Water-Data Report 2012

06076560 SMITH RIVER BELOW NEWLAN CREEK, NEAR WHITE SULPHUR SPRINGS, MT

Upper Missouri Basin
Smith Subbasin

LOCATION.--Lat 46°35'28", long 111°03'28" referenced to North American Datum of 1983, in NW ¼ NE ¼ NE ¼ sec.35, T.10 N., R.5 E., Meagher County, MT, Hydrologic Unit 10030103, on left bank 40 ft upstream from county road bridge, 0.3 mi downstream from Newlan Creek, 7.3 mi northwest of White Sulphur Springs, and at river mile 112.1.

DRAINAGE AREA.--517 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 2004 to December 2011 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 4,785 ft, referenced to the National Geodetic Vertical Datum of 1929.

REMARKS.--Records are good except for estimated daily discharges, which are poor. Flow is slightly regulated by Smith River Reservoir (station number 06075000) and Newlan Creek Reservoir. Numerous diversions for irrigation 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 Several unpublished observations of water temperature and specific conductance were made during the year.

06076560 SMITH RIVER BELOW NEWLAN CREEK, NEAR WHITE SULPHUR SPRINGS, MT—Continued

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	78	97	e90									
2	77	e90	e85									
3	81	94	e80									
4	81	102	e70									
5	84	104	e60									
6	92	e95	e70									
7	97	e85	e80									
8	97	e90	e75									
9	95	e95	e80									
10	93	99	e75									
11	93	102	e75									
12	94	104	e70									
13	92	101	e75									
14	92	102	e80									
15	94	e90	e80									
16	96	e80	e85									
17	99	e90	e90									
18	96	e85	e85									
19	98	e75	e80									
20	104	e70	e80									
21	98	e80	e75									
22	98	e90	e65									
23	96	e100	e70									
24	101	e95	e75									
25	104	e90	e80									
26	101	e85	e80									
27	101	e90	e80									
28	98	e95	e90									
29	100	99	e85									
30	98	e95	e85									
31	100	---	e80									
Total	2,928	2,769	2,430									
Mean	94.5	92.3	78.4									
Max	104	104	90									
Min	77	70	60									
Ac-ft	5,810	5,490	4,820									

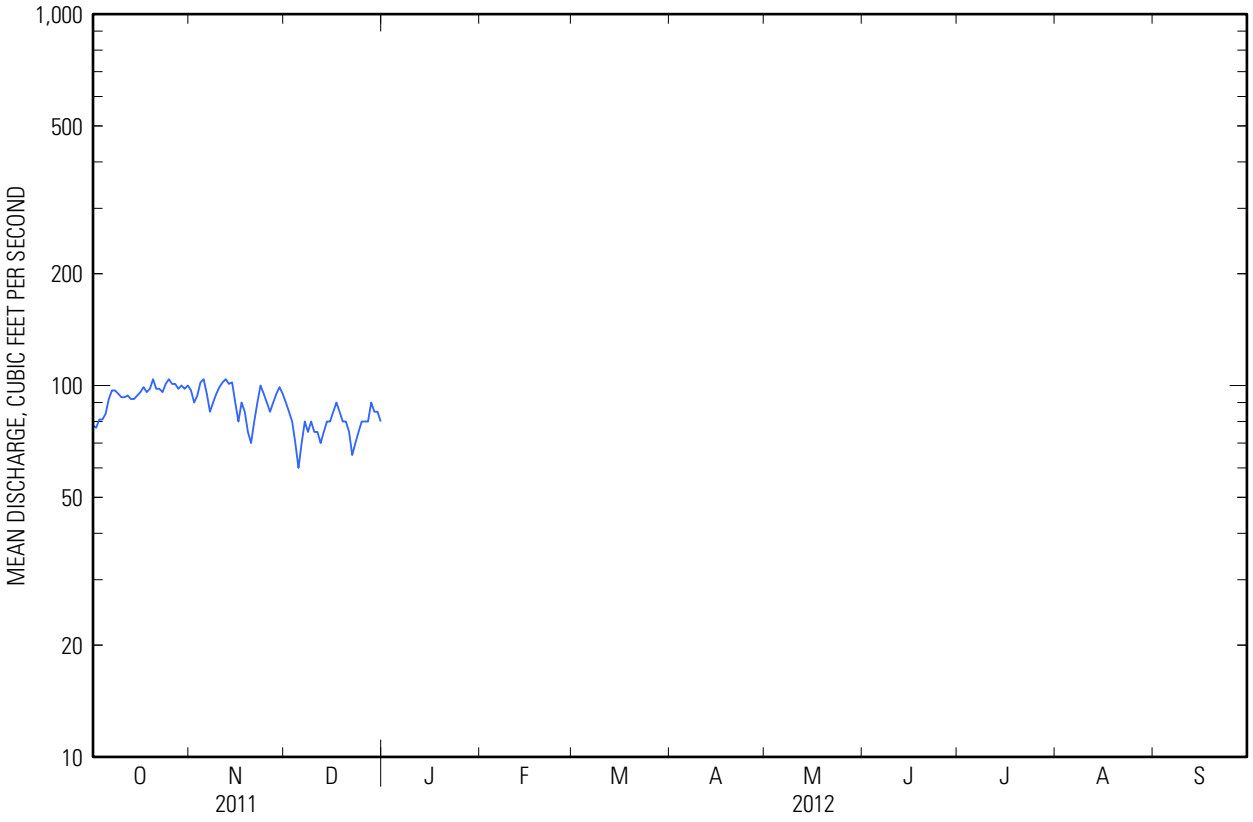
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2005 - 2012, BY WATER YEAR (WY)*

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	65.6	65.5	56.9	55.2	54.8	81.6	87.5	149	335	128	46.5	61.7
Max	94.5	93.0	91.4	94.3	94.3	114	141	347	881	297	74.9	104
(WY)	(2012)	(2011)	(2011)	(2011)	(2011)	(2007)	(2011)	(2011)	(2011)	(2011)	(2011)	(2010)
Min	36.0	40.5	41.6	34.1	39.5	54.9	58.3	71.5	77.6	24.8	19.7	23.8
(WY)	(2008)	(2008)	(2008)	(2008)	(2008)	(2008)	(2008)	(2008)	(2007)	(2007)	(2007)	(2007)

Discontinued Dec. 31, 2011.

06076560 SMITH RIVER BELOW NEWLAN CREEK, NEAR WHITE SULPHUR SPRINGS, MT—Continued

SUMMARY STATISTICS

	Calendar Year 2011		Water Years 2005 – 2012*	
Annual total	72,828			
Annual mean	200		98.0	
Highest annual mean			200	2011
Lowest annual mean			54.6	2007
Highest daily mean	1,420	Jun 9	1,420	Jun 9, 2011
Lowest daily mean	60	Feb 1	17	Sep 3, 2007
Annual seven-day minimum	70	Aug 9	18	Aug 28, 2007
Maximum peak flow			1,450	Jun 9, 2011
Maximum peak stage			5.85	Jun 9, 2011
Instantaneous low flow			[a]17	Aug 15, 2007
Annual runoff (ac-ft)	144,500		70,990	
10 percent exceeds	553		169	
50 percent exceeds	99		64	
90 percent exceeds	75		35	

*Discontinued Dec. 31, 2011.
[a]Gage height, 1.65 ft.