Water-Data Report 2013

06446000 WHITE RIVER NEAR OGLALA, SD

White Basin
Upper White Subbasin

LOCATION.--Lat 43°15'17.5", long 102°49'36.8" referenced to North American Datum of 1927, in SW ¼ NE ¼ sec.24, T.38 N., R.47 W., Shannon County, SD, Hydrologic Unit 10140201, on right bank at downstream side of bridge, 3.0 mi downstream from Blacktail Creek, and 7.0 mi northwest of Oglala.

DRAINAGE AREA.--2,160 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--May 1943 to current year.

REVISED RECORDS.--WDR SD-10-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 2,853.54 ft above NGVD of 1929. Prior to May 6, 1947, nonrecording gage at same site and datum.

REMARKS.--Records good except those for Sept. 1 - 30, which are fair and those for estimated daily discharges, which are poor. Some diversions for irrigation upstream from station. Satellite data-collection platform at station. Water temperature and specific conductance measured with each discharge measurement.

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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	0.00	e0.00	e3.6	e2.6	e5.4	e18	20	54	54	16	1.8	e1.3
2	0.00	e0.00	e4.1	e2.6	e5.0	e19	19	45	36	12	3.4	e1.2
3	0.00	e0.05	e4.1	e3.0	e5.5	e19	19	38	36	9.5	5.9	e0.80
4	0.00	e0.16	e3.1	e3.0	e5.5	e17	18	32	33	7.5	3.1	e0.60
5	0.00	4.4	e4.3	e3.0	e5.8	e16	18	28	30	6.1	2.6	e0.70
6	0.00	4.0	e3.3	e3.4	e6.0	e18	17	26	27	4.5	2.7	e0.80
7	0.00	3.9	e2.8	e4.0	e6.2	e19	17	24	24	14	3.8	e2.4
8	0.00	4.5	e3.3	e4.0	e6.5	e18	16	23	24	6.5	30	3.6
9	0.00	3.4	e2.6	e4.5	e5.7	e18	16	26	26	9.4	3.1	6.8
10	0.00	3.8	e2.9	e5.3	e5.2	e18	28	22	25	15	4.7	1.7
11	0.00	3.2	e3.2	e5.3	e4.9	e18	35	21	26	13	4.2	e1.2
12	0.00	2.2	e3.4	e4.9	e5.7	e17	40	20	26	11	4.0	e0.80
13	0.00	1.7	e3.5	e4.0	e6.0	e18	38	19	47	9.4	3.4	e3.6
14	0.00	1.7	e3.5	e3.3	e7.0	e19	34	20	30	7.1	6.9	5.2
15	0.00	2.5	e3.3	e3.3	e6.5	e20	32	19	24	6.0	35	6.4
16	0.00	2.1	e3.8	e3.7	e6.0	e19	32	20	22	4.5	85	6.0
17	0.00	1.7	e3.9	e4.0	e7.0	e18	35	20	21	6.0	45	5.0
18	0.00	1.3	e4.1	e3.8	e8.0	e17	49	20	18	5.4	30	5.1
19	0.00	1.5	e3.8	e3.7	e8.0	e16	59	20	18	4.3	33	5.1
20	0.00	2.5	e3.8	e3.5	e8.0	e14	55	23	16	13	22	4.0
21	0.00	2.9	e4.6	e3.1	e8.0	e15	63	28	15	5.0	17	2.5
22	0.00	3.0	e4.8	e3.2	e7.5	e15	136	39	86	3.3	16	1.6
23	0.00	2.9	e4.5	e3.1	e7.7	e14	135	35	118	5.0	12	3.0
24	e0.10	2.7	e4.0	e3.1	e8.3	e13	168	34	29	3.0	9.1	3.7
25	e0.18	e2.4	e3.6	e4.5	e10	e13	156	40	33	2.8	6.5	9.0
26	e0.14	e2.2	e3.8	e5.3	e12	e14	129	38	46	3.2	5.1	1.8
27	e0.10	e2.1	e3.1	e5.4	e13	e15	123	32	29	3.5	4.0	1.3
28	e0.05	e2.6	e3.0	e5.0	e16	e16	111	29	27	4.3	3.5	4.2
29	e0.00	e3.7	e3.0	e4.9	---	16	92	29	28	3.4	4.1	5.1
30	e0.00	e3.8	e2.9	e4.8	---	19	69	33	21	2.5	3.3	2.3
31	e0.00	---	e2.7	e4.5	---	22	---	40	---	1.8	2.0	---
Total	0.57	72.91	110.4	121.8	206.4	528	1,779	897	995	218.0	412.2	96.80
Mean	0.02	2.43	3.56	3.93	7.37	17.0	59.3	28.9	33.2	7.03	13.3	3.23
Max	0.18	4.5	4.8	5.4	16	22	168	54	118	16	85	9.0
Min	0.00	0.00	2.6	2.6	4.9	13	16	19	15	1.8	1.8	0.60
Ac-ft	1.1	145	219	242	409	1,050	3,530	1,780	1,970	432	818	192

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2013, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	14.5	17.2	15.2	16.5	41.5	110	83.1	108	141	50.5	23.6	18.5
Max	63.1	55.8	55.7	97.0	281	807	465	583	1,037	314	130	181
(WY)	(1968)	(1987)	(1947)	(1997)	(1997)	(1949)	(2000)	(1957)	(1967)	(1969)	(1979)	(1955)
Min	0.00	0.00	0.00	0.00	1.21	8.22	12.3	13.4	4.88	0.00	0.00	0.00
(WY)	(1965)	(2008)	(2008)	(2008)	(1991)	(2007)	(1962)	(1985)	(1981)	(1985)	(2003)	(1964)

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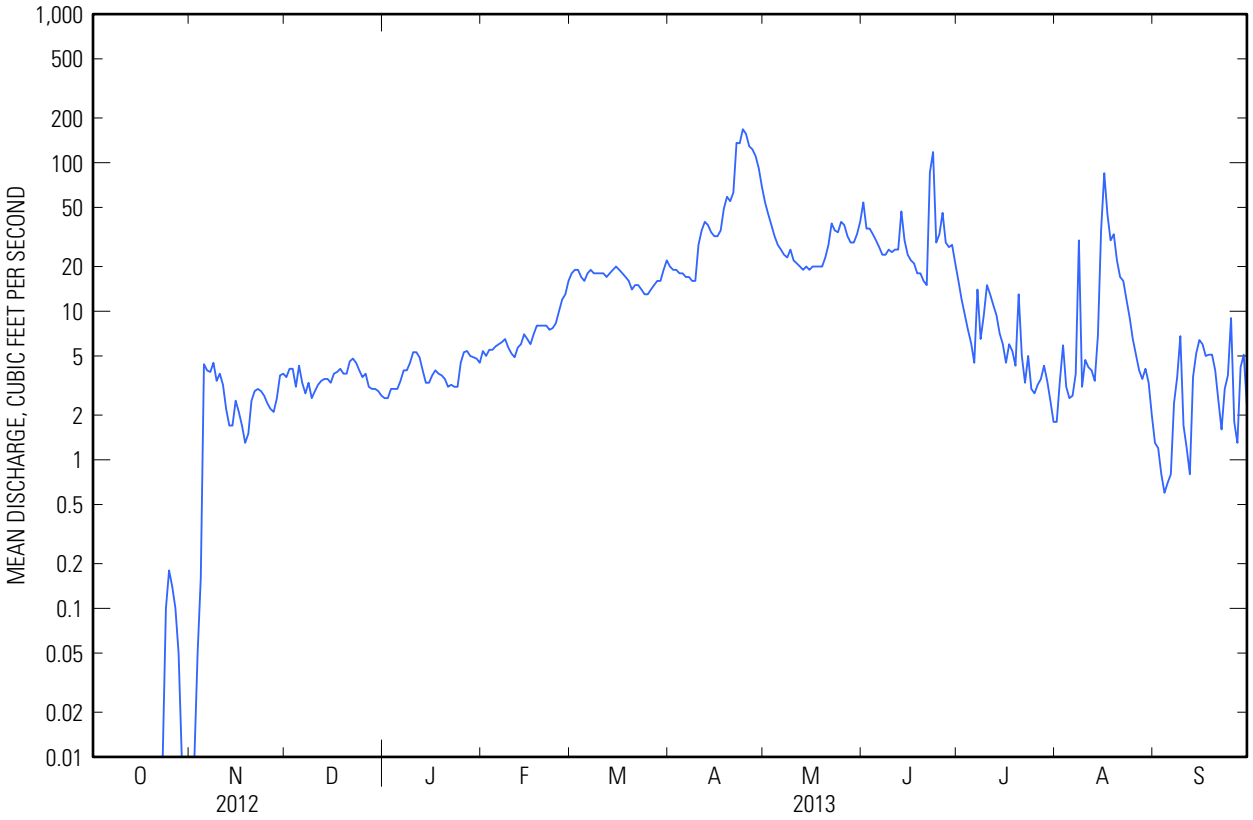
SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1944 - 2013	
Annual total	8,694.69		5,438.08			
Annual mean	23.8		14.9		[a]53.3	
Highest annual mean					152	1997
Lowest annual mean					9.50	2008
Highest daily mean	105	Mar 2	168	Apr 24	3,870	Jun 23, 1947
Lowest daily mean	0.00	Jul 21	0.00	Oct 1	[b]0.00	Sep 25, 1952
Annual seven-day minimum	0.00	Jul 28	0.00	Oct 1	0.00	Sep 25, 1952
Maximum peak flow			302	Jun 22	[c]5,200	Jun 21, 1947
Maximum peak stage			9.18	Jun 22	23.61	Jun 16, 1967
Annual runoff (ac-ft)	17,250		10,790		38,580	
10 percent exceeds	64		34		98	
50 percent exceeds	4.7		5.4		21	
90 percent exceeds	0.00		0.66		3.0	

[a] Median of annual mean discharges, 45 ft³/s.
[b] No flow at times in most years.
[c] From rating curve extended above 2,800 ft³/s on basis of velocity-area studies, gage height, 23.50 ft.



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WATER-QUALITY RECORDS

WATER-QUALITY DATA
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

[ft^3/s, cubic feet per second; °C, degrees Celsius; µS/cm, microsiemens per centimeter]

Date	Sample start time	Discharge, instantaneous, ft^3/s (00061)	Specific conductance, water, unfiltered, µS/cm at 25°C (00095)	Temperature, air, °C (00020)	Temperature, water, °C (00010)
11-07-2012	**0933**	4.1	2,260	10.0	4.2
11-29-2012	**1117**	3.7	975	4.5	0.6
12-10-2012	**0955**	3.0	1,940	-1.0	0.7
01-24-2013	**1326**	3.0	1,200	5.0	0.1
02-28-2013	**1211**	16	706	8.0	0.0
04-03-2013	**1200**	19	720	22.0	9.8
07-02-2013	**1229**	12	772	28.0	25.0
07-22-2013	**0924**	2.9	844	23.5	22.7
08-26-2013	**0956**	5.2	623	27.0	22.5
09-24-2013	**0945**	4.1	631	14.5	12.3