07211500 CANADIAN RIVER NEAR TAYLOR SPRINGS, NM

Upper Canadian Basin
Upper Canadian Subbasin

LOCATION.--Lat 36°17'51.25", long 104°29'43.70" referenced to North American Datum of 1983, Colfax County, NM, Hydrologic Unit 11080003, on left bank at head of gorge, 2.1 mi south of Taylor Springs, 2.3 mi downstream from Cimarron River, 2.4 mi upstream from Chico Creek, 7.1 mi southeast of Springer, and at mile 847.9.

DRAINAGE AREA.--2,850 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--January 1940 to September 1958, and annual maximum, water years 1959-63. June 1964 to current year. Water-year estimate for 1940, published in WSP 1311.

REVISED RECORDS.--WSP 1177: drainage area. WSP 1281: 1941-42(P), 1945-47(M), 1948-50(P).

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Elevation of gage is 5,640 ft above NGVD of 1929, from topographic map. Prior to June 10, 1964, water-stage recorder at site 1.7 mi downstream at different datum; operated as crest-stage gage at that site and datum during water years 1959-64.

REMARKS.--Records fair except for those estimated, which are poor. Diversions for irrigation of about 30,000 acres upstream from station. Several observations of water temperature were made during the year. No flow at times some years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum flood prior to 1965 occurred Sept. 29, 1904, discharge published as 91,100 ft^3/s in WSP 842 and 847.

07211500 CANADIAN RIVER NEAR TAYLOR SPRINGS, 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	4.6	4.7	e4.3	e4.2	e8.0	13	92	158	19	e22	e9.7	e9.5
2	4.8	4.7	e4.5	e4.2	e7.8	12	83	118	19	e58	e9.4	e49
3	5.4	4.8	e4.4	e4.1	e7.0	13	67	195	26	e96	e10	e24
4	5.2	4.8	e4.4	e4.4	e9.5	13	49	263	20	e31	e9.4	e9.3
5	5.1	4.7	e4.8	e4.5	e11	13	29	316	21	e53	e5.6	e5.5
6	4.7	4.7	e4.5	e3.9	e13	13	22	320	21	e20	e4.4	e5.1
7	4.3	4.9	e4.6	e4.0	e14	13	21	275	18	e16	e2.7	e3.6
8	6.2	4.9	e4.7	e3.9	e15	13	23	236	14	e13	e1.7	e2.6
9	8.2	4.8	e4.8	e4.2	e18	12	27	202	15	e11	e0.85	e3.8
10	9.1	4.7	e4.9	e4.4	e18	12	26	178	24	e95	e0.20	e4.0
11	7.4	4.8	e5.0	e4.7	e20	13	22	154	16	e77	e0.01	e3.5
12	6.2	4.8	e4.6	e5.0	e24	12	20	101	44	e23	e0.06	e2.9
13	5.6	4.9	e4.4	e4.6	e22	12	25	96	47	e19	e0.05	e2.2
14	5.6	5.2	e4.4	e4.4	e20	13	38	98	42	e18	e0.00	e1.7
15	6.3	5.0	e4.5	e4.2	e21	16	41	84	42	e13	e0.73	e1.1
16	5.7	5.1	e4.7	e4.4	e23	24	45	65	35	e14	e0.00	e0.46
17	5.3	5.4	e4.9	e4.5	e22	26	68	62	28	e9.8	e0.00	e0.88
18	4.8	5.5	e5.1	e4.7	e20	25	108	62	26	e7.0	e11	e1.5
19	4.4	5.8	e4.8	e4.9	e21	24	124	98	20	e17	e2.9	e0.75
20	4.9	5.8	e4.8	e5.0	e19	37	126	137	13	e211	e0.00	e1.0
21	4.8	5.5	e4.6	e4.9	18	67	126	137	8.1	e48	e0.06	e1.6
22	4.2	5.4	e4.4	e5.0	16	67	124	127	6.7	e25	e1.5	e0.96
23	4.0	5.5	e4.2	e5.3	16	73	123	118	e5.1	e16	e2.6	e0.78
24	4.0	5.5	e4.2	e5.6	15	78	109	59	e4.2	e14	e2.7	e0.89
25	4.3	5.5	e4.1	e5.8	14	76	113	45	e3.1	e9.6	e2.6	e0.08
26	4.7	5.6	e4.3	e5.9	14	75	103	47	e106	e7.9	e1.3	e0.09
27	5.1	5.6	e4.4	e6.0	13	92	93	46	e55	e43	e20	e0.02
28	5.5	e5.2	e4.6	e6.2	13	103	83	45	e80	e21	e11	e0.04
29	5.6	e4.8	e4.5	e6.5	---	107	85	43	e113	e9.7	e29	e1.6
30	5.7	e4.1	e4.3	e6.6	---	102	93	35	e44	e14	e37	e15
31	5.0	---	e4.1	e7.0	---	98	---	24	---	e15	e23	---
Total	166.7	152.7	140.8	153.0	452.3	1,267	2,108	3,944	935.2	1,047.0	199.46	153.45
Mean	5.38	5.09	4.54	4.94	16.2	40.9	70.3	127	31.2	33.8	6.43	5.12
Max	9.1	5.8	5.1	7.0	24	107	126	320	113	211	37	49
Min	4.0	4.1	4.1	3.9	7.0	12	20	24	3.1	7.0	0.00	0.02
Ac-ft	331	303	279	303	897	2,510	4,180	7,820	1,850	2,080	396	304

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2007, BY WATER YEAR (WY)

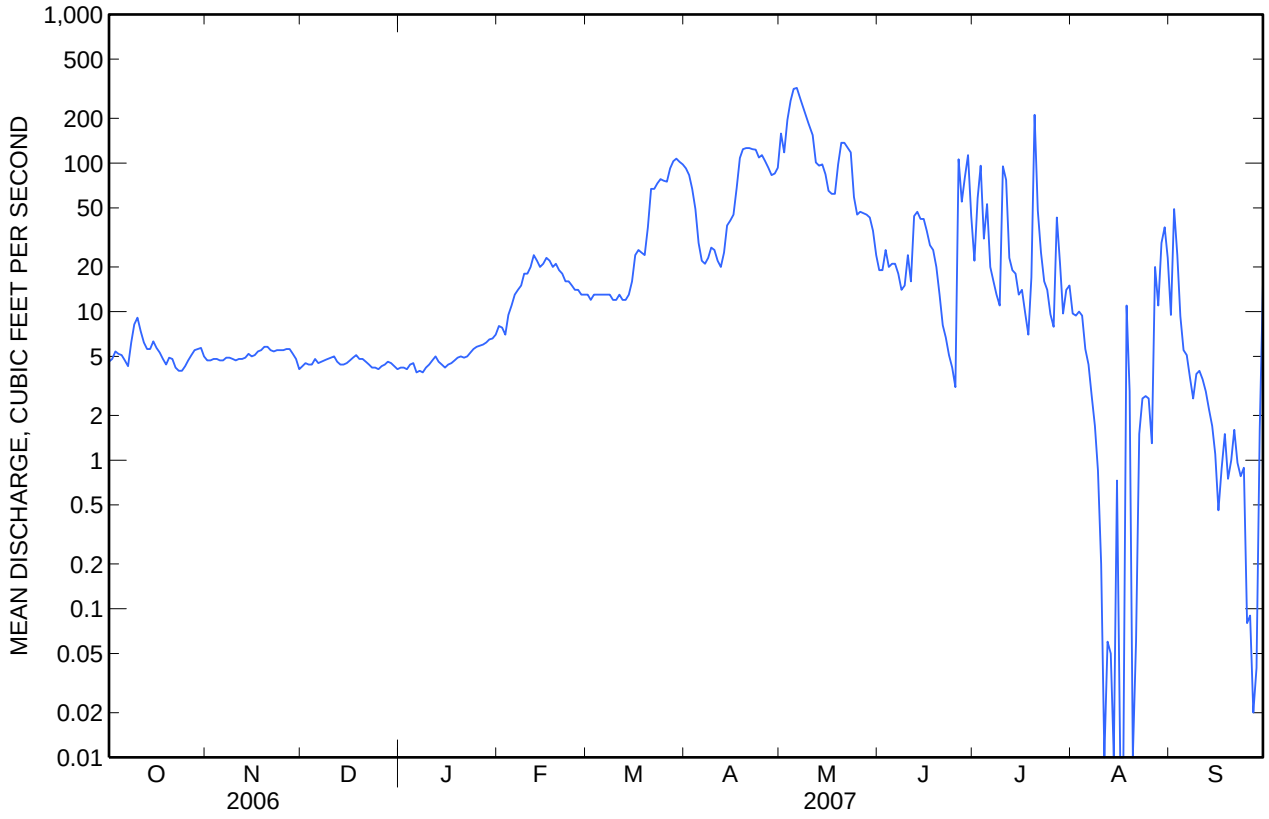
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	34.4	21.8	19.6	20.5	23.9	28.0	122	231	133	83.6	111	69.9
Max	451	192	105	121	186	337	2,853	2,174	2,313	509	563	1,354
(WY)	(1942)	(1942)	(1943)	(1943)	(1948)	(1987)	(1942)	(1941)	(1965)	(1947)	(1981)	(1942)
Min	0.00	0.01	0.02	0.04	0.06	0.03	1.40	0.32	0.53	0.89	0.01	0.00
(WY)	(1957)	(2004)	(2004)	(2004)	(2004)	(2004)	(1954)	(2002)	(2006)	(2003)	(2003)	(1956)

07211500 CANADIAN RIVER NEAR TAYLOR SPRINGS, NM—Continued

SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 1940 - 2007	
Annual total	6,146.24		10,719.61			
Annual mean	16.8		29.4		75.6	
Highest annual mean					564	1942
Lowest annual mean					3.05	2003
Highest daily mean	722	Jul 6	320	May 6	43,000	Jun 18, 1965
Lowest daily mean	0.00	Jun 10	0.00	Aug 14	0.00	Jun 29, 1946
Annual seven-day minimum	0.00	Jun 10	0.12	Aug 11	0.00	Jun 24, 1953
Maximum peak flow			963	Jun 26	[a]162,000	Jun 18, 1965
Maximum peak stage			6.78	Jun 26	[b]47.40	Jun 18, 1965
Instantaneous low flow			0.00	Aug 14	0.00	Jun 29, 1946
Annual runoff (ac-ft)	12,190		21,260		54,730	
10 percent exceeds	27		95		120	
50 percent exceeds	5.0		9.5		14	
90 percent exceeds	0.70		2.8		2.0	

[a] From rating curve extended above 7,000 ft³/s, on basis of slope-area measurement of peak flow.
[b] From Floodmarks.



WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1966-75, March 2005- present.

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 1 of 5

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

Date	Time	Instantaneous discharge, cfs (00061)	Turbdty white light, det ang 90+/-30 degrees NTU (63675)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf µS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Bromide, water, unfltrd µg/L (63689)	Calcium water, fltrd, mg/L (00915)
Nov													
03...	1010	5.0	30	627	9.9	99	8.3	3,040	10.5	6.5	1,100	.310	208
May													
16...	1035	62	57	630	8.4	103	8.4	1,040	18.5	15.5	280	E.110	61.0
Aug													
01...	1100	12	58	628	8.2	117	8.4	1,340	30.0	23.0	340	--	75.5
Sep													
26...	1130	.02	44	628	8.7	109	8.3	2,310	22.0	16.5	520	--	98.8

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 2 of 5

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

Date	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt fxd end lab, mg/L as CaCO3 (29801)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)
Nov													
03...	136	4.63	3.9	297	252	247	294	4	53.5	.45	7.00	1,310	2,170
May													
16...	31.6	1.42	1.5	57.1	154	150	178	2	14.7	.42	7.11	369	632
Aug													
01...	36.3	3.68	2.1	90.0	153	148	175	3	21.0	.49	16.4	552	885
Sep													
26...	65.9	4.13	3.9	202	195	186	222	--	64.2	.54	3.86	938	1,490

07211500 CANADIAN RIVER NEAR TAYLOR SPRINGS, NM—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
Part 3 of 5
[Remark codes: <, less than; E, estimated.]

Date	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + 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 + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Alum-inum, water, fltrd, µg/L (01106)	Anti-mony, water, fltrd, µg/L (01095)
Nov													
03...	2,400	.20	E.32	<.020	E.029	<.06	<.002	E.003	.014	.035	27	E1.6	.12
May													
16...	742	.40	.38	<.020	E.059	<.06	<.002	E.004	E.004	.055	140	--	--
Aug													
01...	1,060	.41	E.49	<.020	--	<.06	<.002	E.004	.007	.089	--	--	--
Sep													
26...	1,770	.35	.39	.021	--	<.06	E.001	E.004	E.005	.048	--	--	--

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
Part 4 of 5
[Remark codes: <, less than; E, estimated.]

Date	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)	Mangan-ese, water, fltrd, µg/L (01056)	Mercury water, unfltrd recover -able, µg/L (71900)	Molyb-denum, water, fltrd, µg/L (01060)
Nov													
03...	.34	45	<.12	157	<.08	<.24	.26	E.46	<18	<.24	43.6	<.010	3.7
May													
16...	--	--	--	38	--	--	--	--	7	--	--	<.010	--
Aug													
01...	--	--	--	113	--	--	--	--	E5	--	--	--	--
Sep													
26...	--	--	--	143	--	--	--	--	<18	--	--	--	--

07211500 CANADIAN RIVER NEAR TAYLOR SPRINGS, NM—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
Part 5 of 5
[Remark codes: <, less than; E, estimated.]

Date	Nickel, water, fltrd, µg/L (01065)	Selen-ium, water, fltrd, µg/L (01145)	Selen-ium, water, unfltrd µg/L (01147)	Silver, water, fltrd, µg/L (01075)	Zinc, water, fltrd, µg/L (01090)	Uranium natural water, fltrd, µg/L (22703)	Suspnd. sedi-ment, sieve diametr percent <.063mm (70331)	Sus-pended sedi-ment concen-tration mg/L (80154)
Nov								
03...	1.1	1.0	1.1	<.2	1.9	5.00	100	67
May								
16...	--	--	.78	--	--	--	96	23
Aug								
01...	--	--	--	--	--	--	95	23
Sep								
26...	--	--	--	--	--	--	76	--