Water-Data Report 2013

09242500 ELK RIVER NEAR MILNER, CO

White-Yampa Basin
Upper Yampa Subbasin

LOCATION.--Lat 40°30′53″, long 106°57′12″ referenced to North American Datum of 1927, in NW ¼ NW ¼ sec.5, T.6 N., R.85 W., Routt County, CO, Hydrologic Unit 14050001, on left bank 15 ft downstream from bridge on County Road 42, 2.5 mi upstream from mouth, and 3.2 mi east of Milner.

DRAINAGE AREA.--448 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--May 1904 to September 1927 (published as "near Trull"). April 1990 to December 2008. May 2009 to September 2012 (seasonal records only), October 2012 to September 2013. Records for 1910-27 furnished by State Engineer of Colorado. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WDR CO-98-2:1997 (M). WDR-US-2011: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Elevation of gage is 6,590 ft above NGVD of 1929, from topographic map. May 1904 to Sept. 1909, nonrecording gage, at different datum, Oct. 1910 to Sept. 1927, water-stage recorder at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions upstream from station for irrigation. Natural flow of stream affected by storage in Lester Creek Reservoir (known also as Pearl Lake), capacity, 5,660 acre-ft, since 1963, and Steamboat Lake, capacity, 23,060 acre-ft, since 1968.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	54	83	64	e60	e63	e54	162	1,100	1,160	360	132	62
2	45	77	67	e54	e53	e48	219	784	1,090	325	129	57
3	37	69	63	e40	e51	e50	260	734	1,470	296	122	55
4	36	61	48	e43	e48	e53	344	913	1,850	294	126	55
5	47	64	68	e48	e48	e49	380	1,110	1,810	289	125	57
6	58	63	66	e53	e58	e56	395	1,150	1,840	346	140	56
7	61	59	60	e56	e53	e62	403	1,460	1,730	284	135	48
8	62	58	56	e53	e48	e63	340	1,460	2,060	247	123	51
9	70	61	47	e51	e54	e61	349	1,450	2,260	224	117	58
10	70	68	e40	e52	e50	e54	259	1,830	2,390	201	122	86
11	78	56	e51	e54	e48	e55	233	2,070	2,340	178	106	148
12	85	45	e56	e50	e40	e60	213	2,130	2,110	165	92	306
13	108	65	e57	e56	e55	e66	202	2,480	1,930	199	85	189
14	100	81	e55	e53	e53	e73	234	2,910	1,780	184	115	152
15	90	70	e56	e43	e50	e83	206	2,780	1,620	165	101	125
16	85	63	e55	e49	e42	e84	203	2,830	1,410	146	87	169
17	88	70	e51	e48	e46	e82	192	3,090	1,270	132	82	148
18	81	72	e52	e48	e48	e78	159	2,810	1,180	132	78	142
19	71	72	e45	e48	e42	e77	170	2,100	1,090	181	73	154
20	71	65	e31	e48	e45	e76	188	1,740	1,010	161	66	122
21	71	62	e35	e49	e46	e81	255	1,440	901	142	62	111
22	67	63	e49	e48	e43	e76	318	1,330	804	132	61	104
23	65	57	e56	e48	e40	e77	265	1,620	702	125	60	136
24	66	57	e57	e52	e46	e71	196	2,210	632	114	66	154
25	77	60	e53	e54	e40	e73	203	2,340	551	124	64	130
26	74	55	e46	e57	e43	e77	239	2,540	532	135	65	119
27	68	49	e62	e63	e39	e81	350	2,570	493	128	61	124
28	75	58	e56	e65	e38	e87	559	2,350	443	133	60	156
29	75	64	e42	e57	---	e100	854	2,020	407	157	57	152
30	81	75	e53	e47	---	128	1,150	1,610	385	180	53	163
31	84	---	e65	e62	---	132	---	1,300	---	153	56	---
Total	2,200	1,922	1,662	1,609	1,330	2,267	9,500	58,261	39,250	6,032	2,821	3,589
Mean	71.0	64.1	53.6	51.9	47.5	73.1	317	1,879	1,308	195	91.0	120
Max	108	83	68	65	63	132	1,150	3,090	2,390	360	140	306
Min	36	45	31	40	38	48	159	734	385	114	53	48
Ac-ft	4,360	3,810	3,300	3,190	2,640	4,500	18,840	115,600	77,850	11,960	5,600	7,120

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1905 - 2013, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	146	112	88.7	84.2	87.1	168	747	2,163	2,220	665	159	112
Max	424	234	154	135	145	406	1,407	3,977	5,341	2,586	445	518
(WY)	(1919)	(1919)	(1998)	(1998)	(1921)	(2007)	(2006)	(1920)	(2011)	(2011)	(1912)	(1997)
Min	51.4	58.0	45.6	50.5	45.9	52.0	317	940	563	88.2	30.3	31.1
(WY)	(2004)	(1991)	(2004)	(2008)	(1991)	(1991)	(2013)	(1990)	(2012)	(2002)	(2002)	(2012)

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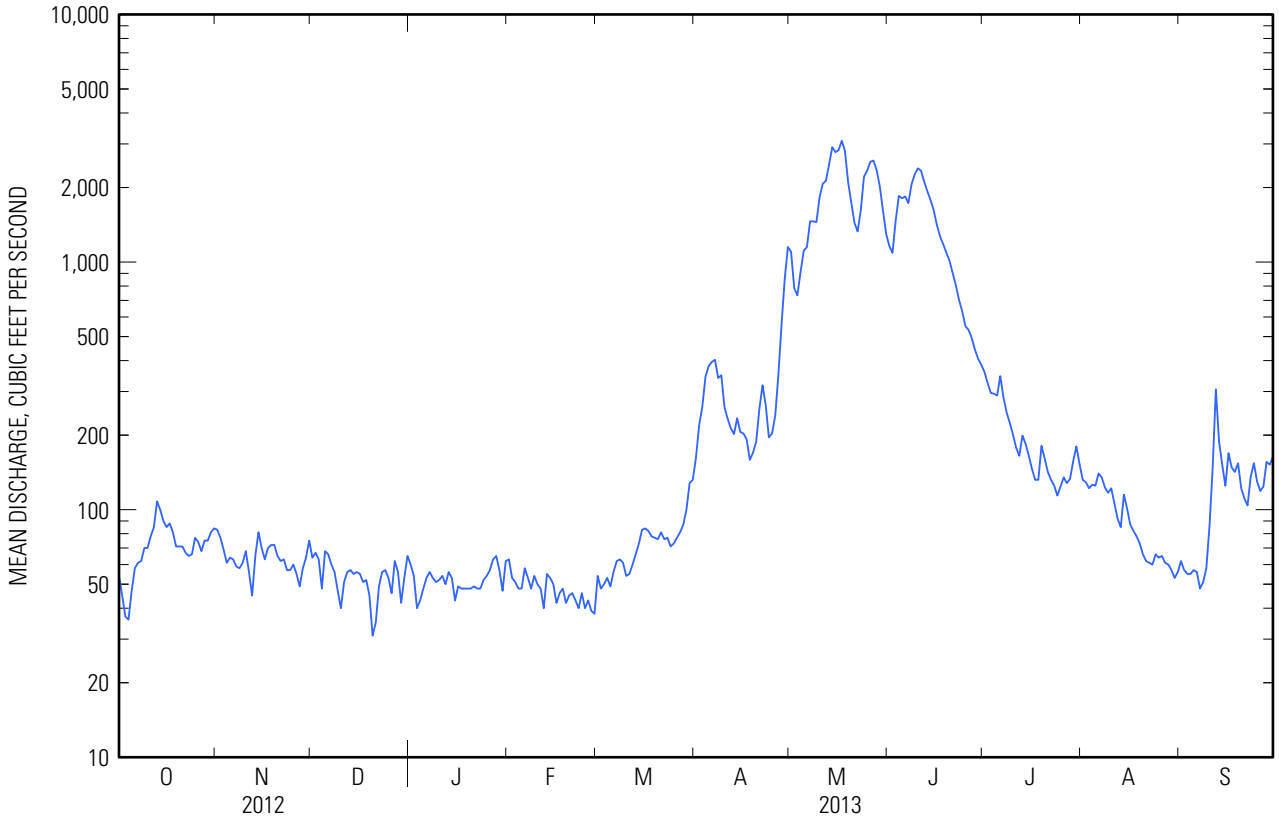
SUMMARY STATISTICS

	Water Year 2013		Water Years 1905 - 2013	
Annual total	130,443			
Annual mean	357		556	
Highest annual mean			886	1917
Lowest annual mean			230	2002
Highest daily mean	3,090	May 17	7,000	Jun 7, 2011
Lowest daily mean	31	Dec 20	3.7	Sep 5, 2002
Annual seven-day minimum	41	Feb 22	5.3	Sep 1, 2002
Maximum peak flow	3,630	May 17	[a]8,590	Jun 7, 2011
Maximum peak stage	6.36	May 17	8.14	Jun 7, 2011
Annual runoff (ac-ft)	258,700		403,000	
10 percent exceeds	1,420		1,900	
50 percent exceeds	78		130	
90 percent exceeds	48		62	

[a] Peak discharge includes 200 ft³/s (estimated) overflow that bypassed the main channel.