Water-Data Report 2012

09032000 RANCH CREEK NEAR FRASER, CO

Colorado Headwaters Basin
Colorado Headwaters Subbasin

LOCATION.--Lat 39°57′00″, long 105°45′54″ referenced to North American Datum of 1927, in NW ¼ NE ¼ sec.22, T.1 S., R.75 W., Grand County, CO, Hydrologic Unit 14010001, on left bank 650 ft downstream from Middle Fork, and 2.7 mi east of Fraser.

DRAINAGE AREA.--20.0 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--August 1934 to current year. Records for May 26, 1937, to September 1959, equivalent to earlier records if diversion to Moffat water tunnel is added to flow past station.

REVISED RECORDS.--WSP 1243: 1935. WDR-US-2011: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Elevation of gage is 8,660 ft above NGVD of 1929, from topographic map. Prior to Oct. 5, 1995, at site 200 ft upstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversion upstream from station for irrigation of hay meadows along Fraser River. Transmountain diversions upstream from station to Moffat water tunnel not known since 1959.

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 09032000, accessed at http://wdr.water.usgs.gov/wy2012/pdfs/09032000.2012.pdf

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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	4.0	3.7	3.1	2.4	2.2	2.1	5.9	3.6	3.7	2.0	6.1	3.6
2	4.0	e3.6	3.0	2.3	2.2	2.1	5.1	4.5	3.7	1.9	5.8	3.5
3	4.0	e3.7	3.0	2.3	2.1	2.1	4.0	6.3	3.2	2.2	5.1	3.3
4	4.0	3.7	3.0	e2.3	2.1	2.1	4.4	6.2	3.1	1.9	4.8	3.1
5	4.1	3.6	2.9	e2.3	2.1	2.1	4.3	6.0	3.1	1.5	4.6	2.9
6	4.2	3.4	2.8	e2.3	2.1	2.1	4.4	6.2	3.1	2.1	4.4	2.7
7	4.2	3.5	2.8	2.3	e2.1	2.1	e4.5	6.0	3.2	3.5	4.4	2.9
8	4.3	3.4	2.8	2.3	e2.1	2.1	e4.8	5.2	3.2	2.2	4.1	2.6
9	4.4	3.3	3.0	2.3	e2.1	2.1	e4.4	3.4	3.2	1.9	4.0	2.6
10	4.8	3.5	3.0	e2.3	e2.1	2.1	4.8	2.9	2.8	1.6	4.0	2.6
11	5.8	3.8	2.9	e2.4	2.1	2.1	5.4	2.9	2.7	2.0	4.1	2.7
12	4.6	3.8	2.9	e2.4	2.1	2.1	5.9	3.0	2.8	1.3	4.0	4.9
13	4.4	3.6	3.0	e2.4	2.1	2.2	5.0	2.9	2.9	1.1	4.2	3.2
14	4.4	3.5	3.0	e2.4	1.9	2.3	4.7	2.8	2.8	1.0	4.2	2.7
15	4.4	3.3	2.9	e2.4	1.9	2.3	4.6	3.0	2.7	1.0	3.9	2.5
16	4.4	3.2	2.8	e2.4	1.9	2.4	4.6	3.0	2.7	1.6	3.8	2.4
17	4.6	3.1	2.8	e2.4	1.9	2.6	4.9	3.0	2.8	1.5	3.7	2.6
18	4.4	3.1	2.7	e2.4	1.9	e2.6	4.9	3.2	2.8	2.1	3.7	2.5
19	4.3	3.2	2.8	e2.4	1.9	e2.4	5.2	3.9	2.7	3.3	3.6	2.3
20	4.2	3.2	2.8	e2.4	2.1	2.1	4.9	3.7	2.6	3.1	3.5	2.3
21	4.1	3.2	2.7	2.4	2.1	e2.1	5.5	3.5	2.7	2.9	3.6	2.2
22	4.2	3.2	2.7	2.4	2.1	2.3	6.2	3.5	2.6	3.2	3.8	2.2
23	4.1	3.2	2.6	2.4	2.1	e2.6	6.6	3.7	2.6	4.3	4.5	2.3
24	4.1	3.1	2.4	2.4	2.1	e3.0	7.7	4.7	2.5	5.6	4.1	2.3
25	4.2	3.1	e2.4	2.2	2.1	3.5	8.8	4.4	2.6	7.8	3.8	2.7
26	4.0	3.1	e2.5	2.2	2.1	4.0	8.6	4.0	2.4	4.3	2.6	4.5
27	e4.3	3.0	e2.5	2.2	2.1	e4.0	7.8	3.6	3.6	3.9	1.9	3.4
28	e4.2	3.0	e2.5	2.2	2.1	e4.0	5.3	3.4	2.9	4.2	2.0	2.9
29	e4.6	3.1	e2.5	2.2	2.1	e4.3	4.0	3.4	2.7	7.7	2.5	2.7
30	4.1	3.1	e2.5	2.2	---	4.8	3.4	3.3	2.2	9.0	3.9	2.6
31	3.9	---	2.4	2.2	---	5.3	---	3.2	---	6.6	4.1	---
Total	133.3	100.3	85.7	72.1	59.9	84.0	160.6	122.4	86.6	98.3	122.8	85.7
Mean	4.30	3.34	2.76	2.33	2.07	2.71	5.35	3.95	2.89	3.17	3.96	2.86
Max	5.8	3.8	3.1	2.4	2.2	5.3	8.8	6.3	3.7	9.0	6.1	4.9
Min	3.9	3.0	2.4	2.2	1.9	2.1	3.4	2.8	2.2	1.0	1.9	2.2
Ac-ft	264	199	170	143	119	167	319	243	172	195	244	170

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935 - 2012, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	4.64	4.04	3.37	2.98	2.69	2.64	5.23	29.6	76.3	24.4	7.03	4.81
Max	19.6	14.6	8.11	5.63	4.65	5.34	17.4	99.4	206	136	27.3	13.8
(WY)	(1962)	(1962)	(1962)	(1962)	(1966)	(1950)	(1946)	(1936)	(1997)	(1995)	(1945)	(1945)
Min	0.98	1.09	0.87	0.89	0.74	0.65	1.61	3.69	2.68	1.86	1.20	0.98
(WY)	(1969)	(1965)	(1965)	(1964)	(1964)	(1964)	(1961)	(1954)	(1966)	(2002)	(2002)	(1960)

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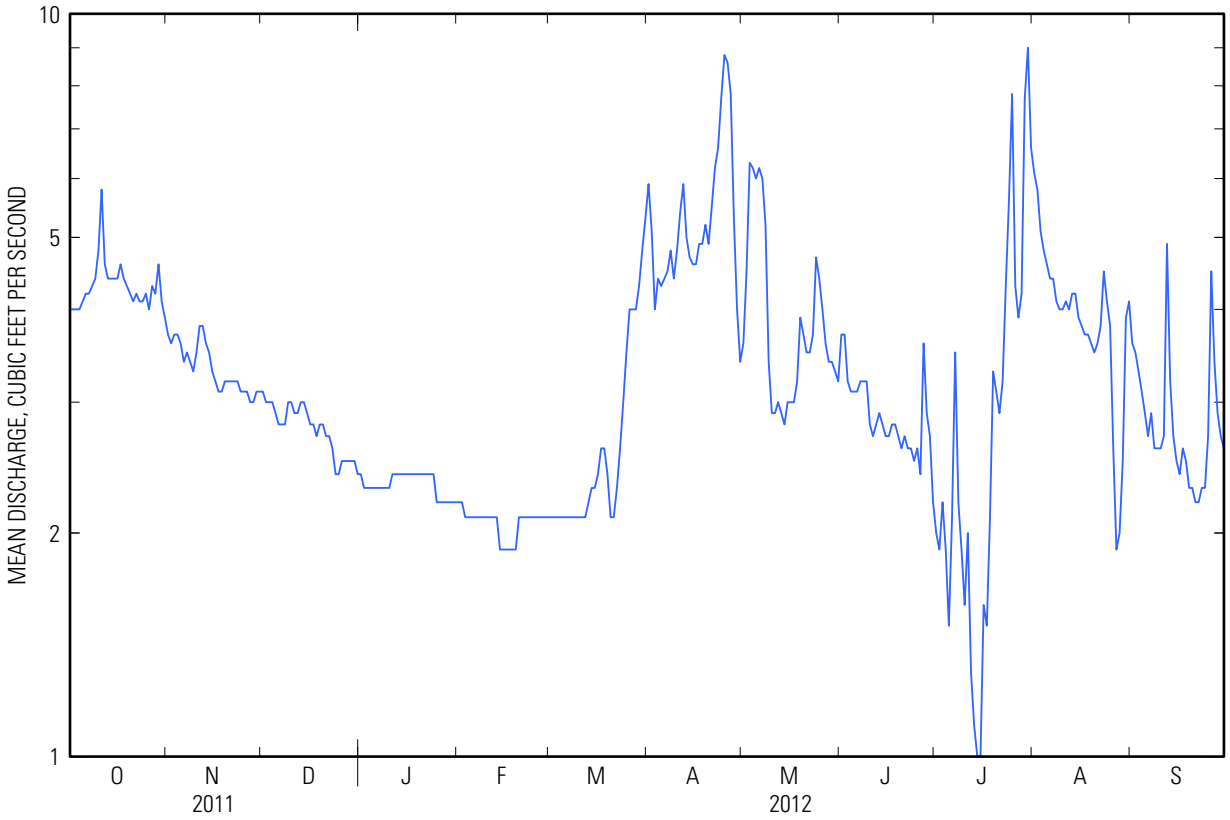
SUMMARY STATISTICS

	Calendar Year 2011		Water Year 2012		Water Years 1935 - 2012	
Annual total	10,679.3		1,211.7			
Annual mean	[a]29.3		[a]3.31		[a]14.0	
Highest annual mean					31.4	1983
Lowest annual mean					2.55	1964
Highest daily mean	287	Jul 2	9.0	Jul 30	402	Jun 7, 1997
Lowest daily mean	2.2	Mar 8	1.0	Jul 14	[b]0.40	Sep 21, 1960
Annual seven-day minimum	2.2	Mar 7	1.4	Jul 11	0.42	Sep 21, 1988
Maximum peak flow			18	Jul 29	[c]551	Jun 7, 2010
Maximum peak stage			[d]4.85	Jul 29	[f]6.62	Jun 7, 2010
Annual runoff (ac-ft)	[a]21,180		[a]2,400		[a]10,120	
10 percent exceeds	117		4.8		28	
50 percent exceeds	4.1		3.0		4.0	
90 percent exceeds	2.4		2.1		1.8	

[a] Significantly affected by upstream diversions into the Moffat water tunnel.
[b] Also occurred Oct 6, 1960, and Sep 24-26, 1988.
[c] From rating curve extended above 290 ft³/s.
[d] Maximum gage height, 5.04 ft, Mar 19, backwater from ice.
[f] Maximum gage height, 6.71 ft, Jun 4, 1997.