Water-Data Report 2013

03354000 WHITE RIVER NEAR CENTERTON, IN

White River Basin

LOCATION.--Lat 39°29′51″, long 86°24′02″ referenced to North American Datum of 1927, in NE ¼ NE ¼ sec.10, T.12 N., R.1 E., Morgan County, IN, Hydrologic Unit 05120201, on right bank at upstream side of bridge on Blue Bluff Road, 0.8 mi downstream from White Lick Creek, 1 mi south of Centerton, and at mile 199.3.

DRAINAGE AREA.-- 2,444.00 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD. -- July 1925 to September 1930 (gage heights only), October 1930 to March 1932, October 1946 to current year. Monthly discharge only for October and November 1946, published in WSP 1305. Published as West Fork White River at Martinsville prior to March 1932, and as West Fork White River near Centerton October 1946 to September 1948.

REVISED RECORDS.-- WSP 1335: 1948-49. WSP 1909: 1931(M). WSP 2109: Drainage area.

GAGE.-- Water-stage recorder. Datum of gage is 595.44 ft above National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark), levels by Indianapolis Power and Light Co. See WSP 1725 for history of changes prior to July 1953. July 1953 to Aug. 7, 1975, water-stage recorder at site 0.4 mi downstream at same datum.

REMARKS.-- Records fair, except for estimated daily discharges, which are poor. Flow regulated by upstream reservoirs. (Former National stream-quality accounting network station).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 22.8 ft at Martinsville site (from information by Indiana State Highway Commission) and 21.9 ft at site 0.4 mi downstream (from information by Corps of Engineers), discharge, 90,000 ft^3/s.

03354000 WHITE RIVER NEAR CENTERTON, IN—Continued

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	811	1,330	756	1,560	10,800	8,880	3,340	5,960	e6,430	2,720	622	771
2	1,150	1,350	791	1,540	7,440	6,550	2,940	5,020	7,600	3,580	607	607
3	1,250	1,350	855	1,470	5,050	5,310	2,580	4,260	6,190	5,030	744	518
4	972	1,290	820	1,420	4,050	4,380	2,300	3,820	4,430	5,520	882	501
5	892	1,180	905	1,390	3,490	3,780	2,100	3,480	3,270	4,050	750	479
6	2,840	1,080	907	1,410	2,940	3,750	1,880	3,420	2,660	2,910	704	460
7	2,680	1,020	866	1,380	2,680	3,610	1,740	3,160	2,280	2,400	646	445
8	2,320	989	991	1,330	2,790	3,500	1,660	2,860	1,950	1,920	643	439
9	1,930	935	1,200	1,400	2,870	3,790	1,710	2,710	1,690	1,600	872	443
10	1,430	884	2,360	2,310	3,040	4,200	1,730	4,830	3,090	1,410	896	450
11	1,160	848	2,910	7,660	3,280	4,800	2,410	4,900	5,730	1,360	761	445
12	989	1,270	3,130	12,100	3,040	5,160	7,680	3,700	5,410	1,360	684	441
13	894	2,320	2,590	24,200	2,790	4,810	10,000	3,120	4,040	1,180	636	475
14	825	2,140	2,020	33,100	2,560	4,280	8,810	2,780	6,410	1,050	583	446
15	874	2,050	1,720	29,300	2,340	3,550	5,640	2,510	8,520	978	556	441
16	879	1,700	1,600	26,300	2,220	3,060	4,840	2,170	6,530	903	544	456
17	813	1,420	1,470	17,000	2,110	2,780	14,400	2,120	3,850	846	528	439
18	1,100	1,250	1,350	7,880	1,920	3,800	14,600	2,660	2,950	812	522	434
19	1,490	1,140	1,260	6,070	2,000	3,440	30,200	2,540	2,380	775	517	656
20	1,710	1,070	1,280	5,090	1,990	3,220	40,700	2,480	1,950	778	518	1,190
21	2,030	1,000	2,360	4,440	1,840	3,050	32,900	2,130	1,630	851	516	983
22	1,640	958	2,800	3,810	1,860	2,650	21,800	e1,980	1,430	852	518	859
23	1,530	982	3,350	3,140	2,150	2,360	10,000	e1,950	1,560	845	511	679
24	2,780	972	2,730	2,740	2,110	2,170	14,700	1,790	3,940	757	504	611
25	3,270	930	2,310	2,630	2,020	2,260	18,500	1,600	2,800	708	495	555
26	3,490	872	1,980	2,440	4,080	2,480	16,500	1,450	1,980	679	499	512
27	2,780	839	1,970	2,280	9,570	2,690	11,500	1,780	1,710	784	502	480
28	2,030	825	1,830	2,790	9,720	2,880	8,220	2,350	1,480	792	485	463
29	1,600	801	1,730	3,390	---	3,700	7,870	4,130	1,590	665	480	464
30	1,380	771	1,660	8,510	---	4,330	7,070	4,300	1,790	628	473	713
31	1,320	---	1,600	11,400	---	3,930	---	3,440	---	612	483	---
Total	50,859	35,566	54,101	231,480	102,750	119,150	310,320	95,400	107,270	49,355	18,681	16,855
Mean	1,641	1,186	1,745	7,467	3,670	3,844	10,340	3,077	3,576	1,592	603	562
Max	3,490	2,320	3,350	33,100	10,800	8,880	40,700	5,960	8,520	5,520	896	1,190
Min	811	771	756	1,330	1,840	2,170	1,660	1,450	1,430	612	473	434
Cfsm	0.67	0.49	0.71	3.06	1.50	1.57	4.23	1.26	1.46	0.65	0.25	0.23
In.	0.77	0.54	0.82	3.52	1.56	1.81	4.72	1.45	1.63	0.75	0.28	0.26

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 2013, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	1,003	1,814	2,748	3,635	3,769	4,721	4,442	3,315	2,773	1,890	1,089	1,025
Max	6,725	11,760	8,604	17,760	10,430	11,220	11,530	11,280	10,310	9,354	6,001	9,121
(WY)	(2002)	(1994)	(2012)	(1950)	(1950)	(2007)	(1964)	(1996)	(1998)	(2003)	(1979)	(2003)
Min	281	320	305	302	460	1,083	1,097	799	419	344	338	213
(WY)	(1964)	(1954)	(1964)	(1977)	(1964)	(2000)	(1971)	(1976)	(1988)	(1954)	(1966)	(1954)

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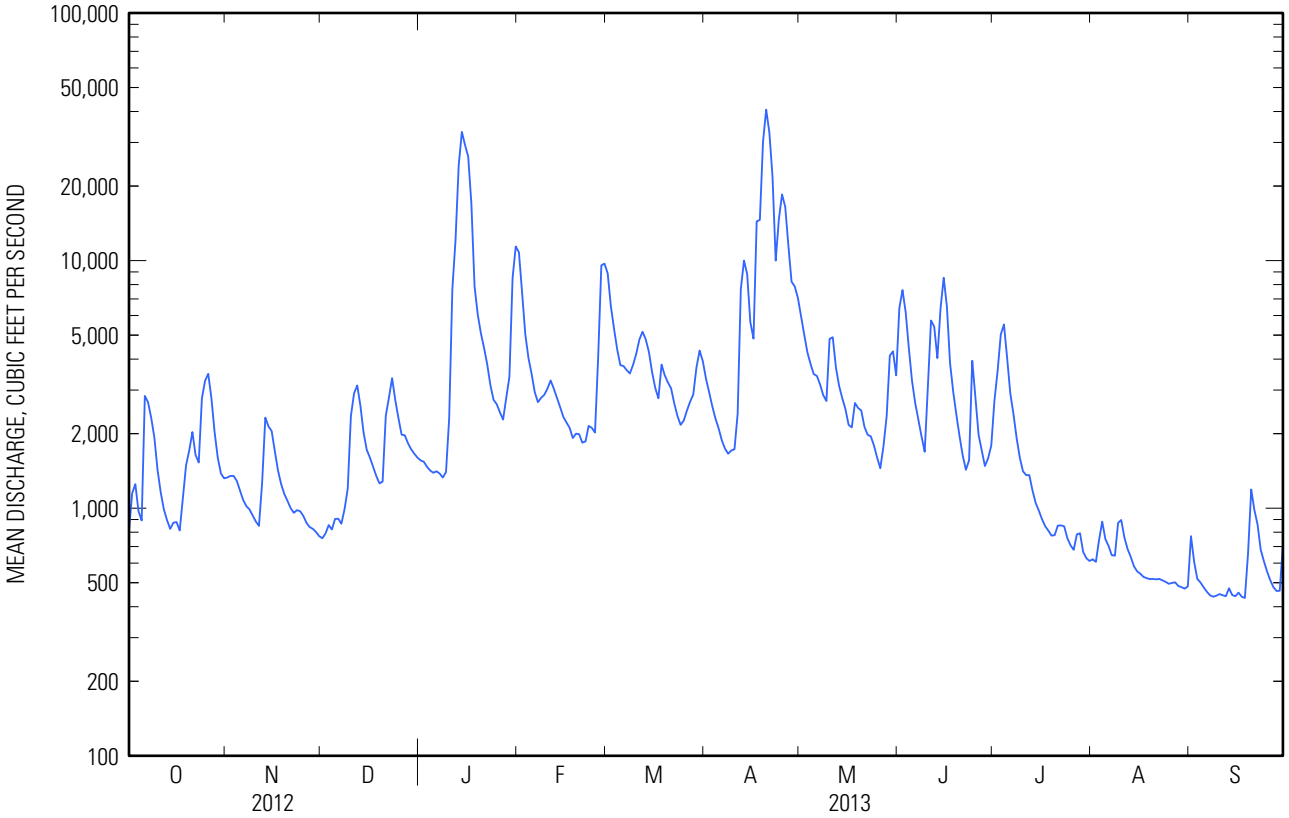
SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1948 - 2013	
Annual total	718,896		1,191,787			
Annual mean	1,964		3,265		2,679	
Highest annual mean					4,133	2008
Lowest annual mean					812	1954
Highest daily mean	12,900	Jan 27	40,700	Apr 20	51,700	Jan 6, 2005
Lowest daily mean	313	Aug 3	434	Sep 18	138	Sep 27, 1954
Annual seven-day minimum	344	Jul 29	446	Sep 6	157	Sep 27, 1954
Maximum peak flow			46,000	Apr 20	65,700	Sep 2, 2003
Maximum peak stage			18.07	Apr 20	20.04	Sep 2, 2003
Annual runoff (cfsm)	0.804		1.34		1.10	
Annual runoff (inches)	10.94		18.14		14.89	
10 percent exceeds	3,750		6,470		6,000	
50 percent exceeds	1,300		1,950		1,420	
90 percent exceeds	409		551		426	



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WATER-QUALITY RECORDS

PERIOD OF RECORD.--
WATER TEMPERATURE: October 1955 to April 1956; October 1966 to September 1967; January 1970 to September 1972; August 1975 to December 1977; June 1978 to December 1978; March 1980 to October 1984; and December 1988 to current year.

INSTRUMENTATION.-- Temperature recorder.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum, 33.1°C, Sept. 7, 1977; minimum, -0.6°C, on a few days during 1976 ,1977, 1999, and 2001.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 30.5°C, July 18; minimum, 1.0°C, Jan. 3.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		October			November			December			January	
1	18.8	17.1	17.7	11.4	9.6	10.6	11.1	8.6	9.9	4.0	3.0	3.5
2	17.1	16.1	16.4	11.8	10.0	10.9	12.6	11.1	11.9	3.4	1.6	2.6
3	18.5	16.1	17.1	11.0	9.9	10.3	14.1	12.6	13.4	2.5	1.0	1.8
4	19.8	16.8	18.3	10.8	9.1	10	14.2	12.7	13.8	3.0	1.7	2.4
5	19.3	15.5	17.8	10.6	8.9	9.8	12.7	10.7	11.6	3.2	1.4	2.3
6	15.5	12.3	13.4	10.5	8.6	9.7	10.7	9.1	9.9	3.3	3.2	3.2
7	13.7	12.7	13.2	11.1	10.2	10.5	11.1	10.2	10.6	3.7	1.9	2.9
8	14.4	11.9	13.1	10.7	9.3	10.0	11.3	11.1	11.2	4.1	2.2	3.2
9	14.7	12.0	13.4	11.4	8.9	10.2	11.1	10.6	10.9	5.6	3.7	4.5
10	14.7	13.1	13.8	13.4	11.0	12.2	10.9	7.4	9.0	4.0	3.0	3.4
11	14.6	11.8	13.3	14.0	12.5	13.3	7.4	6.5	7.0	6.3	3.7	5.2
12	15.5	13.0	14.2	13.7	10.4	12.4	6.5	5.5	6.0	7.3	5.6	6.2
13	15.7	13.5	14.6	10.4	8.8	9.5	6.2	4.9	5.6	8.9	6.7	8.2
14	17.8	15.7	16.8	9.1	7.8	8.5	6.6	5.0	5.9	6.7	4.8	5.4
15	17.7	15.9	16.7	8.9	7.3	8.1	7.7	6.4	6.8	4.8	4.0	4.3
16	17.0	14.6	15.9	9.0	7.0	8.0	9.1	7.7	8.5	4.2	3.4	3.9
17	16.6	15.5	16.2	9.4	7.4	8.4	8.7	8.0	8.3	4.2	3.2	3.7
18	16.5	15.2	15.8	9.7	8.0	8.9	8.7	8.1	8.4	4.3	3.7	4.0
19	15.3	13.7	14.4	9.8	8.3	9.1	8.3	7.6	8.0	5.1	3.8	4.5
20	14.2	12.9	13.5	11.3	9.7	10.5	9.2	6.9	8.4	5.1	4.5	4.8
21	14.7	12.0	13.3	12.1	10.4	11.3	6.9	3.7	4.9	4.5	2.7	3.8
22	16.0	14.0	15.0	12.0	10.1	11.1	4.3	3.1	3.7	2.7	1.5	2.1
23	17.0	15.5	16.2	11.6	8.9	10.7	4.3	3.0	3.6	1.9	1.4	1.7
24	17.5	15.4	16.4	8.9	7.5	8.0	4.4	3.5	4.0	2.5	1.3	1.9
25	17.8	16.1	16.9	8.8	7.2	8.0	4.5	4.1	4.3	2.7	1.8	2.2
26	17.1	14.0	15.4	9.4	7.7	8.7	4.1	1.5	2.5	3.3	1.8	2.5
27	14.1	12.6	13.4	9.1	8.1	8.6	3.5	1.9	2.8	3.5	2.5	2.9
28	12.9	11.6	12.4	8.6	7.1	7.9	4.1	3.2	3.6	4.7	3.5	4.3
29	12.1	10.7	11.5	8.6	6.8	7.8	3.9	3.1	3.5	7.6	4.6	5.9
30	11.1	9.8	10.2	9.8	7.9	8.8	3.4	2.1	2.9	8.0	6.8	7.7
31	11.0	9.4	10.2	---	---	---	3.3	2.5	2.9	6.8	3.8	5.0
Month	19.8	9.4	14.7	14.0	6.8	9.7	14.2	1.5	7.2	8.9	1.0	3.9

03354000 WHITE RIVER NEAR CENTERTON, IN—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		February			March			April			May	
1	3.8	2.1	2.8	3.7	3.5	3.6	---	---	---	18.0	15.1	16.5
2	2.1	1.7	1.9	3.6	3.3	3.4	---	---	---	19.4	16.6	18.0
3	2.0	1.6	1.8	4.6	2.9	3.7	11.5	8.5	10	19.0	17.7	18.3
4	2.6	1.5	2.1	4.5	3.1	3.8	12.1	9.0	10.4	18.5	17.3	17.7
5	3.7	2.5	3.1	4.5	3.6	4.3	13.1	9.5	11.3	17.3	16.3	16.6
6	4.6	3.6	4.0	3.9	3.1	3.5	13.5	10.8	12.1	17.0	15.8	16.4
7	6.4	3.9	5.1	4.9	3.4	4.1	16.1	12.2	14.1	18.2	16.2	17.2
8	6.4	5.2	5.8	6.5	3.8	5.1	15.9	14.8	15.4	19.6	17.1	18.4
9	5.9	4.4	5.2	7.0	5.2	6.1	18.5	14.8	16.6	19.7	18.3	19.1
10	5.8	4.8	5.2	8.5	6.8	7.5	19.3	17.3	18.3	18.8	17.1	17.6
11	5.9	5.3	5.7	8.6	7.5	8.2	18.6	16.6	17.6	17.1	15.9	16.5
12	6.2	4.4	5.3	7.8	6.6	7.2	16.6	12.2	14.0	16.8	14.6	15.7
13	6.1	5.1	5.5	7.0	5.4	6.1	12.2	11.3	11.8	17.5	14.5	15.9
14	7.1	5.1	6.0	6.2	4.5	5.4	12.3	10.9	11.6	19.4	15.5	17.4
15	6.5	5.2	5.9	6.9	5.1	6.1	13.6	11.8	12.6	21.5	17.8	19.6
16	5.2	4.0	4.6	7.9	6.6	7.2	14.1	12.9	13.5	21.9	19.6	20.7
17	5.1	3.1	4.2	7.3	6.5	6.8	13.0	11.6	12.3	21.8	20.3	21.0
18	6.3	3.6	4.9	6.5	5.4	5.8	14.6	13.0	13.9	21.8	20.1	20.9
19	6.4	4.1	5.3	7.0	4.3	5.6	14.5	11.1	12.7	23.7	20.4	22.0
20	4.7	2.8	3.8	7.0	5.1	6.0	12.0	11.1	11.5	24.1	22.1	23.2
21	4.4	3.3	3.8	7.3	4.6	5.9	11.5	10.2	10.9	24.5	22.0	23.3
22	4.4	3.6	4.0	8.1	4.9	6.5	12.7	10.2	11.4	---	---	---
23	5.8	3.4	4.6	9.8	6.8	8.1	12.7	12.0	12.4	---	---	---
24	6.2	3.9	5.1	8.8	6.1	7.6	12.7	10.6	11.4	21.2	18.1	19.6
25	6.8	4.4	5.6	6.3	5.1	5.7	11.8	10.0	10.9	20.0	18.5	19.1
26	6.2	3.4	4.9	7.5	5.2	6.3	11.8	10.3	11.1	19.2	17.7	18.4
27	4.0	3.5	3.8	7.6	5.7	6.7	12.0	11.2	11.6	20.7	18.0	19.3
28	3.8	3.5	3.6	---	---	---	12.8	11.9	12.3	21.4	19.2	20.3
29	---	---	---	---	---	---	14.3	12.6	13.3	22.2	20.2	21.3
30	---	---	---	---	---	---	16.4	13.6	14.9	22.8	20.6	21.8
31	---	---	---	---	---	---	---	---	---	22.4	21.3	21.8
Month	7.1	1.5	4.4	---	---	---	---	---	---	---	---	---

03354000 WHITE RIVER NEAR CENTERTON, IN—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		June			July			August			September	
1	---	---	---	23.0	21.9	22.3	25.5	21.6	23.4	27.8	25.8	26.8
2	20.8	19.8	20.3	22.9	21.6	22.2	24.6	22.3	23.6	27.7	25.4	26.4
3	20.9	19.0	19.9	23.0	21.2	22.1	26.3	23.1	24.4	26.4	23.6	25.0
4	21.1	18.3	19.7	22.3	21.6	22.1	25.8	22.3	24.1	25.9	22.3	24.1
5	22.1	18.9	20.5	23.5	21.3	22.4	25.6	22.6	24.1	26.1	22.6	24.3
6	22.2	20.2	21.2	23.1	22.3	22.6	24.7	23.4	24.0	26.2	22.9	24.5
7	21.9	20.6	21.3	24.7	21.7	23.0	25.5	23.2	24.3	26.2	23.1	24.6
8	22.9	20.0	21.4	25.0	23.0	24.0	26.9	24.1	25.4	26.1	24.0	25.0
9	23.1	21.2	22.2	25.8	24.0	24.7	27.6	24.8	26.0	27.2	24.0	25.5
10	22.3	20.4	21.3	25.5	24.6	24.9	28.0	24.9	26.4	28.4	25.3	26.6
11	23.3	20.0	21.6	25.9	23.3	24.5	28.3	25.1	26.6	28.6	25.5	26.9
12	24.2	22.1	23.2	26.3	22.9	24.5	27.0	24.7	26.0	27.0	24.8	26.0
13	24.4	22.8	23.4	26.6	23.3	24.9	26.5	24.1	25.3	24.8	21.7	23.1
14	23.9	21.6	22.8	27.6	24.0	25.7	25.0	21.6	23.4	22.7	19.3	21.0
15	22.8	21.7	22.3	28.8	25.4	27.0	23.5	20.9	22.3	22.0	18.9	20.5
16	22.3	21.6	22.0	29.6	25.8	27.5	23.7	20.6	22.1	21.3	20.0	20.7
17	24.4	21.6	22.9	30.1	26.6	28.3	24.3	20.9	22.6	21.6	18.7	20.1
18	25.0	22.3	23.7	30.5	26.8	28.6	25.2	21.7	23.4	22.3	19.5	20.7
19	25.2	22.6	24.0	30.3	27.4	28.8	26.2	22.3	24.2	23.0	20.8	21.7
20	25.7	23.2	24.3	28.7	25.2	26.9	26.5	23.1	24.8	22.9	21.8	22.4
21	26.6	23.4	25.0	25.8	23.8	25.0	27.2	23.6	25.3	22.5	20.7	21.7
22	26.3	24.3	25.1	26.1	24.3	25.1	26.8	24.1	25.5	21.8	19.3	20.5
23	25.3	23.4	24.3	27.7	24.2	25.8	27.5	24.1	25.6	21.5	18.4	19.9
24	25.9	21.8	24.0	27.1	23.8	25.5	27.6	23.6	25.5	21.7	18.1	19.9
25	26.7	24.2	25.4	26.6	22.9	24.7	27.3	23.4	25.3	22.5	19.5	20.9
26	25.6	24.1	24.7	25.6	23.0	24.3	26.8	23.8	25.3	22.7	19.3	21.0
27	26.9	23.4	25.0	25.9	23.2	24.4	27.7	24.7	26.0	22.9	19.5	21.2
28	26.8	24.6	25.7	23.9	21.5	22.7	28.8	25.3	26.9	22.6	19.6	21.2
29	25.4	23.5	24.5	24.6	20.7	22.7	29.1	26.2	27.5	21.5	20.0	20.5
30	23.8	22.8	23.3	23.3	22.0	22.5	29.1	25.5	27.3	21.4	19.8	20.5
31	---	---	---	22.9	21.5	22.1	29.5	26.4	27.7	---	---	---
Month	---	---	---	30.5	20.7	24.6	29.5	20.6	25.0	28.6	18.1	22.8