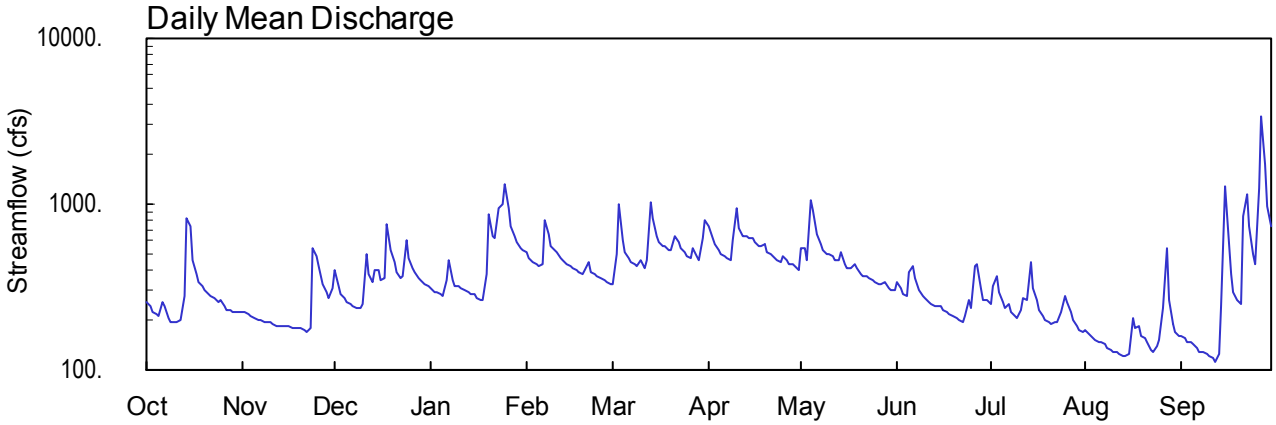
SAVANNAH RIVER BASIN

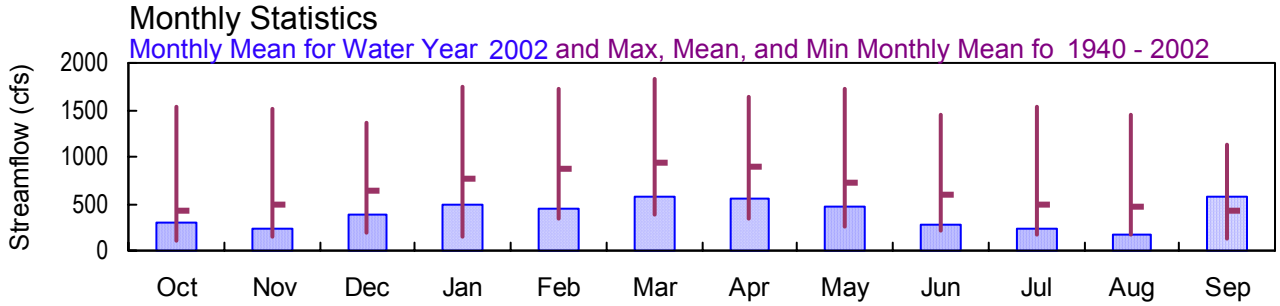
2002 Water Year

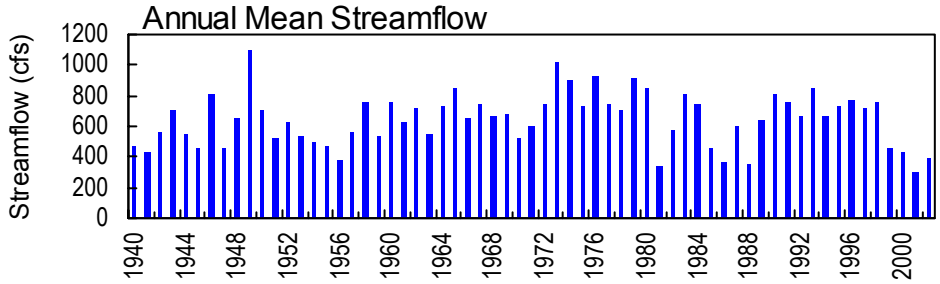
02177000 CHATTOOGA RIVER NEAR CLAYTON, GA

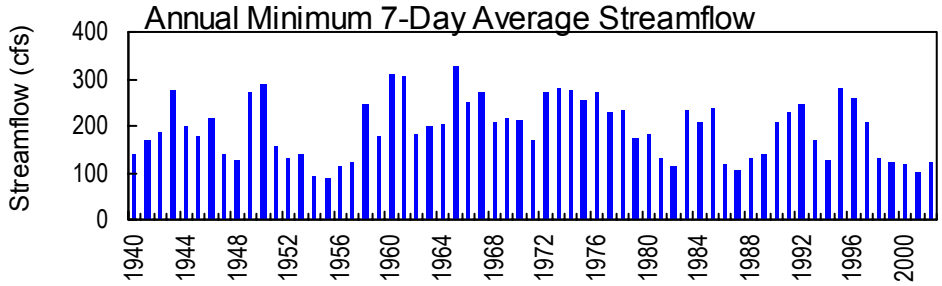
Latitude: 34°48'50" Longitude: 83°18'22" Hydrologic Unit Code: 03060102 Columbia County

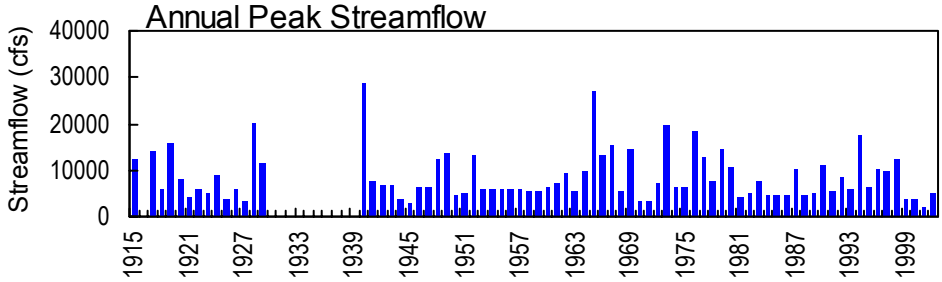
Drainage Area: 207. mi^2 Datum: 1,165.60 feet











02177000 - Chattooga River near Clayton, GA

02177000 CHATTOOGA RIVER NEAR CLAYTON, GA

LOCATION.—Lat 34°48'50", long 83°18'22" referenced to North American Datum (NAD) of 1927, Oconee County, SC-Rabun County, GA, Hydrologic Unit 03060102, on left bank 150 feet downstream from bridge on US 76, 2.8 miles upstream from Stekoa Creek, 7.0 miles southeast of Clayton, 9.0 miles downstream from Warwoman Creek, and 9.0 miles upstream from confluence with Tallulah River.

DRAINAGE AREA.—207 mi^2.

COOPERATION.—Georgia Geologic Survey.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—May 1907 to June 1908, October 1939 to current year. Monthly discharge only for May 1907 to June 1908, published in WSP 1303.

REVISED RECORDS.—WSP 1383: 1940-41, drainage area.

GAGE.—Satellite transmitter with a water-stage recorder. Datum of gage is 1,165.60 feet above National Geodetic Vertical Datum (NGVD) of 1929. May 1907 to June 1908, a non-recording gage was located at site 400.00 feet upstream at different datum.

REMARKS.—Records good. Periods of monthly discharge only are not included in statistics computations.

PEAK DISCHARGES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 3,400 ft^3/s and maximum (*):

DATE	TIME	DISCHARGE (ft^3/s)	GAGE-HEIGHT (ft)
Sep. 27	1530	4,980*	4.88*
		No other peaks above base discharge	

WATER-STAGE RECORDS

PERIOD OF RECORD.—May 1907 to June 1908, October 1939 to current year.

GAGE.—Satellite transmitter with a water-stage recorder. Datum of gage is 1,165.60 feet above National Geodetic Vertical Datum (NGVD) of 1929. May 1907 to June 1908, a non-recording gage was located at site 400.00 feet upstream at different datum.

REMARKS.—Records good.

EXTREMES FOR CURRENT YEAR.—Maximum gage-height recorded, 4.88 feet, September 27; minimum gage-height recorded, 0.79 feet, September 12, 13.

U.S. DEPARTMENT OF THE INTERIOR - U.S. GEOLOGICAL SURVEY - WATER RESOURCES

STATION NUMBER 02177000 CHATTOOGA RIVER NEAR CLAYTON, GA SOURCE AGENCY USGS STATE 45 COUNTY 073
LATITUDE 344850 LONGITUDE 0831822 NAD27 DRAINAGE AREA 207.* CONTRIBUTING DRAINAGE AREA 207 DATUM 1165.6 NGVD29
Date Processed: 2003-03-10 13:46 By acday
APPROVED
DD #1, (ALL DVS)
DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	255	221	405	309	507	328	728	537	339	252	175	161
2	240	221	318	298	479	503	623	536	310	323	167	155
3	226	218	286	297	452	993	572	461	285	365	159	149
4	216	213	269	290	441	602	532	1060	278	291	152	146
5	209	206	258	279	419	509	505	919	385	260	147	143
6	257	201	250	353	440	474	483	665	419	235	148	137
7	243	199	243	464	791	450	467	582	362	252	142	130
8	206	197	238	351	658	431	462	532	303	221	134	127
9	197	195	235	325	561	424	613	501	282	211	131	124
10	193	193	252	317	526	460	945	493	268	204	129	121
11	193	189	495	314	508	412	717	480	257	227	128	117
12	202	186	377	303	470	466	639	462	248	269	125	112
13	276	184	342	293	455	1040	648	463	242	263	122	126
14	832	182	397	289	437	822	631	509	240	445	120	244
15	742	183	396	285	423	650	619	437	243	316	125	1290
16	462	182	349	273	416	587	590	416	230	262	206	848
17	379	180	361	266	401	560	558	406	223	231	180	380
18	341	178	755	266	386	563	556	440	219	213	185	293
19	318	178	528	384	379	529	570	410	213	202	161	265
20	302	178	443	882	398	522	521	382	206	196	158	248
21	287	174	392	640	443	646	498	369	201	188	149	836
22	277	171	362	619	393	598	480	366	193	196	133	1150
23	268	180	368	949	377	536	454	355	209	197	129	745
24	258	538	609	1000	367	512	444	348	261	222	138	502
25	266	481	468	1320	356	489	483	336	234	277	151	434
26	242	428	417	941	353	478	456	328	420	260	239	1260
27	232	332	385	746	342	544	438	328	433	226	540	3400
28	229	299	363	649	332	484	436	339	312	198	262	1750
29	226	271	348	589	---	465	426	316	267	186	189	982
30	226	315	331	546	---	619	396	306	265	174	168	727
31	223	---	318	524	---	806	---	304	---	168	161	---
TOTAL	9023	7073	11558	15361	12510	17502	16490	14386	8347	7530	5253	17102
MEAN	291	236	373	496	447	565	550	464	278	243	169	570
MAX	832	538	755	1320	791	1040	945	1060	433	445	540	3400
MIN	193	171	235	266	332	328	396	304	193	168	120	112
CFSM	1.41	1.14	1.80	2.39	2.16	2.73	2.66	2.24	1.34	1.17	0.82	2.75
IN.	1.62	1.27	2.08	2.76	2.25	3.15	2.96	2.59	1.50	1.35	0.94	3.07

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2002, BY WATER YEAR (WY)

MEAN	433	498	641	770	864	940	888	714	588	498	476	427
MAX	1524	1509	1358	1747	1728	1829	1633	1725	1439	1542	1453	1118
(WY)	1965	1980	1962	1946	1990	1979	1964	1976	1976	1949	1940	1949
MIN	98.6	155	183	155	347	387	349	261	210	180	169	118
(WY)	1955	1955	1956	1956	1941	1988	1986	2001	1988	1986	2002	1954

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1940 - 2002	
ANNUAL TOTAL	117803		142128			
ANNUAL MEAN	323		389		644	
HIGHEST ANNUAL MEAN					1098	1949
LOWEST ANNUAL MEAN					298	2001
HIGHEST DAILY MEAN	1270	Sep 24	3400	Sep 27	14800	Aug 30 1940
LOWEST DAILY MEAN	147	Jun 21	112	Sep 12	88	Oct 8 1954
ANNUAL SEVEN-DAY MINIMUM	156	Jun 16	122	Sep 7	90	Oct 7 1954
MAXIMUM PEAK FLOW			4980	Sep 27	29000	Aug 30 1940
MAXIMUM PEAK STAGE			4.88	Sep 27	13.80	Aug 30 1940
INSTANTANEOUS LOW FLOW			109	Sep 12	88	Oct 8 1954
ANNUAL RUNOFF (CFSM)	1.56		1.88		3.11	
ANNUAL RUNOFF (INCHES)	21.17		25.54		42.25	
10 PERCENT EXCEEDS	514		639		1150	
50 PERCENT EXCEEDS	269		328		519	
90 PERCENT EXCEEDS	179		168		221	

U.S. DEPARTMENT OF THE INTERIOR - U.S. GEOLOGICAL SURVEY - WATER RESOURCES

STATION NUMBER 02177000 CHATTOOGA RIVER NEAR CLAYTON, GA SOURCE AGENCY USGS STATE 45 COUNTY 073
LATITUDE 344850 LONGITUDE 0831822 NAD27 DRAINAGE AREA 207. CONTRIBUTING DRAINAGE AREA 207* DATUM 1165.6 NGVD29
Date Processed: 2003-03-10 13:44 By acday
APPROVED
DD #2
GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.27	1.16	1.48	1.33	1.62	1.36	1.88	1.65	1.38	1.17	0.99	0.95
2	1.24	1.16	1.34	1.31	1.58	1.59	1.77	1.66	1.33	1.30	0.97	0.94
3	1.21	1.15	1.29	1.31	1.55	2.14	1.70	1.56	1.28	1.37	0.95	0.92
4	1.19	1.14	1.26	1.29	1.53	1.74	1.66	2.17	1.27	1.25	0.93	0.91
5	1.17	1.13	1.23	1.27	1.50	1.62	1.62	2.08	1.45	1.19	0.92	0.90
6	1.27	1.12	1.22	1.39	1.53	1.58	1.59	1.81	1.50	1.14	0.92	0.88
7	1.24	1.11	1.21	1.56	1.95	1.54	1.57	1.72	1.41	1.17	0.90	0.86
8	1.17	1.10	1.20	1.40	1.81	1.52	1.56	1.66	1.32	1.11	0.88	0.85
9	1.14	1.10	1.19	1.35	1.69	1.51	1.73	1.61	1.28	1.09	0.87	0.84
10	1.13	1.10	1.22	1.34	1.65	1.56	2.10	1.60	1.25	1.07	0.86	0.83
11	1.14	1.09	1.60	1.34	1.62	1.49	1.87	1.59	1.23	1.12	0.86	0.82
12	1.16	1.08	1.44	1.32	1.57	1.56	1.79	1.56	1.22	1.21	0.85	0.80
13	1.31	1.08	1.38	1.30	1.55	2.18	1.80	1.56	1.20	1.19	0.84	0.85
14	1.91	1.07	1.47	1.29	1.52	1.98	1.78	1.62	1.20	1.49	0.83	1.13
15	1.89	1.07	1.46	1.29	1.50	1.80	1.76	1.52	1.21	1.29	0.84	2.39
16	1.56	1.07	1.39	1.26	1.49	1.72	1.73	1.50	1.18	1.19	1.07	1.95
17	1.44	1.06	1.41	1.25	1.47	1.69	1.69	1.48	1.16	1.13	1.00	1.39
18	1.38	1.06	1.91	1.25	1.45	1.69	1.69	1.53	1.15	1.09	1.02	1.25
19	1.34	1.06	1.65	1.42	1.44	1.65	1.70	1.49	1.14	1.07	0.95	1.20
20	1.32	1.06	1.53	2.04	1.47	1.64	1.64	1.44	1.13	1.05	0.95	1.17
21	1.29	1.05	1.46	1.78	1.53	1.79	1.61	1.42	1.11	1.02	0.92	1.89
22	1.27	1.04	1.41	1.76	1.46	1.74	1.58	1.42	1.09	1.05	0.87	2.26
23	1.25	1.06	1.42	2.08	1.44	1.66	1.55	1.40	1.13	1.05	0.86	1.87
24	1.24	1.64	1.75	2.16	1.42	1.63	1.53	1.39	1.24	1.10	0.89	1.57
25	1.25	1.59	1.57	2.44	1.40	1.60	1.59	1.37	1.16	1.22	0.93	1.48
26	1.20	1.51	1.50	2.10	1.40	1.58	1.55	1.36	1.45	1.19	1.14	2.34
27	1.18	1.37	1.45	1.90	1.38	1.67	1.53	1.36	1.47	1.12	1.62	3.93
28	1.18	1.31	1.41	1.80	1.37	1.59	1.52	1.38	1.28	1.05	1.19	2.79
29	1.17	1.26	1.39	1.73	---	1.56	1.51	1.34	1.20	1.02	1.03	2.14
30	1.17	1.33	1.36	1.67	---	1.75	1.47	1.32	1.20	0.99	0.97	1.88
31	1.16	---	1.34	1.64	---	1.97	---	1.32	---	0.97	0.96	---
MEAN	1.29	1.17	1.42	1.56	1.53	1.68	1.67	1.54	1.25	1.14	0.96	1.47
MAX	1.91	1.64	1.91	2.44	1.95	2.18	2.10	2.17	1.50	1.49	1.62	3.93
MIN	1.13	1.04	1.19	1.25	1.37	1.36	1.47	1.32	1.09	0.97	0.83	0.80