

Water-Data Report 2010

03504000 NANTAHALA RIVER NEAR RAINBOW SPRINGS, NC

Upper Tennessee Basin
Upper Little Tennessee Subbasin

LOCATION.--Lat 35°07'39", long 83°37'07" referenced to North American Datum of 1983, Macon County, NC, Hydrologic Unit 06010202, on right bank on Forest Service Road 437 in Nantahala National Forest, 300 ft upstream from Roaring Fork, 0.2 mi downstream of Buck Creek, 4 mi northwest of town of Rainbow Springs, and at river mile 34.3.

DRAINAGE AREA.--51.9 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1940 to current year.

REVISED RECORDS.--WSP 973: 1941(M).

GAGE.--Water-stage recorder. Datum of gage is 3,072.97 ft above National Geodetic Vertical Datum of 1929 of 1929. Satellite telemetry at streamgage.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Occasional slight diurnal fluctuation at low flow caused by small ponds on tributaries upstream from station. Maximum discharge for period of record from rating curve extended above 3,000 ft³/s on basis of slope-area measurement of peak flow. Minimum discharge for current water year also occurred September 22, 25, 26.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010
DAILY MEAN VALUES

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	239	427	250	362	312	198	201	177	140	97	71	60
2	220	356	570	331	410	205	193	175	125	94	61	59
3	199	325	507	311	354	191	186	474	123	91	61	57
4	182	300	387	300	334	183	180	300	130	87	61	55
5	299	279	348	284	839	178	175	253	130	84	69	53
6	201	261	315	270	773	174	170	227	125	80	90	53
7	244	246	297	262	574	172	165	208	119	78	74	52
8	195	231	300	252	489	172	311	193	109	75	60	52
9	182	217	703	e249	459	174	258	180	122	80	59	51
10	194	446	444	e237	413	178	212	179	130	84	92	49
11	172	1,160	382	e223	375	206	199	178	109	74	82	92
12	291	648	353	e211	359	245	190	170	104	131	99	126
13	237	501	488	e200	334	290	182	161	101	144	94	60
14	276	426	409	195	316	267	177	154	98	133	98	54
15	364	378	393	190	309	244	173	156	97	87	73	52
16	330	347	354	189	290	224	167	158	141	81	70	50
17	285	326	331	455	276	213	163	190	113	78	81	54
18	253	554	429	310	266	207	157	157	105	102	75	49
19	232	389	399	264	260	195	153	144	100	97	91	48
20	213	354	335	266	251	188	158	137	93	82	82	47
21	200	328	309	384	246	226	156	140	96	77	347	46
22	192	320	294	343	302	353	146	134	117	80	176	49
23	254	308	283	307	269	259	143	128	116	77	111	52
24	367	283	284	635	253	240	269	124	103	71	92	46
25	259	266	1,050	888	235	227	355	123	116	68	83	45
26	237	253	670	577	221	240	241	120	122	66	78	99
27	412	239	533	465	214	210	222	118	134	71	89	142
28	437	226	463	408	206	249	202	127	146	64	76	174
29	341	216	415	379	---	250	189	119	119	64	69	76
30	306	296	381	378	---	222	181	116	104	63	66	199
31	399	---	403	335	---	210	---	203	---	78	63	---
Total	8,212	10,906	13,079	10,460	9,939	6,790	5,874	5,423	3,487	2,638	2,793	2,101
Mean	265	364	422	337	355	219	196	175	116	85.1	90.1	70.0
Max	437	1,160	1,050	888	839	353	355	474	146	144	347	199
Min	172	216	250	189	206	172	143	116	93	63	59	45
Cfsm	5.10	7.00	8.13	6.50	6.84	4.22	3.77	3.37	2.24	1.64	1.74	1.35
In.	5.89	7.82	9.37	7.50	7.12	4.87	4.21	3.89	2.50	1.89	2.00	1.51

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 2010, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	117	158	225	278	313	311	271	214	171	139	120	116
Max	415	376	474	568	657	572	493	491	485	378	327	594
(WY)	(1965)	(1978)	(1993)	(1974)	(1957)	(1979)	(1979)	(1976)	(1989)	(2005)	(1994)	(2004)
Min	35.6	56.6	77.2	84.4	115	138	118	96.8	67.1	59.0	49.5	41.8
(WY)	(2001)	(1955)	(1959)	(1981)	(1941)	(1988)	(1986)	(1986)	(1986)	(1986)	(1986)	(1986)

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SUMMARY STATISTICS

	Calendar Year 2009		Water Year 2010		Water Years 1941 - 2010	
Annual total	90,430		81,702			
Annual mean	248		224		202	
Highest annual mean					286	2005
Lowest annual mean					109	1986
Highest daily mean	1,560	Sep 21	1,160	Nov 11	3,620	Sep 17, 2004
Lowest daily mean	62	Aug 16	45	Sep 25	27	Aug 22, 2008
Annual seven-day minimum	69	Aug 12	48	Sep 19	29	Aug 18, 2008
Maximum peak flow			1,790	Dec 25	^a 6,300	Jun 16, 1949
Maximum peak stage			4.35	Dec 25	9.70	Jun 16, 1949
Instantaneous low flow			^a 44	Sep 21	25	Aug 24, 2008
Annual runoff (cfsm)	4.77		4.31		3.90	
Annual runoff (inches)	64.82		58.56		52.97	
10 percent exceeds	424		401		368	
50 percent exceeds	213		195		162	
90 percent exceeds	80		69		67	

^a See Remarks.

