

Water-Data Report 2012

03460000 CATALOOCHEE CREEK NEAR CATALOOCHEE, NC

French Broad-Holston Basin
Pigeon Subbasin

LOCATION.--Lat 35°40'03", long 83°04'25" referenced to North American Datum of 1983, Haywood County, NC, Hydrologic Unit 06010106, in Great Smoky Mountains National Park, on left bank 20 ft downstream of bridge on North Carolina Highway 284, 500 ft upstream from Little Cataloochee Creek, 2 mi north of Cataloochee, and 3.7 mi upstream from mouth.

DRAINAGE AREA.--49.2 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1933 to September 1952, October 1962 to current year. Monthly discharge only for some periods, published in WSP 1306.

REVISED RECORDS.--WSP 823: Drainage area.

GAGE.--Water-stage recorder and crest stage gage. Datum of gage is 2,456.88 ft above National Geodetic Vertical Datum of 1929 (levels by Tennessee Valley Authority). Satellite telemetry at streamgage.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Minimum discharge for period of record also occurred Dec. 17, 24, 1943, result of freezeup. Minimum discharge for current water year also occurred September 13, 14, 15, 16, 17.

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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	33	48	175	147	213	135	104	166	83	36	67	41
2	33	46	150	135	200	127	100	151	71	112	49	47
3	32	55	132	125	174	261	129	139	64	48	46	38
4	32	108	118	e121	181	216	131	132	62	45	46	37
5	32	67	108	114	185	184	130	125	70	42	44	38
6	32	60	364	109	168	160	172	115	60	40	66	34
7	32	56	1,360	112	161	145	141	111	57	39	74	32
8	31	53	767	119	153	137	128	115	55	39	65	36
9	31	51	430	137	144	237	117	106	54	55	92	36
10	32	51	302	147	137	183	110	97	57	56	114	30
11	45	46	235	198	132	172	103	91	58	70	90	30
12	59	45	195	256	126	161	98	88	64	64	75	29
13	45	42	168	232	122	176	94	96	53	60	66	28
14	60	42	149	204	117	153	90	124	56	52	62	28
15	43	48	136	184	110	154	87	111	54	61	56	28
16	38	258	163	165	119	197	84	105	50	62	51	27
17	38	239	145	186	107	187	100	93	53	80	49	32
18	38	154	129	219	101	193	345	87	59	82	47	169
19	78	124	123	190	125	176	297	84	50	93	55	68
20	67	110	118	185	114	164	224	79	48	128	50	46
21	50	118	174	292	107	152	190	89	54	76	44	40
22	46	128	230	289	106	141	168	91	54	67	42	37
23	44	242	383	511	127	138	153	96	56	59	41	34
24	43	162	283	488	113	142	139	85	46	54	41	33
25	41	138	231	365	107	136	162	76	43	50	38	32
26	40	120	199	320	103	123	284	72	41	48	37	32
27	40	107	225	405	101	119	326	69	39	45	36	32
28	54	189	190	336	97	116	253	67	38	44	34	32
29	80	281	173	288	104	114	213	80	37	41	41	36
30	54	208	164	249	---	113	186	86	36	40	40	35
31	50	---	155	220	---	114	---	66	---	94	35	---
Total	1,373	3,396	7,874	7,048	3,854	4,926	4,858	3,092	1,622	1,882	1,693	1,197
Mean	44.3	113	254	227	133	159	162	99.7	54.1	60.7	54.6	39.9
Max	80	281	1,360	511	213	261	345	166	83	128	114	169
Min	31	42	108	109	97	113	84	66	36	36	34	27
Cfsm	0.90	2.30	5.16	4.62	2.70	3.23	3.29	2.03	1.10	1.23	1.11	0.81
In.	1.04	2.57	5.95	5.33	2.91	3.72	3.67	2.34	1.23	1.42	1.28	0.91

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1934 - 2012^a, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	53.3	73.3	116	162	173	195	154	114	83.6	73.3	69.4	57.9
Max	146	201	302	392	394	496	305	289	252	182	223	361
(WY)	(1990)	(2010)	(1973)	(1937)	(1990)	(1963)	(1936)	(2003)	(1967)	(1949)	(1940)	(2004)
Min	19.0	22.3	26.0	35.5	49.5	63.2	58.8	46.2	34.7	29.6	26.9	21.1
(WY)	(2009)	(1940)	(1940)	(1940)	(1941)	(1988)	(1986)	(1986)	(1986)	(1986)	(1987)	(2008)

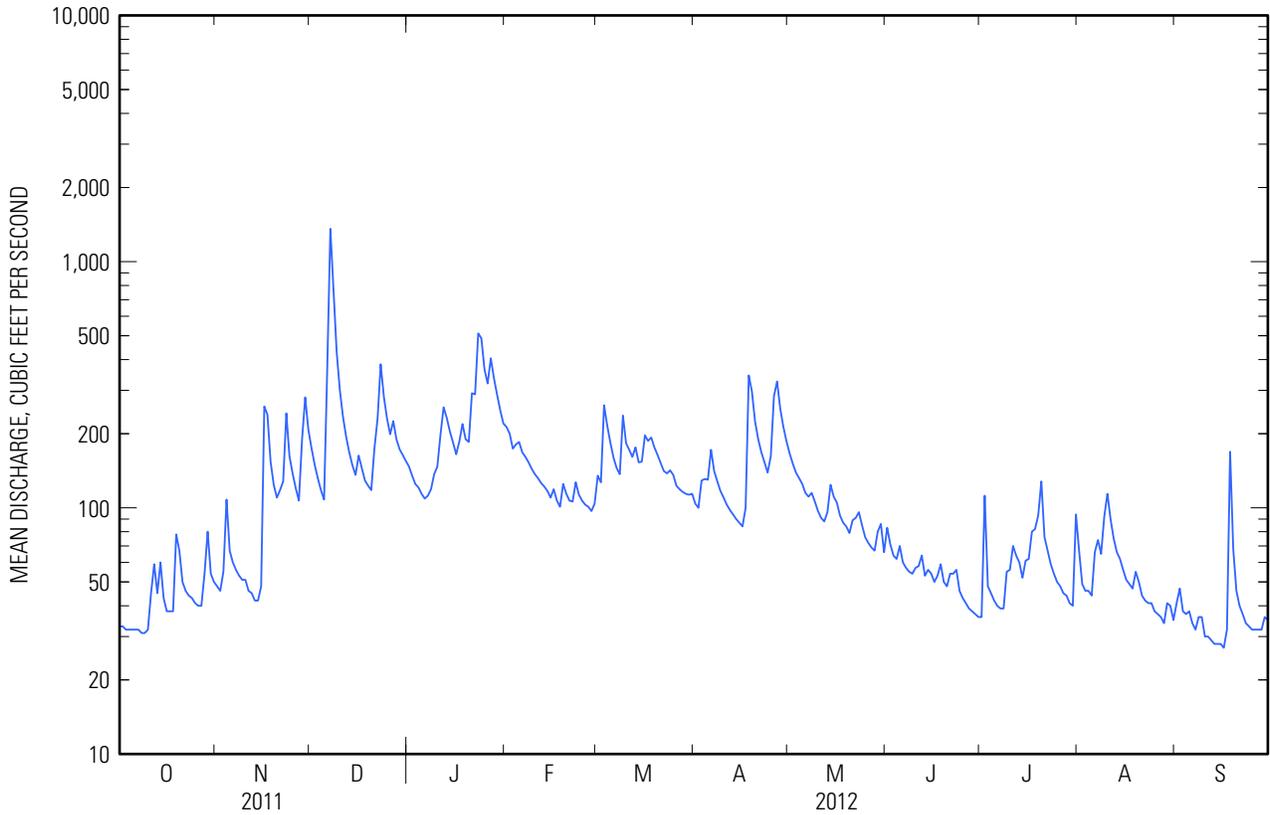
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SUMMARY STATISTICS

	Calendar Year 2011		Water Year 2012		Water Years 1934 - 2012 ^a	
Annual total	46,740		42,815			
Annual mean	128		117		110	
Highest annual mean					171	1994
Lowest annual mean					51.5	1986
Highest daily mean	1,360	Dec 7	1,360	Dec 7	2,690	Mar 16, 1973
Lowest daily mean	30	Sep 3	27	Sep 16	12	Jan 2, 1940
Annual seven-day minimum	32	Oct 3	29	Sep 10	15	Aug 18, 2008
Maximum peak flow			2,000	Dec 7	5,080	Mar 6, 1963
Maximum peak stage			5.75	Dec 7	8.08	Mar 6, 1963
Instantaneous low flow			^b 27	Sep 12	^b 9.0	Jan 2, 1940
Annual runoff (cfsm)	2.60		2.38		2.24	
Annual runoff (inches)	35.34		32.37		30.42	
10 percent exceeds	240		219		202	
50 percent exceeds	100		95		82	
90 percent exceeds	40		37		34	

^a See Period of Record.

^b See Remarks.



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WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1963 to 1996, 1999, 2003, September 2011 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: August 1973 to September 1986.

WATER TEMPERATURE: October 1962 to September 1986, December 2011 to current year.

INSTRUMENTATION.--Temperature recorder from October 1962 to September 1986. Water-quality monitor from May 1974 to September 1986, December 2011 to current year.

REMARKS.--Station operated as part of the Hydrologic Benchmark network from October 1962 to current year. Miscellaneous chemical data published for 1945 water year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 43 microsiemens, June 13, 1974; minimum, 7 microsiemens, Feb. 28, 1983.

WATER TEMPERATURE: Maximum, 23.5°C, Aug. 5, 1977; minimum, -0.1°C, January 3, 4, February 12, 13, 2012.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum recorded, 21.1°C, July 7; minimum recorded, -0.1°C, January 3, 4, February 12, 13.

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TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	October			November			December			January		
1	---	---	---	---	---	---	---	---	---	7.1	4.7	5.8
2	---	---	---	---	---	---	---	---	---	6.2	1.4	3.8
3	---	---	---	---	---	---	---	---	---	1.4	-0.1	0.3
4	---	---	---	---	---	---	---	---	---	1.2	-0.1	0.2
5	---	---	---	---	---	---	---	---	---	2.8	1.2	1.9
6	---	---	---	---	---	---	---	---	---	3.5	1.8	2.6
7	---	---	---	---	---	---	---	---	---	5.5	2.8	4.0
8	---	---	---	---	---	---	---	---	---	6.7	5.4	6.0
9	---	---	---	---	---	---	---	---	---	8.0	6.7	7.2
10	---	---	---	---	---	---	---	---	---	8.1	7.4	7.8
11	---	---	---	---	---	---	---	---	---	8.7	8.1	8.4
12	---	---	---	---	---	---	---	---	---	8.1	6.0	7.6
13	---	---	---	---	---	---	---	---	---	6.0	2.3	3.5
14	---	---	---	---	---	---	---	---	---	3.3	1.1	2.2
15	---	---	---	---	---	---	---	---	---	3.7	3.0	3.3
16	---	---	---	---	---	---	---	---	---	4.6	2.5	3.4
17	---	---	---	---	---	---	---	---	---	6.4	3.7	4.9
18	---	---	---	---	---	---	---	---	---	6.5	3.6	4.9
19	---	---	---	---	---	---	---	---	---	4.0	2.3	3.2
20	---	---	---	---	---	---	---	---	---	6.2	3.6	4.8
21	---	---	---	---	---	---	---	---	---	8.0	6.2	7.2
22	---	---	---	---	---	---	---	---	---	8.1	6.4	7.4
23	---	---	---	---	---	---	---	---	---	9.2	8.1	8.6
24	---	---	---	---	---	---	---	---	---	8.4	6.9	8.0
25	---	---	---	---	---	---	---	---	---	8.4	5.7	7.0
26	---	---	---	---	---	---	---	---	---	9.9	8.0	9.0
27	---	---	---	---	---	---	---	---	---	9.9	6.7	8.8
28	---	---	---	---	---	---	---	---	---	7.2	5.3	6.2
29	---	---	---	---	---	---	---	---	---	5.6	3.5	4.5
30	---	---	---	---	---	---	---	---	---	5.6	3.6	4.5
31	---	---	---	---	---	---	6.4	5.3	5.9	6.6	4.1	5.2
Month	---	---	---	---	---	---	---	---	---	9.9	-0.1	5.2

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TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	February			March			April			May		
1	7.7	5.0	6.2	10.9	8.8	9.7	13.7	10.5	12.2	15.8	13.5	14.6
2	8.7	6.8	7.8	10.3	7.1	8.8	16.0	11.2	13.4	16.8	13.7	15.1
3	7.1	4.7	6.0	10.2	7.6	9.1	14.8	12.4	13.5	16.2	13.8	15.1
4	8.1	6.4	7.3	7.6	4.9	6.0	14.4	11.6	13.0	15.8	14.4	15.1
5	9.1	7.7	8.4	5.9	4.1	5.0	14.6	12.1	13.2	15.5	13.6	14.6
6	7.8	6.1	7.0	7.0	2.6	4.7	13.8	11.2	12.4	16.4	13.7	15.0
7	6.9	5.4	6.1	8.0	4.7	6.3	12.6	8.1	10.4	15.2	14.1	14.7
8	6.1	4.8	5.4	9.5	7.3	8.4	12.9	8.4	10.7	15.1	14.2	14.6
9	5.4	4.1	4.7	9.4	6.6	8.6	12.7	8.7	10.8	14.8	12.9	14.0
10	5.3	3.1	4.2	8.3	4.7	6.5	11.2	8.8	10.1	13.8	11.5	12.6
11	5.0	0.7	3.4	9.0	4.9	6.9	10.6	7.2	9.0	13.2	9.7	11.6
12	1.0	-0.1	0.3	9.8	7.8	8.6	10.2	5.4	7.9	12.7	11.0	12.0
13	2.8	-0.1	1.0	11.7	9.1	10.0	11.3	5.9	8.6	12.7	12.1	12.4
14	4.6	2.6	3.3	11.9	8.2	10.0	13.3	7.9	10.5	14.3	12.4	13.2
15	6.0	3.4	4.5	11.7	8.7	10.3	15.1	9.5	12.3	14.9	13.1	13.8
16	7.5	5.1	6.1	12.3	9.9	11.1	15.8	12.0	14.0	14.8	12.4	13.6
17	7.5	5.6	6.5	12.3	9.8	11.1	14.8	12.8	13.6	15.1	12.1	13.6
18	7.4	4.8	6.3	12.9	10.5	11.6	12.8	11.5	11.9	15.0	12.9	14.0
19	7.1	5.7	6.7	13.5	10.2	11.7	13.9	11.2	12.3	15.6	12.8	14.2
20	5.8	4.0	5.0	13.4	10.5	11.9	13.2	11.1	12.2	15.3	13.0	14.2
21	6.2	3.4	4.7	14.2	10.5	12.2	13.0	11.1	12.0	14.4	12.6	13.7
22	6.9	4.1	5.6	13.8	10.8	12.3	13.1	9.9	11.7	13.9	12.9	13.4
23	9.4	6.5	7.8	13.4	11.9	12.6	9.9	7.6	8.4	14.0	13.2	13.6
24	10.1	7.0	9.1	13.8	11.4	12.4	9.6	6.9	8.2	15.8	13.0	14.2
25	7.0	4.0	5.1	11.8	10.2	10.8	12.8	8.3	10.2	16.6	13.3	14.9
26	5.5	2.3	3.9	13.7	10.1	11.6	12.0	11.1	11.5	17.3	14.2	15.7
27	7.3	3.7	5.5	13.6	9.3	11.5	13.8	11.1	12.2	17.6	14.6	16.1
28	8.5	4.3	6.4	13.7	10.0	11.8	15.2	11.3	13.1	17.8	15.0	16.4
29	10.3	7.8	9.0	14.4	11.5	12.7	15.6	12.2	13.8	16.9	15.4	16.0
30	---	---	---	13.7	10.7	12.3	16.1	12.9	14.5	17.5	14.9	16.0
31	---	---	---	14.6	12.0	13.1	---	---	---	16.0	13.5	15.0
Month	10.3	-0.1	5.6	14.6	2.6	10.0	16.1	5.4	11.6	17.8	9.7	14.3

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TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	15.6	14.5	15.3	20.6	17.7	19.1	19.2	16.5	17.7	19.2	17.5	18.4
2	14.6	12.3	13.5	19.7	17.5	18.6	19.5	16.9	18.2	19.5	17.6	18.5
3	15.0	11.5	13.2	19.0	17.5	18.4	18.8	17.4	18.2	18.7	17.9	18.3
4	15.3	13.2	14.2	19.7	17.1	18.3	19.2	17.8	18.5	19.0	17.9	18.4
5	16.2	13.8	14.7	20.5	17.3	18.7	20.2	18.0	18.9	19.4	17.9	18.6
6	15.4	12.9	14.1	20.4	17.1	18.8	19.3	18.0	18.6	20.1	18.2	18.9
7	14.9	13.0	14.0	21.1	17.9	19.4	19.0	17.7	18.2	19.3	16.9	18.2
8	15.9	12.5	14.1	20.4	18.6	19.4	19.8	17.4	18.4	18.3	17.0	17.7
9	14.8	13.2	14.1	19.6	18.0	18.8	18.5	17.1	17.8	17.0	14.6	15.8
10	15.0	14.1	14.5	19.5	17.7	18.4	17.5	16.2	16.8	15.9	13.3	14.7
11	16.0	14.3	15.0	18.2	17.4	17.7	17.5	16.4	16.8	15.5	13.4	14.6
12	17.5	15.0	16.0	17.4	17.0	17.2	17.2	14.7	16.0	16.6	14.7	15.4
13	17.6	15.1	16.3	18.1	16.8	17.3	17.1	15.2	16.2	15.7	13.9	15.0
14	16.3	14.6	15.7	19.0	17.0	17.9	17.7	15.6	16.6	15.4	13.9	14.8
15	17.8	15.3	16.4	19.2	16.9	17.9	17.5	16.0	16.8	15.5	13.5	14.6
16	17.7	15.4	16.5	19.3	16.9	17.9	17.6	14.9	16.4	16.0	14.8	15.4
17	16.9	15.8	16.4	18.3	17.1	17.8	16.8	15.4	16.1	15.9	15.3	15.6
18	17.2	15.4	16.3	18.8	16.9	17.7	17.5	16.2	16.8	15.9	15.4	15.8
19	17.8	15.5	16.6	19.1	16.8	17.7	17.1	16.1	16.6	15.4	13.9	14.6
20	17.9	15.7	16.8	18.0	17.0	17.4	17.1	15.5	16.3	15.3	12.8	14.2
21	17.3	15.9	16.7	18.8	17.0	17.7	16.3	14.0	15.3	15.0	12.9	14.1
22	18.2	16.3	17.1	19.5	17.2	18.2	16.4	14.1	15.3	15.7	13.5	14.6
23	19.1	16.3	17.6	19.2	17.4	18.3	16.8	14.4	15.6	15.0	12.2	13.4
24	19.4	16.2	17.7	19.7	17.5	18.6	17.6	15.2	16.3	12.4	9.6	11.1
25	19.2	16.0	17.6	20.1	18.1	19.0	17.8	15.1	16.4	12.9	10.0	11.4
26	19.0	16.2	17.5	20.5	18.3	19.3	18.0	15.2	16.6	15.0	12.5	13.6
27	17.3	13.8	15.7	20.3	18.4	19.3	18.0	15.2	16.6	15.0	13.1	14.2
28	17.9	13.9	16.0	20.1	17.6	18.9	17.4	15.4	16.6	14.9	13.3	14.2
29	18.5	15.3	16.9	20.2	17.4	18.8	17.9	16.4	17.2	15.4	14.4	14.8
30	20.1	16.7	18.3	19.5	17.5	18.5	18.5	16.9	17.6	15.3	13.8	14.6
31	---	---	---	18.8	17.7	18.0	19.1	17.1	18.1	---	---	---
Month	20.1	11.5	15.8	21.1	16.8	18.4	20.2	14.0	17.0	20.1	9.6	15.4