Water-Data Report 2013

06464500 KEYA PAHA RIVER AT WEWELA, SD

Niobrara Basin
Keya Paha Subbasin

LOCATION.--Lat 43°01'37.5", long 99°46'49.9" referenced to North American Datum of 1927, in NW ¼ SW ¼ SE ¼ sec.24, T.95 N., R.76 W., Tripp County, SD, Hydrologic Unit 10150006, on right bank at downstream side of bridge on U.S. Highway 183, 1.0 mi north of Wewela, 4.5 mi upstream from Holt Creek, and 11.5 mi downstream from Lost Creek.

DRAINAGE AREA.--1,129 mi^2 of which 8 mi^2 probably is noncontributing.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--November 1937 to September 1940, October 1947 to current year. Monthly discharge only for October 1947, published in WSP 1309.

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 2,049.78 ft above NGVD of 1929. Prior to Jun. 21, 1957, nonrecording gage at site 13 ft upstream at same datum. Prior to Aug. 23, 1984, recording gage on left bank 13 ft downstream from bridge at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Satellite data-collection platform at station. Water temperature and specific conductance measured with each discharge measurement.

Suggested citation: U.S. Geological Survey, 2014, Water-resources data for the United States, Water Year 2013: U.S. Geological Survey Water-Data Report WDR-US-2013, site 06464500, accessed at http://wdr.water.usgs.gov/wy2013/pdfs/06464500.2013.pdf

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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	31	e36	e31	e35	e48	73	95	299	52	41	26
2	19	31	e36	e31	e37	e48	72	87	238	47	83	25
3	19	31	e37	e31	e38	e50	70	82	201	43	129	24
4	19	31	37	e32	e38	e52	68	77	177	40	115	23
5	19	32	37	e32	e37	e58	65	73	151	43	91	24
6	21	33	36	e32	e38	e66	64	70	134	41	100	24
7	22	32	36	e33	e38	e76	63	68	122	39	87	24
8	24	32	36	e33	e39	e70	e64	69	117	39	81	e24
9	24	32	e26	e34	e39	e62	e63	80	119	45	81	e25
10	25	33	e29	e33	e45	e62	e41	97	107	48	81	e26
11	25	e23	e31	e32	e50	e74	e49	98	98	41	72	e27
12	25	e24	e31	e32	e45	e86	56	80	89	35	62	e29
13	26	e31	e31	e32	e45	e96	61	71	80	33	55	30
14	26	e33	e31	e32	e42	e105	121	64	74	42	58	30
15	24	e34	e31	e32	e42	e110	207	56	72	57	62	32
16	24	e35	e31	e33	e42	116	215	55	70	337	56	34
17	24	e35	e31	e34	e42	115	224	62	70	192	51	e34
18	25	e36	e32	e35	e42	109	201	64	65	155	47	e35
19	24	37	e32	e34	e42	102	177	78	61	119	44	33
20	24	36	e32	e33	e41	96	162	230	58	89	41	30
21	25	36	e33	e33	e40	90	155	380	55	71	40	30
22	26	35	e31	e33	e38	88	164	312	54	62	41	32
23	26	33	e30	e33	e38	87	157	267	93	54	40	29
24	26	e29	e30	e34	e40	e80	154	229	120	50	40	29
25	28	e32	e30	e35	e42	e77	161	189	117	45	38	29
26	28	e34	e31	e36	e43	e80	162	162	108	43	36	28
27	30	e34	e30	e37	e44	81	147	140	86	41	33	29
28	30	e34	e30	e36	e45	78	133	143	71	38	31	33
29	31	e34	e31	e36	---	77	116	214	59	37	29	34
30	31	e35	e31	e35	---	77	104	334	55	37	28	36
31	31	---	e31	e34	---	75	---	384	---	39	27	---
Total	770	978	997	1,033	1,147	2,491	3,569	4,410	3,220	2,054	1,820	868
Mean	24.8	32.6	32.2	33.3	41.0	80.4	119	142	107	66.3	58.7	28.9
Max	31	37	37	37	50	116	224	384	299	337	129	36
Min	19	23	26	31	35	48	41	55	54	33	27	23
Ac-ft	1,530	1,940	1,980	2,050	2,280	4,940	7,080	8,750	6,390	4,070	3,610	1,720

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2013, BY WATER YEAR (WY) *

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	41.3	47.4	38.8	34.6	79.9	179	166	144	118	63.7	37.0	31.0
Max	141	204	120	135	546	598	605	754	512	607	178	89.2
(WY)	(1996)	(1999)	(2002)	(1997)	(1997)	(1960)	(1952)	(1995)	(1962)	(1962)	(1998)	(1999)
Min	8.49	12.0	8.74	1.61	5.08	33.5	31.3	27.4	12.2	3.55	0.80	3.71
(WY)	(1977)	(1977)	(1956)	(1949)	(1979)	(1975)	(1976)	(1981)	(1976)	(1940)	(1976)	(1976)

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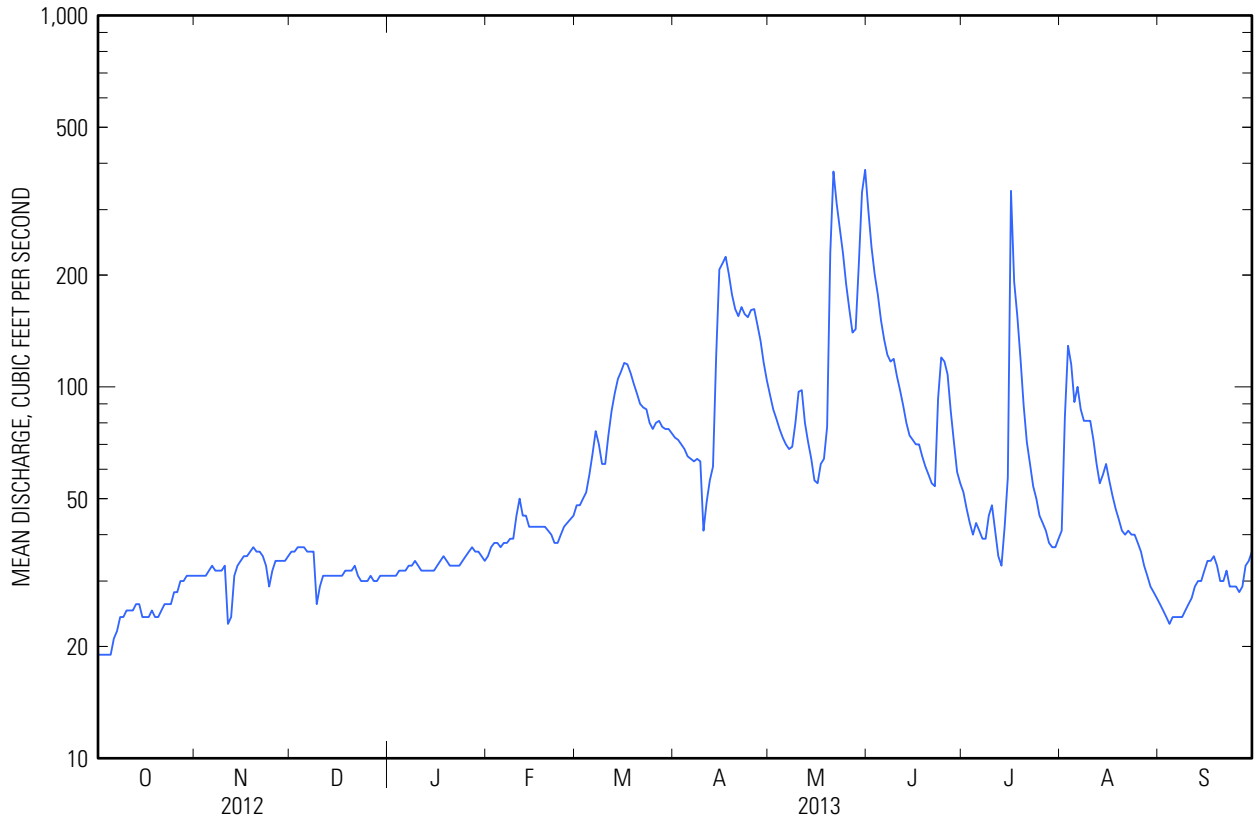
SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1939 - 2013*	
Annual total	18,210		23,357			
Annual mean	49.8		64.0		[a]81.7	
Highest annual mean					188	1997
Lowest annual mean					19.5	1976
Highest daily mean	250	Mar 7	384	May 31	4,930	Mar 30, 1952
Lowest daily mean	10	Aug 30	19	Oct 1	[b]0.00	Jan 10, 1949
Annual seven-day minimum	11	Sep 2	20	Oct 1	0.00	Jan 10, 1949
Maximum peak flow			457	May 21	[c]5,430	Mar 31, 1952
Maximum peak stage			3.87	May 21	[d]13.50	Mar 25, 1950
Annual runoff (ac-ft)	36,120		46,330		59,170	
10 percent exceeds	100		125		166	
50 percent exceeds	35		40		44	
90 percent exceeds	15		26		16	

* Reflects water years 1939-40, and 1948-2013.
[a] Median of annual mean discharges, 72 ft³/s.
[b] Also Jan. 11 to Feb. 15, 1949, and Aug. 19 to Sept. 14, 1976.
[c] Gage height, 13.08 ft.
[d] Backwater from ice.



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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)
10-17-2012	**1730**	24	412	11.5	10.6
12-17-2012	**1456**	31	451	0.0	0.1
02-15-2013	**1023**	42	401	-5.0	-0.1
04-04-2013	**1243**	68	430	9.0	11.0
04-04-2013	**1526**	65	430	9.0	11.0
05-21-2013	**0850**	385	353	9.5	15.0
05-21-2013	**1125**	368	368	11.5	15.0
06-07-2013	**0834**	126	490	11.0	16.2
07-15-2013	**1526**	49	396	28.5	31.9
07-15-2013	**1701**	50	396	28.5	31.9
08-28-2013	**1225**	32	407	28.0	29.0