

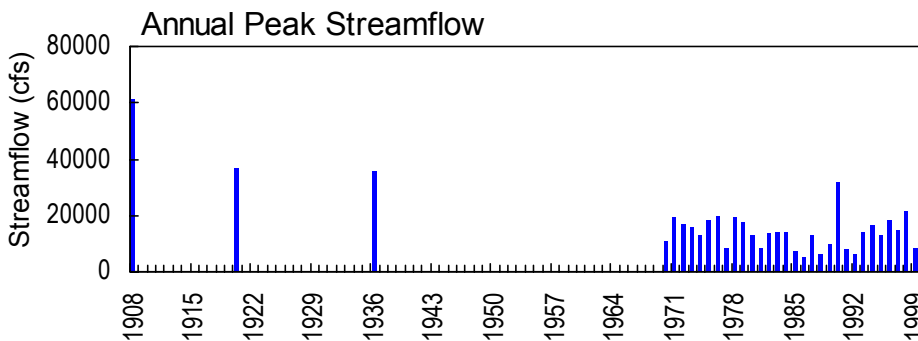
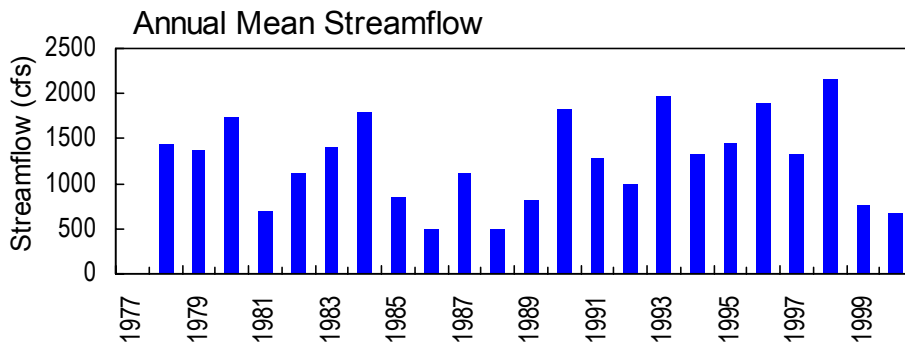
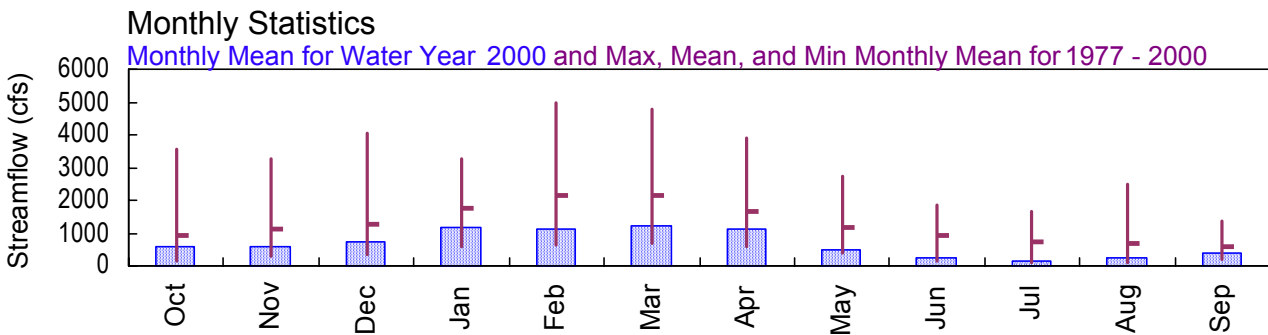
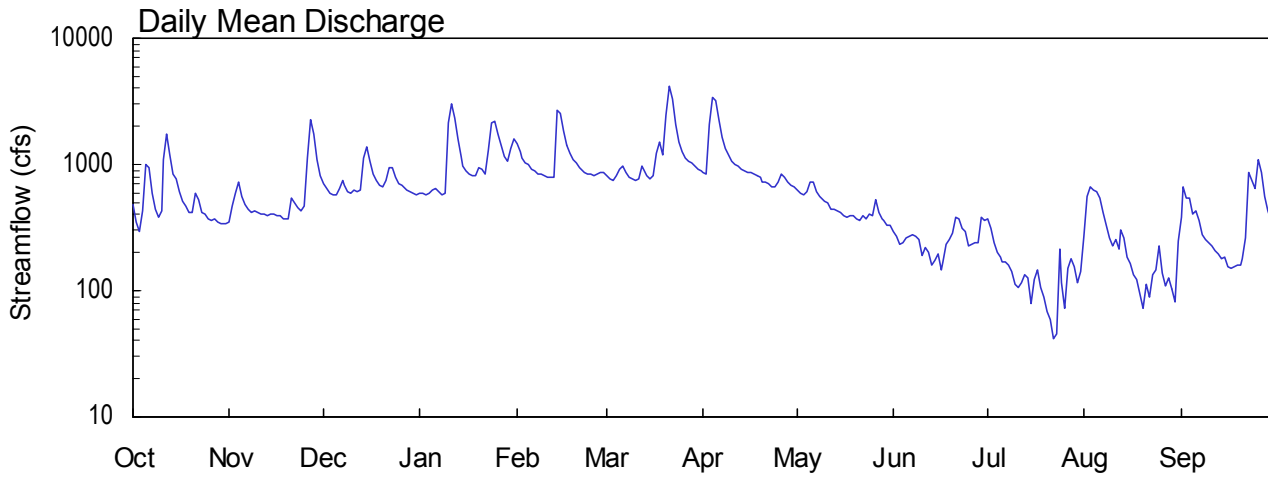


# ALTAMAHA RIVER BASIN

## 2000 Water Year

### 02218300 OCONEE RIVER NEAR PENFIELD, GA

Latitude: 33° 43' 16" Longitude: 83° 17' 44" Hydrologic Unit Code: 03070101 Greene County  
Drainage Area: 940 mi<sup>2</sup> Datum: 433.2 feet Period of Record: 1977 - 2000



02218300 - Oconee River near Penfield, GA

**ALTAMAHA RIVER BASIN  
2000 Water Year**

**02218300 OCONEE RIVER NEAR PENFIELD, GA**

**LOCATION.**--Lat 33°43'14", long 83°17'45", Greene County, Hydrologic Unit 03070101, on downstream side of bridge on GA Highway 15, 7.0 miles upstream from Greenbrier Creek, 8.0 miles northwest of Penfield, and 10.0 mi southeast of Watkinsville.

**DRAINAGE AREA.**--940 mi<sup>2</sup>.

**WATER-DISCHARGE RECORDS**

**PERIOD OF RECORD.**--Water years 1970-77 (annual maximum), August 1977 to current year.

**REVISED RECORDS.**--WDR GA-91-1: 1990(M).

**GAGE.**--Satellite transmitter with a water-stage recorder. Datum of gage is 433.26 feet above sea level. From November 4, 1969 to July 21, 1977, crest-stage gage, and from July 22, 1977 to August 1, 1990, water-stage recorder located at site 300 feet upstream at same datum.

**REMARKS.**--Records good, except some regulation at low streamflow occurs from operation of Barnett Shoals Dam.

**EXTREMES OUTSIDE PERIOD OF RECORD.**--Flood of Dec. 19, 1919, reached a stage of 26.9 feet, information supplied by Georgia Department of Transportation, discharge, 37,000 ft<sup>3</sup>/s, from rating curve extended above 22,000 ft<sup>3</sup>/s on basis of slope-conveyance study. The flood of April 6, 1936 reached a stage of 26.7 feet, discharge, 36,000 ft<sup>3</sup>/s (revised) from rating curve extended above 22,000 ft<sup>3</sup>/s on basis of slope-conveyance study.

**PEAK DISCHARGES FOR CURRENT YEAR.**--Peak discharges greater than base discharge of 4,600 ft<sup>3</sup>/s and maximum (\*):

DATE	TIME	DISCHARGE (ft <sup>3</sup> /s)	GAGE HEIGHT (ft)
Mar. 21	1545	4,340*	11.85*

No other peaks greater than base discharge

STATION NUMBER 02218300 OCONEE RIVER NEAR PENFIELD, GA STREAM SOURCE AGENCY USGS  
 LATITUDE 334316 LONGITUDE 0831744 DRAINAGE AREA 940 DATUM 433.26 STATE 13 COUNTY 133

DCP

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	478	347	704	592	1480	820	853	623	290	371	271	379
2	349	473	641	588	1270	779	851	589	272	309	566	669
3	292	587	600	580	1120	758	2080	569	231	239	662	537
4	424	731	582	596	1040	823	3450	601	239	199	625	540
5	1010	552	571	622	987	911	3200	731	260	187	603	404
6	940	477	640	642	921	962	2240	734	273	167	541	431
7	592	436	745	603	884	859	1620	615	274	169	422	362
8	438	423	676	571	844	798	1350	564	268	160	330	280
9	382	431	605	588	841	767	1200	535	254	141	262	256
10	425	413	590	2140	816	748	1070	514	189	113	225	240
11	1080	411	632	3000	802	764	1000	494	219	106	256	229
12	1730	403	603	2300	799	962	964	438	201	117	213	207
13	1190	395	621	1610	788	909	915	444	158	133	306	196
14	833	404	1130	1160	2660	819	885	433	174	125	260	178
15	771	405	1380	978	2520	773	873	419	195	80	183	183
16	607	398	1070	883	1870	810	873	395	144	124	163	157
17	519	389	843	833	1420	1210	846	383	167	147	133	150
18	468	373	742	811	1210	1510	811	388	231	105	124	154
19	419	368	694	808	1100	1200	786	392	255	88	95	158
20	422	375	673	948	1020	2480	727	367	289	68	72	159
21	600	546	739	916	945	4140	717	357	383	59	114	177
22	521	499	937	847	895	3260	699	395	369	42	89	263
23	423	457	939	1290	866	2100	661	375	315	46	135	856
24	401	430	795	2110	851	1490	668	409	291	211	144	744
25	366	465	702	2180	836	1270	724	388	228	116	224	641
26	365	1110	678	1760	822	1140	830	522	230	73	137	1090
27	370	2270	659	1420	835	1050	781	419	237	150	110	872
28	354	1740	630	1160	877	1040	723	376	241	180	125	554
29	336	1080	613	1070	859	970	693	357	384	154	102	424
30	342	816	594	1350	---	910	662	328	360	116	81	365
31	343	---	580	1600	---	885	---	329	---	141	249	---
TOTAL	17790	18204	22608	36556	32178	37917	33752	14483	7621	4436	7822	11855
MEAN	574	607	729	1179	1110	1223	1125	467	254	143	252	395
MAX	1730	2270	1380	3000	2660	4140	3450	734	384	371	662	1090
MIN	292	347	571	571	788	748	661	328	144	42	72	150
CFSM	.61	.65	.78	1.25	1.18	1.30	1.20	.50	.27	.15	.27	.42
IN.	.70	.72	.89	1.45	1.27	1.50	1.34	.57	.30	.18	.31	.47

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 2000, BY WATER YEAR (WY)

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
MEAN	951	1102	1271	1774	2161	2163	1664	1157	933	718	694	579												
MAX	3571	3272	4029	3261	4974	4798	3897	2729	1840	1635	2481	1347												
(WY)	1990	1978	1984	1978	1998	1980	1979	1980	1994	1989	1994	1992												
MIN	165	275	358	595	638	689	569	366	153	93.4	116	217												
(WY)	1988	1982	1989	1981	1989	1988	1986	1988	1988	1986	1986	1999												

SUMMARY STATISTICS FOR 1999 CALENDAR YEAR FOR 2000 WATER YEAR WATER YEARS 1977 - 2000

ANNUAL TOTAL	275618	245222																						
ANNUAL MEAN	755	670																						
HIGHEST ANNUAL MEAN																								
LOWEST ANNUAL MEAN																								
HIGHEST DAILY MEAN	7910	Feb 2																						
LOWEST DAILY MEAN	65	Sep 19																						
ANNUAL SEVEN-DAY MINIMUM	118	Sep 14																						
MAXIMUM PEAK FLOW																								
MAXIMUM PEAK STAGE																								
ANNUAL RUNOFF (CFSM)	.80																							
ANNUAL RUNOFF (INCHES)	10.91																							
10 PERCENT EXCEEDS	1240																							
50 PERCENT EXCEEDS	644																							
90 PERCENT EXCEEDS	227																							