

Water-Data Report 2006

06012500 RED ROCK RIVER BELOW LIMA RESERVOIR, NEAR MONIDA, MT

Missouri Headwaters Basin
Red Rock Subbasin

LOCATION.--Lat 44°39'22", long 112°22'14" referenced to North American Datum of 1927, in NE ¼ SE ¼ SE ¼ sec.31, T.13 S., R.6 W., Beaverhead County, MT, Hydrologic Unit 10020001, on right bank just downstream from Lima Reservoir, 7 mi northwest of Monida, and at river mile 2,542.1.

DRAINAGE AREA.--570 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--January 1911 to December 1918, April 1919, May 1925 to October 1933, April 1934 to September 1935, May 1936 to October 1938, May 1939 to September 1969, seasonal records only June 1974 to September 1982 and April 1985 to current year. Monthly discharge only for some periods, published in Water Supply Paper (WSP) 1309. Prior to October 1950, published as "below Red Rock Reservoir".

REVISED RECORDS.-- WSP 1309: 1935. WSP 1389: 1912, 1934. WSP 1559: Drainage area.

GAGE.--Water-stage recorder and sharp-crested weir. Elevation of gage is 6,530 ft, referenced to the National Geodetic Vertical Datum of 1929, estimated from spillway elevation based on Montana Department of Natural Resources and Conservation elevation. Prior to Oct. 1, 1978, at elevation 1.00 ft higher. See WSP 1709 for history of nonrecording gage changes prior to May 8, 1939.

REMARKS.--Seasonal records are good. Flow is regulated by Lima Reservoir (station number 06012000). No storage during 1934. Diversions for irrigation of about 10,000 acres occur upstream from reservoir. A Bureau of Reclamation satellite telemeter is located at the station. Several observations of water temperature and specific conductance were made during the year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 1984 reached a discharge of 1,500 ft³/s, gage height, 5.15 ft, from floodmarks.

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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				0.00	436	529	474	420	373	28		
2				0.00	447	522	473	420	372	30		
3				0.00	464	513	471	418	371	28		
4				0.00	470	507	470	418	369	28		
5				0.00	477	500	470	416	369	28		
6				0.00	484	495	469	416	353	28		
7				0.00	486	493	467	414	333	28		
8				0.00	421	500	467	413	332	27		
9				0.00	209	503	466	415	314	27		
10				0.00	430	509	430	415	280	28		
11				0.00	468	499	410	414	278	28		
12				0.00	465	493	379	406	278	28		
13				0.00	462	491	328	402	276	28		
14				0.00	459	493	327	400	274	28		
15				0.00	440	503	324	398	273	28		
16				0.00	403	506	324	396	161	28		
17				0.00	420	510	325	394	113	28		
18				0.00	505	509	324	393	112	28		
19				45	503	505	324	392	81	28		
20				296	497	493	323	392	57	28		
21				404	496	479	323	333	40	28		
22				404	497	475	323	307	29	28		
23				395	494	471	323	305	28	28		
24				400	495	464	323	294	28	28		
25				407	492	462	302	268	28	28		
26				408	529	473	261	339	28	28		
27				409	542	478	261	379	28	28		
28				410	542	478	261	379	28	28		
29				415	543	478	260	378	28	28		
30				424	538	474	286	374	28	28		
31				---	535	---	422	373	---	---		
Total				4,417.00	14,649	14,805	11,390	11,881	5,662	868		
Mean				147	473	494	367	383	189	28.0		
Max				424	543	529	474	420	373	30		
Min				0.00	209	462	260	268	28	27		
Ac-ft				8,760	29,060	29,370	22,590	23,570	11,230	1,720		

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1911-1969 AND SEASONS 1974 - 2006*

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mean	21.5	19.9	18.8	70.8	304	534	326	224	144	54.4	54.0	28.0
Max	57.9	55.3	48.0	571	948	754	652	513	384	430	353	97.6
(WY)	(1928)	(1928)	(1918)	(1913)	(1917)	(1917)	(1982)	(1982)	(1995)	(1917)	(1913)	(1926)
Min	0.00	0.00	0.00	0.00	26.2	4.62	0.63	0.00	0.00	0.00	0.00	0.00
(WY)	(1932)	(1932)	(1932)	(1980)	(1934)	(1934)	(1934)	(1934)	(1937)	(1932)	(1932)	(1932)

* During periods of operation (January 1911 to December 1918, April 1919, May 1925 to October 1933, April 1934 to September 1935, May 1936 to October 1938, May 1939 to September 1969, June 1974 to September 1982, April 1985 to current year; seasonal records beginning water year 1974).

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SUMMARY STATISTICS

	2006 Season		Seasons 1974 - 2006		Water Years 1911 - 1969*	
Annual mean					143	
Highest annual mean					271	1913
Lowest annual mean					59.5	1935
Highest daily mean	543	May 29	946	May 28, 1975	^a 2,500	May 15, 1933
Lowest daily mean	.00	Apr 1	0.00	Oct 9, 1978	0.00	Oct 1, 1931
Annual seven-day minimum					0.00	Oct 1, 1931
Maximum peak flow	563	May 28	^b 946	May 28, 1975	^a 2,500	May 15, 1933
Maximum peak stage	3.37	May 28	4.00	Jun 26, 1981	6.4	May 15, 1933
Annual runoff (ac-ft)					103,300	
10 percent exceeds					449	
50 percent exceeds					56	
90 percent exceeds					8.0	

* During periods of operation (January 1911 to December 1918, April 1919, May 1925 to October 1933, April 1934 to September 1935, May 1936 to October 1938, May 1939 to September 1969, June 1974 to September 1982, April 1985 to current year; seasonal records beginning water year 1974).

^a Observed, estimated by dam tender; released to prevent dam failure.

^b Gage height, 3.38 ft, datum then in use.

