

Water-Data Report 2013

06211000 RED LODGE CREEK ABOVE COONEY RESERVOIR, NEAR BOYD, MT

Upper Yellowstone Basin
Clarks Fork Yellowstone Subbasin

LOCATION.--Lat 45°26'16", long 109°15'12" referenced to North American Datum of 1983, in NE ¼ SE ¼ SE ¼ sec.33, T.4 S., R.20 E., Carbon County, MT, Hydrologic Unit 10070006, on right bank 0.6 mi upstream from Cooney Reservoir, 9.5 mi west of Boyd, and at river mile 15.0.

DRAINAGE AREA.--143 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--May 1937 to current year (no winter records most years).

REVISED RECORDS.--Water Supply Paper (WSP) 1729: Drainage area. WSP 2116: 1937, maximum discharge (M); 1942 (M); 1943, peak discharge (P); 1944 (M); 1948 (M); 1952 (M); 1957 (P); 1962 (M); 1963 (M).

GAGE.--Water-stage recorder. Elevation of gage is 4,248.0 ft, referenced to the National Geodetic Vertical Datum of 1929.

REMARKS.--Records are good. Some return flow occurs from lands irrigated by water diverted from Rock Creek and East Rosebud Creek basins. Diversions for irrigation of about 5,100 acres occur upstream from station. U.S. Geological Survey satellite telemeter is located at the station. Several unpublished observations of water temperature and specific conductance were made during the year.

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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	19						20	18	137	81	70	25
2	20						19	18	135	88	67	27
3	20						19	17	140	87	59	30
4	28						19	19	133	89	58	28
5	32						19	28	133	102	57	28
6	35						20	23	120	107	53	25
7	38						19	19	108	108	50	30
8	36						20	17	111	123	49	41
9	38						19	11	109	104	51	52
10	38						16	11	117	93	56	39
11	34						22	9.4	139	91	56	31
12	35						25	7.2	156	89	51	31
13	34						23	4.9	156	85	48	30
14	33						21	2.8	169	86	47	67
15	31						19	4.5	141	84	42	109
16	31						19	8.9	130	83	40	80
17	33						19	29	120	92	43	62
18	32						18	36	111	92	39	64
19	34						19	65	112	72	38	55
20	35						19	195	112	68	34	55
21	38						e19	153	113	59	31	52
22	42						20	124	111	50	30	50
23	43						18	125	112	38	29	52
24	44						23	152	101	41	32	53
25	41						25	128	95	44	34	51
26	39						24	125	94	44	31	51
27	40						21	123	98	55	30	57
28	40						19	116	90	58	27	61
29	41						19	188	79	73	25	57
30	40						19	191	82	70	25	55
31	40						---	151	---	71	25	---
Total	1,084						601	2,119.7	3,564	2,427	1,327	1,448
Mean	35.0						20.0	68.4	119	78.3	42.8	48.3
Max	44						25	195	169	123	70	109
Min	19						16	2.8	79	38	25	25
Ac-ft	2,150						1,190	4,200	7,070	4,810	2,630	2,870

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937 - 2013, BY WATER YEAR (WY)*

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	46.6	33.3	19.3	15.4	27.4	36.5	71.4	154	185	89.2	38.6	45.7
Max	119	69.5	33.6	18.8	35.0	62.9	234	616	575	297	90.2	106
(WY)	(1942)	(1942)	(1958)	(1964)	(1962)	(1962)	(1973)	(1975)	(1967)	(1975)	(1993)	(1941)
Min	17.5	16.5	14.5	12.1	18.9	17.4	12.7	10.8	15.3	4.90	4.71	4.20
(WY)	(1954)	(1955)	(1946)	(1963)	(1964)	(1964)	(1961)	(1985)	(1954)	(1949)	(1946)	(1949)

*No winter records most years.

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SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1937 – 2013*	
Annual mean					58.4	
Highest annual mean					67.1	1963
Lowest annual mean					49.8	1964
Highest daily mean	97	May 27	195	May 20	2,820	May 11, 2005
Lowest daily mean	3.9	May 16	2.8	May 14	0.00	Aug 1, 1949
Annual seven-day minimum					0.00	Aug 9, 1949
Maximum peak flow			256	May 29	4,700	May 25, 2011
Maximum peak stage			3.05	May 29	7.74	May 25, 2011
Instantaneous low flow			^a 1.6	May 15	0.00	Aug 1, 1949
Annual runoff (ac-ft)					42,340	
10 percent exceeds					170	
50 percent exceeds					30	
90 percent exceeds					15	

*No winter records most years.

^aGage height, 1.33 ft, but may have been less outside seasonal period.

