



Water-Data Report 2007

08313000 RIO GRANDE AT OTOWI BRIDGE, NEAR SAN ILDEFONSO, NM

Upper Rio Grande Basin
Upper Rio Grande Subbasin

LOCATION.--Lat 35°52'28.2", long 106°08'32.8" referenced to North American Datum of 1983, Santa Fe County, NM, Hydrologic Unit 13020101, on San Ildefonso Pueblo Grant, near right bank on downstream end of pier of former railway bridge, 400 ft downstream from bridge on State Highway 502, 1.8 mi southwest of San Ildefonso Pueblo, 2.5 mi downstream from Pojoaque River, 6.8 mi west of Pojoaque, and at mile 1,614.2.

DRAINAGE AREA.-- 14,300 mi², approximately, including 2,940 mi² in closed basin in San Luis Valley, Colorado.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--February 1895 to December 1905, June 1909 to current year. Monthly discharge only for some periods, published in WSP 1312. In early reports this record was published as "at Water Tank," as "at Rio Grande," and as "near Buckman."

REVISED RECORDS.--WSP 828: drainage area. WSP 1512: 1895-99, 1904-06, 1911-12, 1914, 1931(M), 1935. WSP 1712: 1904(M). WDR-NM-90: 1989.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 5,488.48 ft above NGVD of 1929. See WSP 1312, 1732, or 1923 for history of changes prior to June 1, 1910.

REMARKS.--Water-discharge records good, except estimated daily discharge, which are poor. Considerable regulation by Heron Reservoir (station 08284510), El Vado Reservoir (station 08285000), and Abiquiu Reservoir (station 08286900) on Rio Chama, which can contribute a major portion of the total flow. Flow affected by release of transmountain water from Heron Reservoir since May 1971. Diversions upstream from station for irrigation of about 620,000 acres in Colorado and 75,000 acres in New Mexico.

EXTREMES OUTSIDE PERIOD OF RECORD.--The 1920 flood is greatest since at least 1884 and probably since 1741; information from file of W.H. Yeo on floods.

08313000 RIO GRANDE AT OTOWI BRIDGE, NEAR SAN ILDEFONSO, NM—Continued

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	722	821	910	800	692	831	1,960	1,440	2,170	1,230	963	885
2	688	796	788	784	684	802	1,830	1,900	2,090	1,380	1,090	1,170
3	668	919	846	761	648	785	1,780	2,610	2,020	1,260	975	890
4	659	1,310	824	762	652	773	1,750	2,810	2,000	1,160	885	819
5	664	1,950	817	766	685	762	1,790	2,950	1,780	1,280	887	684
6	669	2,010	838	761	696	833	1,870	3,100	1,830	1,180	936	603
7	680	1,940	910	722	694	817	1,940	2,960	1,830	1,150	989	600
8	727	1,670	935	675	703	846	1,780	2,990	1,650	1,080	840	727
9	840	1,310	979	711	716	907	1,730	2,270	1,590	867	797	787
10	1,230	1,270	1,000	708	734	968	1,710	2,460	1,470	765	732	1,090
11	1,780	1,250	1,030	716	751	1,010	1,630	2,690	1,310	916	924	927
12	1,810	1,220	1,030	725	786	1,070	1,450	2,700	1,370	980	1,060	810
13	1,320	1,220	1,030	764	798	1,090	1,410	2,610	1,460	1,290	1,080	683
14	1,120	1,180	1,010	772	783	1,160	1,270	2,680	1,550	1,470	942	661
15	1,120	1,130	1,010	695	777	1,300	1,200	2,880	1,570	1,410	863	650
16	1,010	1,110	1,040	634	759	1,450	1,300	3,300	1,750	1,170	927	791
17	942	1,100	1,040	646	753	1,650	1,390	3,520	1,780	979	1,100	1,100
18	1,060	1,100	1,060	664	793	1,990	1,390	3,740	1,540	848	1,020	1,020
19	1,120	1,100	1,080	648	802	2,150	1,390	3,640	1,280	888	1,080	791
20	1,050	1,110	1,060	665	807	2,240	1,310	3,500	1,140	1,190	1,040	728
21	940	1,150	980	660	806	2,290	1,280	3,350	1,030	1,130	1,130	712
22	859	1,150	866	649	817	2,290	1,230	3,110	997	1,120	1,150	644
23	815	1,140	777	640	829	2,290	1,130	3,070	1,170	1,140	1,220	624
24	851	1,110	741	647	826	2,350	1,170	3,080	1,140	1,010	1,250	660
25	809	1,120	706	676	814	2,270	1,200	2,960	1,320	879	1,080	614
26	771	1,110	707	674	820	2,190	1,180	2,940	1,440	833	1,010	567
27	839	1,100	760	662	837	2,110	1,200	2,840	1,440	1,160	981	556
28	907	1,090	785	660	864	2,080	1,160	2,760	1,250	743	818	633
29	887	1,080	805	669	---	2,020	1,200	2,710	1,190	728	737	762
30	852	1,080	806	666	---	1,980	1,260	2,500	1,160	847	881	e670
31	831	---	798	688	---	2,050	---	2,340	---	896	802	---
Total	29,240	36,646	27,968	21,670	21,326	47,354	43,890	88,410	45,317	32,979	30,189	22,858
Mean	943	1,222	902	699	762	1,528	1,463	2,852	1,511	1,064	974	762
Max	1,810	2,010	1,080	800	864	2,350	1,960	3,740	2,170	1,470	1,250	1,170
Min	659	796	706	634	648	762	1,130	1,440	997	728	732	556
Ac-ft	58,000	72,690	55,470	42,980	42,300	93,930	87,060	175,400	89,890	65,410	59,880	45,340

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 2007, BY WATER YEAR (WY)

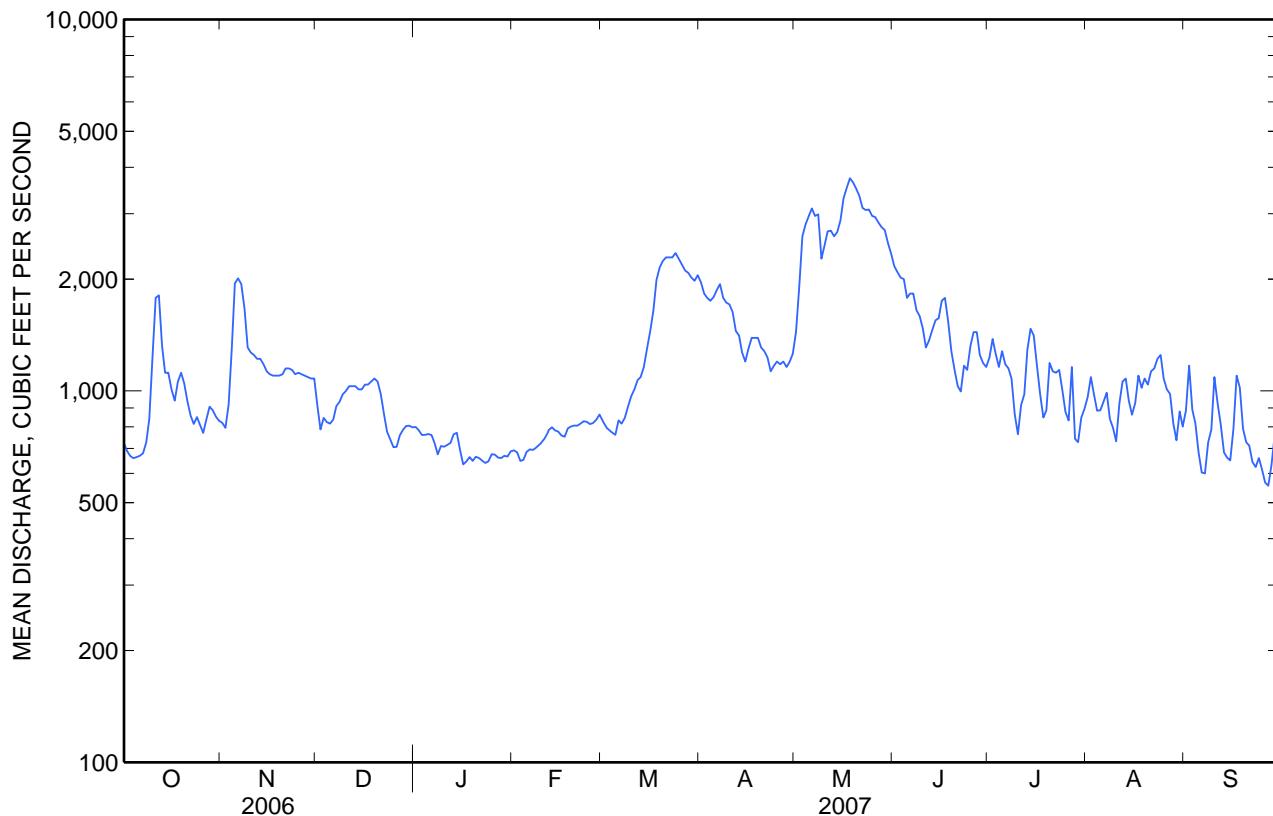
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	788	931	890	779	885	1,300	2,107	3,469	3,012	1,486	990	880
Max	2,225	2,034	1,959	1,757	2,641	3,127	6,412	8,390	7,914	4,548	2,132	1,553
(WY)	(1998)	(1987)	(1976)	(1986)	(1987)	(1987)	(1985)	(1985)	(1979)	(1995)	(1999)	(1999)
Min	361	368	426	436	498	610	489	433	470	394	391	263
(WY)	(1975)	(2003)	(2003)	(1977)	(2003)	(2003)	(1977)	(1977)	(1972)	(1972)	(1972)	(1974)

08313000 RIO GRANDE AT OTOWI BRIDGE, NEAR SAN ILDEFONSO, NM—Continued**SUMMARY STATISTICS**

	Calendar Year 2006	Water Year 2007			Water Years 1971 - 2007
Annual total	331,819		447,847		
Annual mean	909		1,227		^a 1,461
Highest annual mean					2,764
Lowest annual mean					602
Highest daily mean	2,010	Nov 6	3,740	May 18	12,000 May 11, 1985
Lowest daily mean	483	Aug 3	556	Sep 27	195 Aug 4, 1977
Annual seven-day minimum	531	Jul 30	614	Sep 22	229 Sep 11, 1971
Maximum peak flow			3,840	May 18	24,400 May 23, 1920
Maximum peak stage				6.08 May 18	^b 14.50 Sep 29, 1904
Instantaneous low flow			519	Sep 28	195 Aug 4, 1977
Annual runoff (ac-ft)	658,200		888,300		1,058,000
10 percent exceeds	1,320		2,180		3,330
50 percent exceeds	846		1,030		967
90 percent exceeds	591		684		490

^a Average discharge for 71 years (water years 1895-1914, 1916, 1920-1970), 1530 ft³/s; 1,108,000 acre-ft/yr.

^b Present site and datum.



08313000 RIO GRANDE AT OTOWI BRIDGE, NEAR SAN ILDEFONSO, NM—Continued**WATER-QUALITY RECORDS**

PERIOD OF RECORD.--Water years 1947 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1946 to September 1997, April 2004 to current year. WATER TEMPERATURE: October 1948 to September 1993, April 2004 to current year. SUSPENDED-SEDIMENT DISCHARGE: October 1947 to current year

INSTRUMENTATION.--Specific conductance recorder operated from October 1978 to September 1986, and April 2004 to current year. Water Temperature recorder operated from October 1954 to September 1986, and April 2004 to current year. Automatic pumping samplers for daily suspended-sediment samples from October 1993 to current.

REMARKS.--Specific conductance values from October 1946 to September 1997 were determined in the laboratory from daily suspended sediment samples collected once daily by the field observer. Water temperature values from October 1948 to September 1993 were determined once daily by the field observer. Interruptions in the record were due to malfunctions of the instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 1,310 microsiemens, Aug. 5, 1963; minimum daily, 88 microsiemens, May 12, 1984. WATER TEMPERATURE: Maximum daily, 31.0 °C, Aug. 4, 5, 1954; minimum daily, freezing point many days during winter months.

SEDIMENT CONCENTRATION: Maximum daily mean, 65,000 mg/L, July 5, 2006; minimum daily mean, 11 mg/L, July 27, 1963 and Feb. 7, 1974.

SEDIMENT LOAD: Maximum daily, 386,000 tons, July 6, 1995; minimum daily, 3 tons, July 27, 1963.

EXTREMES FOR WATER YEAR 2006.-- SEDIMENT CONCENTRATION: Maximum daily mean, 65,000 mg/L, July. 5; minimum daily mean, 136 mg/L, December. 5. SEDIMENT LOAD: Maximum daily 247,000 tons, July. 5; minimum daily, 250 tons, December 7.

**WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 1 of 5

[Remark codes: <, less than; E, estimated.]

Date	Time	Turbidity		Barometric pressure, mm Hg	Dissolved oxygen, mg/L	Percent of saturation (00301)	pH, water, field, std units (00400)	Specific conductance, µS/cm (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO ₃ (00900)	Calcium water, mg/L (00915)	Magnesium water, mg/L (00925)
		Instantaneous discharge, cfs (00061)	white light, det ang 90+/-30 degrees NTU (63675)										
Nov 28...	1350	1,080	15	623	10.8	105	8.4	247	11.0	5.5	94	28.7	5.25
May 01...	1330	1,520	--	627	9.0	111	8.4	304	23.5	16.0	110	32.9	6.00
Aug 14...	1315	955	--	633	7.8	110	8.2	259	38.0	23.0	95	29.5	5.12
Sep 14...	1123	669	--	626	8.4	109	8.0	297	24.0	18.0	--	--	--

08313000 RIO GRANDE AT OTOWI BRIDGE, NEAR SAN ILDEFONSO, NM—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 2 of 5

[Remark codes: <, less than; E, estimated.]

Date	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium water, fltrd, mg/L (00930)	Alka-linity, wat flt fxd end	Alka-linity, wat flt inc tit	Bicar-bonate, wat flt incr.	Carbon-ate, wat flt titr., field,	Chlor-incrm.	Fluor-ide, water, fltrd, mg/L (00940)	Silica, water, fltrd, mg/L (00955)	Sulfate, water, fltrd, mg/L (00945)	Residue water, filtr, sum of constituents, mg/L (70301)	Residue on evap. at 180degC
Nov 28...	2.38	.7	14.8	93	94	112	--	4.61	.32	22.6	31.5	166	165
May 01...	2.76	.8	19.4	99	102	121	1	6.30	.37	16.9	51.4	197	208
Aug 14...	2.18	.6	14.2	93	92	E111	--	3.79	.31	19.5	33.4	163	171
Sep 14...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 3 of 5

[Remark codes: <, less than; E, estimated.]

Date	Ammonia		Ammonia		Nitrate		Ortho-phosphate		Organic		E coli, m-TEC		Fecal coliform, M-FC
	+ org-N, water, fltrd, mg/L as N (00623)	+ org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Ammonia water, unfltrd mg/L as N (00610)	+ nitrite water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Phosphorus, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L as P (00666)	water, unfltrd mg/L (00665)	water, fltrd, mg/L (00681)	water, fltrd, 100 mL (31633)	water, col/100 mL (31625)	MF, 0.7u MF
Nov 28...	.14	.23	<.020	<.100	E.05	E.001	.015	.013	.187	.7	<11	<3	4.6
May 01...	.39	.59	<.020	--	<.06	<.002	.012	.018	.209	6.7	270	E34	6.1
Aug 14...	.27	.61	<.020	--	<.06	E.001	.027	.035	.298	3.7	1,000	900	5.8
Sep 14...	--	--	--	--	--	--	--	--	--	--	--	--	--

08313000 RIO GRANDE AT OTOWI BRIDGE, NEAR SAN ILDEFONSO, NM—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 4 of 5

[Remark codes: <, less than; E, estimated.]

Date	Anti-mony, water, fltrd, µg/L (01095)	Arsenic water, fltrd, µg/L (01000)	Barium, water, fltrd, µg/L (01005)	Beryll- ium, water, fltrd, µg/L (01010)	Boron, water, fltrd, µg/L (01020)	Cadmium water, fltrd, µg/L (01025)	Chrom- ium, water, fltrd, µg/L (01030)	Cobalt water, fltrd, µg/L (01035)	Copper, water, fltrd, µg/L (01040)	Iron, water, fltrd, µg/L (01046)	Lead, water, fltrd, µg/L (01049)	Lithium water, fltrd, µg/L (01130)	Mangan- ese, water, fltrd, µg/L (01056)
Nov 28...	.06	1.5	44	<.06	27	<.04	.30	E.03	.47	20	<.12	10.3	1.9
May 01...	.07	1.6	51	<.06	33	<.04	.24	.07	1.1	17	<.12	13.4	3.9
Aug 14...	.09	2.3	51	<.06	25	<.04	.21	.07	.90	8	E.06	10.1	.9
Sep 14...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 5 of 5

[Remark codes: <, less than; E, estimated.]

Date	Mercury water, fltrd, µg/L (71890)	Mercury unfltrd recover- able, µg/L (71900)	Molyb- denum, water, fltrd, µg/L (01060)	Nickel, water, fltrd, µg/L (01065)	Selen- ium, water, fltrd, µg/L (01145)	Selen- ium, water, unfiltrd, µg/L (01147)	Silver, water, fltrd, µg/L (01075)	Stront- ium, water, fltrd, µg/L (01080)	Vanad- ium, water, fltrd, µg/L (01085)	Zinc, water, fltrd, µg/L (01090)	Uranium natural water, fltrd, µg/L (22703)	Suspnd. sediment, sieve diametr <.063mm (70331)	Sus- pended sediment concent- ration mg/L (80154)
Nov 28...	<.010	<.010	4.0	.39	.20	.22	<.1	207	2.4	1.7	1.78	4	766
May 01...	E.006	.011	3.6	.53	.22	.25	<.1	258	2.4	1.1	1.75	5	2,160
Aug 14...	<.010	<.010	4.1	.61	.23	.26	<.1	244	3.8	E.38	1.29	38	392
Sep 14...	--	--	--	--	--	--	--	--	--	--	--	--	--

08313000 RIO GRANDE AT OTOWI BRIDGE, NEAR SAN ILDEFONSO, NM—Continued
TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	October				November				December			
1	17.1	12.2	14.8	9.8	6.2	8.1	2.2	0.0	1.0	3.1	1.2	1.9
2	16.7	12.4	14.8	9.6	6.3	8.1	2.6	0.0	1.1	2.1	0.0	0.9
3	17.7	12.7	15.2	9.7	6.1	8.1	2.8	0.7	1.6	1.3	0.0	0.5
4	18.3	13.9	16.2	9.7	6.8	8.4	2.4	0.0	1.1	2.0	0.0	0.8
5	18.2	14.8	16.5	10.4	7.7	9.0	2.9	0.0	1.4	3.9	0.8	2.2
6	18.0	15.2	16.7	10.1	7.9	9.0	3.7	0.1	2.0	3.7	1.2	2.3
7	18.4	15.2	16.6	9.9	7.8	8.9	3.7	0.8	2.4	2.6	0.0	1.1
8	16.8	14.5	15.4	10.6	7.6	9.1	3.8	0.8	2.4	2.0	0.0	0.8
9	14.7	13.1	13.9	10.2	7.4	9.0	3.5	0.7	2.3	2.3	0.0	0.9
10	14.6	11.5	13.2	9.3	6.9	8.2	3.7	0.8	2.4	2.3	0.0	1.0
11	14.5	11.5	13.0	7.7	5.2	6.7	4.6	2.5	3.4	4.6	0.8	2.6
12	14.5	11.0	12.8	8.7	6.2	7.2	4.0	1.1	2.7	5.0	2.5	3.7
13	14.3	10.4	12.5	6.9	4.9	5.9	4.2	1.6	3.0	5.6	3.2	4.4
14	13.0	10.9	12.1	7.2	4.1	5.5	4.1	1.9	3.1	5.1	1.6	3.7
15	14.8	12.3	13.4	6.0	3.5	4.8	4.3	1.9	3.1	1.6	0.0	0.7
16	15.0	11.4	13.2	5.8	2.8	4.4	4.0	1.8	3.0	0.7	0.0	0.1
17	13.8	11.4	12.7	6.1	2.9	4.6	5.0	2.0	3.5	0.4	0.0	0.1
18	13.4	10.6	11.8	6.5	3.3	5.0	4.5	3.0	3.9	0.1	0.0	0.0
19	12.1	9.0	10.6	6.8	3.8	5.4	4.2	3.3	3.8	0.3	0.0	0.1
20	11.9	8.2	10.0	6.7	3.8	5.4	3.3	1.9	2.7	0.7	0.0	0.3
21	12.0	8.5	10.2	6.5	3.7	5.2	2.6	0.2	1.5	2.5	0.0	1.1
22	11.6	7.9	9.7	6.6	3.6	5.2	1.7	0.0	0.7	3.2	0.3	1.6
23	11.3	7.1	9.2	6.4	3.7	5.2	1.8	0.0	0.6	2.4	0.0	1.0
24	10.0	8.1	9.0	5.4	3.7	4.7	2.2	0.0	0.8	3.0	0.0	1.3
25	11.2	8.1	9.4	6.9	4.0	5.5	1.6	0.0	0.6	3.5	0.0	1.7
26	10.2	7.9	9.0	6.6	4.1	5.4	2.0	0.0	0.7	3.6	0.0	1.8
27	9.4	6.1	7.8	6.0	4.0	5.1	2.8	0.0	1.4	3.7	0.9	2.1
28	10.2	6.1	8.2	6.2	4.1	5.0	3.2	1.4	2.2	4.2	0.3	2.3
29	9.6	6.9	8.5	4.7	2.2	4.0	3.4	1.6	2.6	4.8	1.5	3.1
30	10.3	6.6	8.5	2.9	0.5	1.8	3.0	1.6	2.2	3.8	1.2	2.5
31	9.8	6.2	8.1	---	---	---	3.8	1.4	2.3	3.8	1.6	2.6
Month	18.4	6.1	12.0	10.6	0.5	6.3	5.0	0.0	2.1	5.6	0.0	1.6

08313000 RIO GRANDE AT OTOWI BRIDGE, NEAR SAN ILDEFONSO, NM—Continued
TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	February				March				April			
1	3.6	1.6	2.5	6.0	2.8	4.5	12.0	7.1	9.5	17.2	13.9	15.6
2	3.2	0.2	1.7	5.2	1.2	3.4	12.8	8.5	10.6	16.0	13.8	14.7
3	3.2	0.0	1.3	5.2	1.1	3.2	12.7	9.3	11.1	16.0	11.5	13.8
4	4.0	0.0	1.9	6.2	1.4	3.8	13.6	9.6	11.7	15.3	12.3	13.8
5	5.4	0.9	3.1	6.9	2.2	4.8	13.8	10.2	12.0	13.3	10.4	11.6
6	6.2	1.9	4.1	8.8	3.9	6.5	12.9	10.6	11.6	12.5	8.7	10.6
7	6.9	2.8	4.8	9.9	5.6	7.9	10.6	7.8	8.8	14.0	8.7	11.4
8	7.2	3.2	5.2	9.3	6.5	7.8	10.1	7.3	8.6	13.0	10.0	11.6
9	6.5	3.8	5.2	10.2	5.6	7.9	12.2	8.7	10.2	15.5	10.5	12.9
10	7.0	4.0	5.6	8.6	6.3	7.3	12.7	9.4	11.0	16.4	11.6	14.0
11	6.8	5.3	6.0	10.0	5.9	7.9	11.2	7.7	9.5	16.5	12.0	14.4
12	8.2	5.4	6.6	10.4	6.6	8.7	11.2	8.2	9.5	16.6	12.2	14.6
13	6.4	4.6	5.4	11.7	7.5	9.7	10.4	7.3	8.9	16.2	12.7	14.4
14	5.2	3.3	4.3	12.1	8.6	10.5	11.8	5.5	8.5	14.6	12.5	13.7
15	6.2	2.0	4.2	12.6	8.6	10.8	13.4	8.4	11.0	15.5	11.6	13.3
16	6.6	2.2	4.5	12.5	8.8	10.9	12.6	9.6	11.3	15.4	11.7	13.5
17	---	---	---	12.4	8.2	10.5	14.2	9.6	11.9	14.7	11.9	13.4
18	5.9	3.1	4.7	11.9	8.3	10.3	14.4	10.2	12.5	16.4	11.9	14.2
19	7.7	3.9	5.6	10.9	8.2	9.7	14.9	10.9	12.9	15.9	12.2	14.2
20	8.1	4.6	6.1	12.6	8.4	10.4	14.3	10.2	12.5	16.0	12.3	14.2
21	8.3	4.0	6.3	11.8	9.1	10.5	13.1	10.2	11.6	16.7	12.7	14.7
22	6.7	4.3	5.7	12.1	9.3	10.5	13.3	8.0	10.8	16.0	12.4	14.4
23	6.3	3.5	5.0	10.9	9.1	9.7	14.3	9.9	12.1	14.6	11.6	13.0
24	6.5	3.4	4.8	9.6	8.1	8.9	13.0	10.5	11.4	15.3	10.7	13.0
25	6.2	2.3	4.4	11.6	7.5	9.5	14.6	8.8	11.7	14.8	12.3	13.6
26	7.9	3.4	5.7	12.6	8.2	10.4	14.8	10.6	12.8	16.6	11.5	14.0
27	8.4	4.0	6.3	13.0	9.2	11.1	16.8	10.8	13.8	16.1	13.1	14.7
28	7.2	4.7	6.1	11.6	9.0	10.3	16.6	13.2	15.1	17.0	13.1	15.0
29	---	---	---	9.8	6.8	8.2	17.9	13.0	15.4	16.9	12.9	15.0
30	---	---	---	8.7	6.0	7.4	17.8	14.3	15.9	16.9	12.9	15.0
31	---	---	---	10.5	5.8	8.0	---	---	---	16.1	12.8	14.6
Month	---	---	---	13.0	1.1	8.4	17.9	5.5	11.5	17.2	8.7	13.8

08313000 RIO GRANDE AT OTOWI BRIDGE, NEAR SAN ILDEFONSO, NM—Continued
**TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	17.6	13.3	15.4	22.8	18.3	20.6	24.6	20.1	22.3	23.1	19.1	21.1
2	17.6	14.4	16.0	21.8	18.9	20.4	23.9	20.4	22.2	22.2	18.9	20.6
3	16.8	14.8	15.8	22.4	17.8	20.2	25.5	20.8	22.8	22.7	18.5	20.8
4	16.6	14.3	15.5	22.7	19.4	20.8	26.1	21.2	23.6	22.7	18.3	20.8
5	18.3	14.1	16.1	21.2	17.7	19.6	26.2	21.9	24.1	25.2	18.9	21.4
6	17.8	15.5	16.6	22.2	18.0	20.2	25.7	21.9	23.5	24.2	17.3	20.5
7	16.8	13.3	15.2	22.5	18.6	20.7	23.8	19.6	21.9	27.2	14.8	21.0
8	17.4	12.8	15.1	22.6	18.8	20.8	24.8	19.5	22.3	23.5	18.8	21.1
9	18.8	14.6	16.5	23.5	18.5	21.2	25.0	20.3	22.7	21.9	19.1	20.2
10	19.4	15.0	17.2	23.6	19.1	21.5	25.2	19.8	22.8	20.6	17.6	19.2
11	19.6	15.7	17.7	21.8	18.7	20.6	24.9	21.0	23.0	20.7	17.4	19.2
12	18.8	16.3	17.6	23.4	18.8	20.9	23.8	21.0	22.5	21.1	17.5	19.3
13	20.1	16.1	17.9	22.2	18.9	20.6	23.9	20.5	22.3	21.2	16.0	18.9
14	19.9	15.6	17.8	21.4	17.6	19.6	24.5	20.1	22.3	20.9	16.2	18.9
15	21.0	16.8	18.9	21.6	18.5	19.9	25.0	20.1	22.6	21.8	17.2	19.4
16	21.4	17.6	19.6	22.6	18.1	20.3	23.5	20.2	22.1	21.6	17.4	19.5
17	21.9	16.0	19.1	24.3	19.0	21.5	23.2	19.0	21.2	19.5	14.0	18.0
18	21.9	17.8	20.0	24.7	20.0	22.5	22.8	20.1	21.6	20.2	16.2	18.1
19	22.5	17.7	20.3	23.7	20.1	21.9	22.9	19.5	21.3	19.9	15.6	17.9
20	23.0	18.8	21.1	21.8	19.2	20.5	23.5	19.0	21.3	19.2	17.0	18.1
21	22.7	19.7	21.3	23.3	19.2	21.1	23.0	18.6	21.1	21.0	16.5	18.7
22	21.8	19.0	20.6	23.6	19.5	21.4	22.3	18.6	20.5	21.6	17.3	19.5
23	22.8	18.4	20.7	24.0	20.2	22.0	22.3	18.5	20.4	20.8	17.4	19.2
24	23.1	18.4	20.8	24.3	19.8	22.0	22.2	18.8	20.4	19.5	16.3	18.1
25	22.0	18.4	20.3	24.9	20.2	22.6	22.1	18.6	20.6	18.9	14.7	17.0
26	21.2	17.3	19.4	23.8	20.8	22.1	21.5	19.4	20.7	19.1	13.9	16.6
27	20.9	17.8	19.3	22.8	16.9	20.0	22.5	18.2	20.4	18.1	13.2	15.9
28	21.6	17.7	19.5	24.7	19.7	22.0	23.4	18.4	20.9	16.9	13.7	15.5
29	21.4	17.4	19.6	23.8	20.3	22.1	22.8	19.6	21.3	---	---	---
30	22.3	17.4	20.0	24.0	20.4	22.4	23.7	18.9	21.4	---	---	---
31	---	---	---	25.2	20.2	22.7	24.0	19.9	21.9	---	---	---
Month	23.1	12.8	18.4	25.2	16.9	21.1	26.2	18.2	21.9	---	---	---

08313000 RIO GRANDE AT OTOWI BRIDGE, NEAR SAN ILDEFONSO, NM—Continued**SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
October				November				December				January
1	326	271	313	273	268	270	297	290	293	---	---	---
2	302	271	284	284	272	278	300	291	296	---	---	---
3	331	302	318	287	282	284	320	300	310	---	---	---
4	337	284	312	290	256	275	327	320	324	---	---	---
5	306	287	298	269	255	261	330	325	328	---	---	---
6	312	297	302	261	251	256	338	329	334	---	---	---
7	303	296	299	262	251	255	342	328	334	---	---	---
8	309	302	307	259	237	242	333	327	330	---	---	---
9	320	305	312	242	223	229	331	324	326	---	---	---
10	319	291	302	230	225	227	324	314	318	---	---	---
11	299	278	288	230	228	229	314	306	309	---	---	---
12	294	261	285	233	228	230	313	306	310	298	285	293
13	306	249	286	240	230	234	311	306	308	301	290	296
14	308	249	283	244	239	241	310	306	308	299	294	296
15	293	224	244	260	241	246	306	297	301	297	283	292
16	252	235	245	281	260	273	306	292	299	312	282	292
17	254	244	249	286	281	284	302	293	297	322	279	298
18	263	254	259	290	284	287	305	300	303	319	285	298
19	258	243	251	291	280	288	---	---	---	318	286	298
20	243	237	239	283	277	280	---	---	---	306	289	297
21	240	237	239	280	276	278	---	---	---	302	291	297
22	243	239	241	280	270	275	---	---	---	301	294	298
23	246	241	243	283	275	281	---	---	---	309	299	304
24	251	245	248	283	280	282	---	---	---	318	296	305
25	255	251	253	286	280	283	---	---	---	311	294	300
26	261	255	258	290	284	288	---	---	---	300	292	296
27	265	260	263	290	283	286	---	---	---	295	288	292
28	267	265	266	296	289	293	---	---	---	293	288	290
29	267	265	266	298	294	296	---	---	---	294	286	290
30	270	264	267	300	296	298	---	---	---	296	283	288
31	270	266	268	---	---	---	---	---	---	296	281	287
Month	337	224	274	300	223	268	---	---	---	---	---	---

08313000 RIO GRANDE AT OTOWI BRIDGE, NEAR SAN ILDEFONSO, NM—Continued**SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
February				March				April				May
1	292	280	285	277	271	275	---	---	---	315	299	304
2	293	281	286	276	268	273	---	---	---	310	292	304
3	294	279	288	---	---	---	---	---	---	292	261	273
4	301	282	291	---	---	---	---	---	---	271	247	260
5	296	289	292	---	---	---	234	226	230	263	251	254
6	299	284	290	---	---	---	227	220	224	272	263	267
7	298	285	291	---	---	---	232	220	226	288	272	279
8	293	285	289	---	---	---	236	227	232	292	285	289
9	295	287	291	---	---	---	247	236	240	289	283	286
10	294	287	291	---	---	---	255	247	251	310	287	303
11	292	288	290	---	---	---	261	250	258	324	310	316
12	297	287	292	---	---	---	265	259	262	323	316	319
13	297	291	294	---	---	---	265	261	263	320	315	317
14	302	290	296	---	---	---	293	265	280	321	309	316
15	293	288	290	248	240	243	295	286	291	309	299	306
16	295	285	290	242	233	238	299	286	292	301	283	294
17	---	---	---	242	229	235	323	286	308	293	272	285
18	290	280	285	---	---	---	332	314	322	275	266	270
19	291	278	284	---	---	---	329	308	320	272	266	268
20	288	283	285	---	---	---	331	314	324	330	266	284
21	287	283	285	---	---	---	327	307	320	278	273	275
22	288	281	285	---	---	---	326	307	316	283	274	278
23	285	278	282	---	---	---	333	323	329	292	280	286
24	282	274	279	---	---	---	324	315	319	304	292	299
25	280	276	279	---	---	---	324	315	320	303	296	299
26	284	275	279	---	---	---	329	318	325	308	298	302
27	280	275	278	---	---	---	327	317	322	310	301	307
28	280	271	275	---	---	---	335	312	325	323	308	315
29	---	---	---	---	---	---	314	301	310	328	321	325
30	---	---	---	---	---	---	312	301	306	335	325	329
31	---	---	---	---	---	---	---	---	---	340	332	336
Month	---	---	---	---	---	---	---	---	---	340	247	295

08313000 RIO GRANDE AT OTOWI BRIDGE, NEAR SAN ILDEFONSO, NM—Continued**SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
				June			July			August		
1	349	340	346	341	335	338	---	---	---	---	---	---
2	348	333	343	338	329	332	---	---	---	---	---	---
3	335	321	331	339	331	335	---	---	---	---	---	---
4	329	319	323	348	335	344	---	---	---	---	---	---
5	331	320	328	337	322	329	---	---	---	---	---	---
6	334	325	330	331	324	327	---	---	---	---	---	---
7	344	333	339	332	324	328	---	---	---	---	---	---
8	335	320	329	333	328	330	---	---	---	299	270	289
9	335	320	326	346	329	338	---	---	---	300	290	295
10	348	332	341	---	---	---	---	---	---	300	284	289
11	343	325	338	---	---	---	---	---	---	299	290	294
12	325	300	310	337	332	334	---	---	---	300	295	298
13	320	300	312	338	325	330	---	---	---	301	296	299
14	333	319	327	335	315	324	---	---	---	305	299	301
15	360	333	343	331	320	326	---	---	---	305	300	302
16	384	325	372	326	313	320	---	---	---	311	303	306
17	343	287	329	317	314	315	---	---	---	306	223	297
18	324	315	318	320	315	318	---	---	---	332	301	317
19	341	317	330	322	294	318	---	---	---	321	314	318
20	355	339	348	---	---	---	---	---	---	321	308	316
21	364	355	360	---	---	---	---	---	---	328	311	316
22	362	353	358	---	---	---	---	---	---	319	293	306
23	354	338	343	---	---	---	---	---	---	308	296	304
24	354	340	346	---	---	---	---	---	---	322	276	293
25	346	336	340	---	---	---	---	---	---	301	292	297
26	346	337	342	---	---	---	---	---	---	303	294	298
27	347	323	342	---	---	---	---	---	---	304	279	290
28	354	322	348	---	---	---	---	---	---	294	260	280
29	343	337	339	---	---	---	---	---	---	---	---	---
30	343	333	338	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
Month	384	287	337	---	---	---	---	---	---	---	---	---

08313000 RIO GRANDE AT OTOWI BRIDGE, NEAR SAN ILDEFONSO, NM—Continued
**SUSPENDED-SEDIMENT
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006**

Day	Mean concentration (mg/L)	Sediment discharge (tons/day)										
October		November		December		January		February		March		
1	371	498	283	557	160	276	4,710	10,600	993	1,630	314	590
2	564	729	288	565	180	336	4,970	11,100	959	1,600	295	533
3	687	979	311	614	164	328	5,110	11,500	924	1,550	276	487
4	856	1,490	334	691	158	338	5,250	11,900	890	1,470	258	462
5	1,480	2,720	357	718	136	260	4,760	10,100	856	1,390	239	432
6	2,210	3,900	380	750	151	257	3,550	6,700	821	1,350	220	398
7	726	1,150	403	787	158	250	2,440	4,500	787	1,260	204	366
8	606	872	426	826	163	260	2,130	3,910	752	1,170	207	368
9	19,100	40,200	449	857	178	291	1,990	3,700	718	1,160	213	368
10	9,620	14,500	472	911	268	463	1,850	3,390	683	1,100	218	378
11	1,510	2,320	1,800	3,910	399	737	1,710	2,900	653	1,020	224	397
12	796	1,250	4,700	12,000	536	1,010	1,580	2,600	633	926	230	422
13	491	792	5,320	13,700	668	1,300	1,470	2,380	614	867	236	400
14	633	1,210	5,690	14,500	772	1,500	1,450	2,340	596	899	242	368
15	548	993	5,690	14,300	872	1,620	1,420	2,400	577	899	248	383
16	472	861	5,320	12,900	971	1,750	1,400	2,460	558	851	254	381
17	513	864	4,940	11,400	1,070	1,970	1,380	2,360	539	835	262	375
18	448	701	4,310	10,400	1,190	2,220	1,360	2,120	520	803	338	594
19	6,160	12,600	2,510	6,150	1,180	2,200	1,340	2,200	502	748	444	899
20	2,590	4,550	780	1,830	891	1,640	1,320	2,260	483	708	550	1,140
21	754	1,330	375	868	1,290	2,400	1,300	2,160	464	733	589	1,150
22	563	970	205	487	950	1,900	1,280	1,980	445	690	546	1,020
23	406	629	161	377	1,470	3,080	1,260	1,960	427	669	502	934
24	337	516	143	329	1,970	4,220	1,230	1,880	408	637	458	833
25	318	481	153	353	3,330	7,130	1,200	1,880	389	614	414	696
26	297	459	149	342	2,760	6,090	1,170	1,910	370	594	371	595
27	329	557	142	318	2,500	5,620	1,140	1,860	352	575	327	537
28	387	718	146	329	4,230	9,200	1,110	1,810	333	587	313	587
29	400	777	157	318	4,630	10,300	1,080	1,760	---	---	909	2,030
30	427	850	155	302	2,080	4,660	1,050	1,710	---	---	3,600	8,870
31	367	735	---	---	3,580	7,960	1,020	1,670	---	---	2,780	6,740
Total	---	101,201	---	112,389	---	81,566	---	122,000	---	27,335	---	33,733

08313000 RIO GRANDE AT OTOWI BRIDGE, NEAR SAN ILDEFONSO, NM—Continued
**SUSPENDED-SEDIMENT
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006**

Day	Mean concentration (mg/L)	Sediment discharge (tons/day)										
April		May		June		July		August		September		
1	2,720	5,970	1,940	5,350	2,150	6,000	2,700	7,430	1,910	3,050	7,780	16,800
2	1,570	2,790	1,960	4,600	3,380	11,800	1,560	4,460	4,710	6,710	5,260	10,800
3	3,030	6,440	1,250	2,950	5,070	18,300	7,060	20,600	10,100	13,300	4,830	9,960
4	2,080	4,350	938	2,560	4,460	16,400	4,540	12,000	14,900	22,800	7,730	15,800
5	1,420	3,380	790	2,210	10,600	43,400	65,000	247,000	7,710	11,500	5,270	11,500
6	1,910	5,000	3,350	10,100	6,420	26,100	26,300	124,000	15,700	62,500	5,240	10,800
7	2,230	5,910	3,480	10,600	5,650	21,200	44,800	75,800	24,600	55,400	4,670	11,600
8	2,810	6,590	3,030	8,720	2,060	7,060	13,500	18,600	10,100	17,500	8,250	21,500
9	1,980	4,490	1,720	4,470	2,900	9,540	8,040	13,800	13,300	36,200	29,500	62,400
10	1,970	5,170	1,000	2,200	2,310	7,670	9,370	14,800	12,400	28,100	9,710	18,300
11	4,490	11,800	1,130	2,660	2,550	9,230	9,090	14,500	31,200	138,000	6,900	12,900
12	5,190	14,200	2,130	5,970	7,040	25,900	5,730	11,200	19,900	85,200	4,750	8,340
13	6,710	21,500	2,340	6,900	4,920	18,900	7,000	15,500	23,900	93,000	3,580	6,030
14	9,430	33,200	1,300	3,840	6,640	28,400	9,160	16,900	34,900	161,000	3,020	5,160
15	8,560	30,400	1,210	3,650	23,300	101,000	4,940	8,420	20,300	73,900	3,270	5,870
16	7,950	19,300	2,180	6,540	12,100	29,100	2,450	5,650	16,900	54,500	3,690	6,740
17	3,630	8,560	2,870	8,000	8,940	34,200	2,940	7,470	7,730	17,800	4,250	7,400
18	3,160	8,290	1,550	4,010	25,700	107,000	4,370	11,200	4,960	11,000	4,810	7,390
19	3,870	10,500	1,670	4,420	14,500	61,200	4,640	14,600	4,860	14,100	4,490	8,460
20	2,570	7,660	1,040	2,690	15,400	62,800	3,290	7,720	13,700	48,300	4,850	10,400
21	5,580	17,100	1,150	3,210	5,790	20,800	4,650	12,100	23,400	98,500	10,300	30,500
22	2,250	6,640	1,110	3,040	4,580	16,600	7,500	25,700	16,200	43,600	5,360	11,900
23	4,810	12,600	992	3,150	16,400	62,800	20,700	81,100	25,700	61,300	3,600	7,220
24	1,830	4,540	5,570	19,200	5,850	22,000	6,540	16,900	13,000	29,500	2,530	4,970
25	2,710	7,000	9,440	34,700	2,000	7,370	7,400	20,800	12,200	26,900	2,520	4,520
26	3,300	8,030	7,770	28,800	4,480	16,000	6,270	18,000	10,100	24,600	2,660	4,830
27	3,530	9,270	4,720	16,200	6,050	19,700	4,480	10,300	19,700	39,800	3,660	7,310
28	2,030	5,850	2,350	7,460	4,010	9,890	2,840	5,370	9,260	17,500	4,780	10,100
29	3,110	9,260	1,270	4,340	1,640	2,640	1,750	2,860	6,830	12,700	5,590	11,900
30	3,920	11,200	878	3,080	1,420	2,990	1,390	1,980	11,300	24,100	6,170	12,200
31	---	---	2,020	5,490	---	---	1,180	1,550	14,700	32,700	---	---
Total	---	306,990	---	231,110	---	825,990	---	848,310	---	1,365,060	---	373,600