



Water-Data Report 2007

07215500 MORA RIVER AT LA CUEVA, NM

Upper Canadian Basin
Mora Subbasin

LOCATION.--Lat 35°56'26.47", long 105°15'00.94" referenced to North American Datum of 1983, Mora County, NM, Hydrologic Unit 11080004, in Mora Grant, on left bank 45 ft upstream from bridge on State Highway 518 at La Cueva, 0.3 mi downstream from La Cueva damsite, and at mile 86.8.

DRAINAGE AREA.--173 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--August 1903 to April 1905 (gage heights and discharge measurements only), May to December 1905, May 1906 to July 1911, April 1931 to current year. Monthly discharge only for some periods, published in WSP 1311. Records for February to April 1905, published in WSP 173, are unreliable and should not be used.

REVISED RECORDS.--WSP 857: 1937. WSP 1281: 1931(M), 1932. WSP 1511: drainage area. See also PERIOD OF RECORD.

GAGE.--Water-stage recorder. Elevation of gage is 7,000 ft above NGVD of 1929, from topographic map. Mar. 10, 1915, to June 4, 1921, water-stage recorder at site 2.8 mi upstream at different datum. July 6, 1921, to Jan. 5, 1929, nonrecording gage or water-stage recorder at site 0.7 mi downstream at datum about 14 ft lower. Jan. 6, 1929, to Apr. 1, 1972, water-stage recorder at site 0.7 mi downstream at datum about 15 ft lower.

REMARKS.--Records fair. Diversions upstream from station for irrigation of about 7,000 acres, part of which is downstream from station. See tabulation below for monthly and yearly diversion of La Cueva canal, which bypasses gage on left bank. La Cueva canal operated as a seasonal gage. Several observations of water temperature were made during the year. No flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 29, 1904, may have exceeded 20,000 ft³/s; another major flood occurred June 11, 1913, but is believed to have been less than flood of 1904.

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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	16	1.9	2.0	e0.90	0.69	1.1	13	15	62	19	18	17
2	16	1.9	1.6	0.80	0.63	1.2	11	48	63	21	28	27
3	16	1.9	1.5	0.90	1.4	0.84	9.9	68	59	21	39	18
4	16	1.9	1.8	1.7	3.7	0.71	10	64	61	23	38	17
5	17	1.9	1.6	1.6	0.97	0.95	12	61	56	24	39	18
6	17	1.9	1.5	1.2	0.95	0.72	15	58	54	21	38	19
7	17	1.9	1.5	1.0	0.84	0.69	16	53	50	22	40	18
8	21	1.9	1.6	0.99	0.78	0.64	16	46	41	23	38	18
9	20	1.9	1.5	1.0	0.70	0.63	12	44	40	20	40	19
10	24	1.9	1.5	0.94	0.70	0.62	11	43	48	16	40	20
11	18	1.8	1.5	0.97	0.69	0.61	12	35	49	17	41	19
12	18	1.8	1.5	1.1	0.69	0.60	14	30	79	18	39	17
13	18	1.7	1.5	1.2	0.69	0.63	22	31	87	24	38	16
14	19	1.7	1.5	1.1	0.69	0.62	23	40	80	24	36	17
15	19	1.5	1.5	1.2	0.73	3.8	27	51	73	23	35	17
16	13	1.5	1.5	1.1	5.4	9.9	27	64	61	21	33	15
17	4.8	1.5	1.5	1.1	14	12	26	73	56	20	31	16
18	3.9	1.5	1.5	1.1	14	12	27	77	50	21	31	18
19	3.3	1.5	1.5	1.1	15	11	30	100	47	21	28	16
20	3.4	1.5	1.5	0.70	15	11	30	117	43	21	28	17
21	2.8	1.5	1.3	0.02	14	11	26	120	44	22	24	20
22	2.4	1.5	1.4	0.00	14	11	26	112	43	21	23	18
23	2.3	1.4	1.3	0.01	14	12	17	103	28	24	20	19
24	2.2	1.4	1.3	0.03	14	15	15	97	27	25	14	19
25	2.2	1.5	1.3	0.03	14	13	14	93	25	18	14	19
26	2.1	1.4	1.3	0.04	14	9.0	14	103	22	21	14	19
27	2.0	1.4	1.4	0.09	6.2	3.1	14	100	18	21	15	19
28	2.0	1.5	1.4	0.34	1.2	3.4	17	97	19	21	14	19
29	2.0	1.5	1.3	0.60	---	8.1	21	89	19	20	15	21
30	1.9	1.3	1.2	0.66	---	12	14	84	20	27	18	19
31	1.9	---	e1.0	0.69	---	13	---	70	---	26	20	---
Total	324.2	49.4	45.3	24.21	169.65	180.86	541.9	2,186	1,424	666	889	551
Mean	10.5	1.65	1.46	0.78	6.06	5.83	18.1	70.5	47.5	21.5	28.7	18.4
Max	24	1.9	2.0	1.7	15	15	30	120	87	27	41	27
Min	1.9	1.3	1.0	0.00	0.63	0.60	9.9	15	18	16	14	15
Ac-ft	643	98	90	48	337	359	1,070	4,340	2,820	1,320	1,760	1,090

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1906 - 2007, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	16.6	10.5	8.03	7.67	7.38	10.5	32.1	77.4	63.7	33.2	42.7	27.4
Max	87.6	60.7	39.4	21.9	25.5	51.2	244	555	314	142	182	111
(WY)	(1942)	(1942)	(1907)	(1907)	(1907)	(1987)	(1942)	(1941)	(1941)	(1911)	(1961)	(1991)
Min	0.64	0.38	0.31	0.00	0.53	0.68	1.02	1.44	1.11	3.02	1.43	0.46
(WY)	(1957)	(1957)	(2004)	(1908)	(1957)	(2003)	(2003)	(2003)	(1956)	(1934)	(1956)	(1956)

07215500 MORA RIVER AT LA CUEVA, NM—Continued**SUMMARY STATISTICS**

	Calendar Year 2006	Water Year 2007	Water Years 1906 - 2007	
Annual total	1,812.61	7,051.52		
Annual mean	4.97	19.3	28.1	
Highest annual mean			113	1941
Lowest annual mean			2.27	2002
Highest daily mean	31 Aug 20	120 May 21	1,060	Apr 23, 1942
Lowest daily mean	0.60 Mar 16	0.00 Jan 22	0.00	Dec 22, 1907
Annual seven-day minimum	0.88 Mar 13	0.03 Jan 21	0.00	Dec 22, 1907
Maximum peak flow		126 May 21	1,530	Sep 23, 1941
Maximum peak stage		2.81 May 21	7.58	Sep 23, 1941
Instantaneous low flow		0.00 Jan 21	0.00	Dec 22, 1907
Annual runoff (ac-ft)	3,600	13,990	20,320	
10 percent exceeds	11	49	70	
50 percent exceeds	2.9	15	12	
90 percent exceeds	1.1	0.90	1.5	

