

Water-Data Report 2008

03500240 CARTOOGECHAYE CREEK NEAR FRANKLIN, NC

Upper Tennessee Basin
Upper Little Tennessee Subbasin

LOCATION.--Lat 35°09'32", long 83°23'39" referenced to North American Datum of 1983, Macon County, NC, Hydrologic Unit 06010202, on downstream side of center pier of bridge on Secondary Road 1152, 0.1 mi downstream of unnamed creek, 1.8 mi south of Franklin, and 1.9 mi upstream from mouth.

DRAINAGE AREA.--57.1 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--June 1961 to current year. Periodic low-flow measurements, water years 1944, 1947, 1953-55, 1958, 1960.

GAGE.--Water-stage recorder. Datum of gage is 2,017.18 ft above NGVD of 1929. Satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Maximum discharge for period of record from rating curve extended above 3,300 ft³/s on basis of contracted-opening measurement of peak flow. Minimum discharge for period of record and current water year also occurred August 24, 2008.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in June 1949 reached a stage of 15.6 ft, from studies by Tennessee Valley Authority; discharge, about 7,000 ft³/s.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	21	31	40	101	283	110	114	82	82	36	30	47
2	22	31	39	83	192	100	116	79	72	34	e27	40
3	23	30	52	71	149	95	111	79	68	32	e26	37
4	25	29	43	64	144	384	117	78	63	32	e25	34
5	28	29	40	62	127	367	168	73	59	32	e24	32
6	25	31	38	60	153	231	167	70	57	40	e22	31
7	24	29	37	56	151	269	145	68	55	34	e21	31
8	23	29	38	55	131	314	132	68	54	35	24	29
9	23	29	39	58	118	239	122	89	50	64	20	37
10	24	29	39	61	106	201	116	82	49	42	19	34
11	22	29	37	276	98	178	113	107	48	38	18	36
12	21	29	36	144	94	161	142	88	47	40	17	35
13	22	29	37	110	102	146	117	79	46	38	19	33
14	23	32	40	91	88	141	109	76	46	38	23	31
15	22	84	45	80	83	222	105	77	50	32	19	30
16	22	42	99	73	81	239	100	100	47	30	18	29
17	23	36	62	120	116	186	97	81	44	29	20	30
18	24	35	52	110	226	166	95	86	41	e28	20	30
19	43	34	49	102	143	255	107	96	40	e27	18	27
20	31	32	47	88	121	288	98	94	39	e26	17	26
21	25	32	73	76	112	223	92	128	52	e26	15	25
22	26	109	62	87	124	192	91	96	52	e29	14	24
23	89	63	111	104	112	171	88	133	42	e27	15	22
24	165	48	95	89	102	154	86	126	39	e26	14	21
25	62	44	75	80	97	143	84	92	36	e25	64	21
26	45	63	67	76	153	136	84	82	35	e30	542	22
27	38	68	59	71	131	129	82	79	37	29	297	25
28	35	53	95	67	116	124	117	86	38	e27	106	24
29	33	47	106	67	109	136	92	86	48	53	70	22
30	33	43	132	160	---	122	85	77	41	44	55	22
31	32	---	133	109	---	115	---	73	---	30	49	---
Total	1,074	1,249	1,917	2,851	3,762	5,937	3,292	2,710	1,477	1,053	1,668	887
Mean	34.6	41.6	61.8	92.0	130	192	110	87.4	49.2	34.0	53.8	29.6
Max	165	109	133	276	283	384	168	133	82	64	542	47
Min	21	29	36	55	81	95	82	68	35	25	14	21
Cfs/m	0.61	0.73	1.08	1.61	2.27	3.35	1.92	1.53	0.86	0.59	0.94	0.52
In.	0.70	0.81	1.25	1.86	2.45	3.87	2.14	1.77	0.96	0.69	1.09	0.58

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	82.1	108	147	186	213	231	194	152	118	89.4	80.8	78.2
Max	295	266	317	336	460	440	375	339	285	267	185	393
(WY)	(1965)	(1993)	(1962)	(1996)	(1990)	(1980)	(1964)	(1976)	(2005)	(2005)	(1994)	(2004)
Min	24.7	41.2	52.2	55.2	94.6	84.7	72.9	56.3	42.3	32.7	28.7	25.6
(WY)	(2001)	(2002)	(1966)	(1981)	(2007)	(1988)	(1986)	(2001)	(1988)	(2000)	(2000)	(1999)

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SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 1961 - 2008	
Annual total	27,047		27,877			
Annual mean	74.1		76.2		140	
Highest annual mean					204	
Lowest annual mean					69.9	
Highest daily mean	432	Jan 8	542	Aug 26	3,340	Sep 17, 2004
Lowest daily mean	21	Sep 13	14	Aug 22	14	Aug 22, 2008
Annual seven-day minimum	22	Oct 11	16	Aug 18	16	Aug 18, 2008
Maximum peak flow			1,340	Aug 26	^a 6,440	Sep 17, 2004
Maximum peak stage			7.40	Aug 26	14.12	Sep 17, 2004
Instantaneous low flow			^a 12	Aug 22	^a 12	Aug 22, 2008
Annual runoff (cfsm)	1.30		1.33		2.44	
Annual runoff (inches)	17.62		18.16		33.20	
10 percent exceeds	131		144		255	
50 percent exceeds	58		56		105	
90 percent exceeds	26		24		45	

^aSee Remarks.