

Water-Data Report 2006

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

Upper Yellowstone Basin  
Clarks Fork Yellowstone Subbasin

LOCATION.--Lat 45°26'16", long 109°15'11" referenced to North American Datum of 1927, 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 mi<sup>2</sup>.

**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 fair. 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 Several unpublished observations of water temperature and specific conductance were made during the year.

## 06211000 RED LODGE CREEK ABOVE COONEY RESERVOIR, NEAR BOYD, MT—Continued

**DISCHARGE, CUBIC FEET PER SECOND**  
**CALENDAR YEAR JANUARY TO DECEMBER 2006**  
**DAILY MEAN VALUES**

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1				19	38	3.8	51	18	15	42		
2				17	36	5.5	54	18	17	40		
3				18	30	5.7	57	17	17	65		
4				17	25	3.9	62	19	16	69		
5				19	28	4.9	62	18	15	59		
6				23	26	4.9	63	17	15	51		
7				30	24	4.2	56	19	13	56		
8				32	24	5.1	62	21	14	70		
9				26	24	7.2	50	24	13	86		
10				24	21	25	45	22	11	89		
11				23	20	30	47	19	11	95		
12				18	20	32	44	18	11	102		
13				16	20	33	40	19	11	80		
14				19	19	39	39	20	11	71		
15				19	15	50	36	19	12	65		
16				17	15	42	35	18	54	66		
17				22	14	38	33	17	43	89		
18				35	13	34	29	16	29	71		
19				33	15	34	30	17	27	69		
20				33	14	39	27	17	27	76		
21				27	12	40	25	21	39	86		
22				24	11	39	25	23	40	69		
23				24	14	40	25	18	57	63		
24				31	18	40	20	17	44	59		
25				34	14	44	25	16	44	53		
26				32	16	44	20	23	38	51		
27				26	21	47	22	21	37	47		
28				28	17	52	20	19	43	45		
29				26	10	49	21	16	43	41		
30				32	6.7	47	21	14	42	39		
31				---	4.0	---	20	13	---	34		
<b>Total</b>				744	584.7	883.2	1,166	574	809	1,998		
<b>Mean</b>				24.8	18.9	29.4	37.6	18.5	27.0	64.5		
<b>Max</b>				35	38	52	63	24	57	102		
<b>Min</b>				16	4.0	3.8	20	13	11	34		
<b>Ac-ft</b>				1,480	1,160	1,750	2,310	1,140	1,600	3,960		

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937 - 2006, BY WATER YEAR (WY)\***

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>Mean</b>	15.4	27.4	36.5	73.7	155	186	88.9	38.0	45.7	46.4	33.3	19.3
<b>Max</b>	18.8	35.0	62.9	234	616	575	297	90.2	106	119	69.5	33.6
<b>(WY)</b>	(1964)	(1962)	(1962)	(1973)	(1975)	(1967)	(1975)	(1993)	(1941)	(1942)	(1942)	(1958)
<b>Min</b>	12.1	18.9	17.4	12.7	10.8	15.3	4.90	4.71	4.20	17.5	16.5	14.5
<b>(WY)</b>	(1963)	(1964)	(1964)	(1961)	(1985)	(1954)	(1949)	(1946)	(1949)	(1954)	(1955)	(1946)

\* No winter records most years.

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SUMMARY STATISTICS

	2006 Season		Water Years 1937 – 2006*	
Annual mean			58.4	
Highest annual mean			67.1	1963
Lowest annual mean			49.8	1964
Highest daily mean	102	Oct 12	2,820	May 11, 2005
Lowest daily mean	3.8	Jun 1	0.00	Aug 1, 1949
Maximum peak flow	111	Oct 12	<sup>b</sup> 3,720	May 11, 2005
Maximum peak stage	2.46	Oct 12	7.35	May 11, 2005
Instantaneous low flow	<sup>a</sup> 3.0	Jun 2	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.

<sup>a</sup> Gage height, 1.61.ft.

<sup>b</sup> Result of slope-area measurement of peak flow.

