	0.97	17	14	1,070	1,030	16	1,760	1,060	845	e0.49
30	3.7	0.55	0.97	17	---	1,070	1,030	15	1,760	1,060	663	e0.42
31	3.6	---	0.93	17	---	1,070	---	911	---	1,060	526	---
Total	272.55	61.94	26.15	131.59	486	6,323.6	31,320	11,375	50,320	46,430	35,319	2,442.96
Mean	8.79	2.06	0.84	4.24	16.8	204	1,044	367	1,677	1,498	1,139	81.4
Max	25	10	1.6	17	18	1,080	1,060	1,070	1,820	1,930	1,860	500
Min	0.00	0.00	0.51	0.37	14	8.7	1,030	15	1,380	1,060	526	0.42
Ac-ft	541	123	52	261	964	12,540	62,120	22,560	99,810	92,090	70,060	4,850

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1917 - 2012, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	323	227	270	295	699	1,182	1,524	1,557	1,826	1,730	1,390	772
Max	2,040	2,662	2,110	1,944	3,026	2,297	2,717	7,601	6,098	4,032	2,623	2,169
(WY)	(1987)	(1942)	(1987)	(1987)	(1986)	(1989)	(1942)	(1942)	(1942)	(1995)	(1924)	(1939)
Min	2.41	1.11	0.84	0.00	3.23	16.6	188	8.32	284	673	155	2.73
(WY)	(1986)	(2008)	(2012)	(1918)	(2007)	(1983)	(1977)	(1957)	(1964)	(1964)	(1954)	(1954)

08361000 RIO GRANDE BELOW ELEPHANT BUTTE DAM, NM—Continued

SUMMARY STATISTICS

	Calendar Year 2011		Water Year 2012		Water Years 1917 - 2012	
Annual total	205,825.24		184,508.79			
Annual mean	564		504		984	
Highest annual mean					2,665	1942
Lowest annual mean					253	1964
Highest daily mean	1,900	Mar 29	1,930	Jul 14	8,220	May 22, 1942
Lowest daily mean	0.00	Oct 22	0.00	Oct 22	0.00	Nov 2, 1916
Annual seven-day minimum	0.51	Nov 15	0.46	Jan 17	0.00	Nov 2, 1916
Annual runoff (ac-ft)	408,300		366,000		712,800	
10 percent exceeds	1,690		1,700		2,090	
50 percent exceeds	43		18		990	
90 percent exceeds	0.91		0.65		5.6