

SANTEE RIVER BASIN

0213903612 CATAWBA RIVER AT CALVIN, NC

LOCATION.--Lat 35°44'23", long 81°43'44", Burke County, Hydrologic Unit 03050101, on right bank at City of Morganton's water intake, 0.5 mi upstream from Canoe Creek, and 0.5 mi north of Calvin.

DRAINAGE AREA.--508 mi².

PERIOD OF RECORD.--July 1991 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,002.40 ft above NGVD of 1929 (levels by City of Morganton). Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records fair. City of Morganton diverted about 13.4 ft³/s from Catawba River for municipal water supply. Considerable regulation, at times, caused by Lake James (station 02138519), 6.5 mi upstream. Maximum discharge for period of record computed on basis of releases from Lake James. Minimum discharge for period of record and current water year affected by regulation.

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	481	324	315	308	296	267	308	603	253	447	360	248
2	472	343	296	342	202	242	247	215	242	447	361	192
3	483	329	178	355	204	357	251	202	382	466	370	194
4	244	329	293	344	284	320	236	498	387	544	363	39
5	235	336	295	314	276	228	331	183	487	577	344	227
6	400	330	303	315	282	466	217	164	504	599	335	176
7	239	323	298	342	355	411	207	451	533	582	264	270
8	345	328	299	335	446	413	555	125	410	451	260	180
9	355	330	300	535	366	425	745	180	383	462	246	167
10	363	367	321	259	337	420	1060	77	493	433	254	162
11	322	373	418	242	409	401	561	223	492	430	258	163
12	370	289	363	251	396	412	725	147	487	404	253	36
13	374	319	340	240	384	491	641	439	502	407	246	165
14	361	388	339	266	297	525	301	414	511	584	248	157
15	426	377	279	260	293	469	1150	397	492	477	270	192
16	379	377	190	267	205	281	1160	398	525	471	304	267
17	366	417	335	261	198	404	1010	384	472	451	334	220
18	370	424	425	345	277	784	178	409	467	470	308	195
19	371	418	588	286	277	967	190	187	469	441	240	182
20	349	463	571	249	241	1460	158	405	477	448	257	166
21	368	470	551	196	279	1450	156	302	493	538	246	127
22	373	459	327	392	281	1330	722	389	464	476	244	178
23	369	437	323	638	231	587	1040	382	487	452	251	195
24	374	481	324	463	235	577	1040	384	469	469	235	193
25	379	481	325	425	274	535	202	383	469	502	263	188
26	348	443	312	344	275	512	199	209	464	445	243	244
27	358	318	312	282	275	617	194	264	513	454	253	450
28	363	316	314	338	281	769	209	383	443	404	258	360
29	276	306	270	331	---	1270	189	385	430	437	242	253
30	364	310	264	305	---	1100	283	375	420	425	246	227
31	354	---	305	303	---	548	---	419	---	354	249	---
TOTAL	11231	11205	10373	10133	8156	19038	14465	9976	13620	14547	8605	6013
MEAN	362.3	373.5	334.6	326.9	291.3	614.1	482.2	321.8	454.0	469.3	277.6	200.4
MAX	483	481	588	638	446	1460	1160	603	533	599	370	450
MIN	235	289	178	196	198	228	156	77	242	354	235	36
†	-165	-155	+46	+269	+177	+112	+32	-10	-179	-303	-187	+183

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2002, BY WATER YEAR (WY)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	589.2	620.6	756.9	1186	1185	1167	1007	781.3	770.6	581.5	744.0	547.9
MAX	1943	1615	1700	2438	2659	2093	1855	1597	2103	785	2078	1146
(WY)	1996	1993	1993	1995	1998	1993	1993	1993	1992	1995	1994	1995
MIN	228	294	298	327	291	409	437	322	355	380	278	200
(WY)	1994	2001	1999	2002	2002	1999	1999	2002	2001	2001	2002	2002

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1991 - 2002	
ANNUAL TOTAL	155533		137362			
ANNUAL MEAN	426.1		376.3		823.6 (UNADJUSTED)	
HIGHEST ANNUAL MEAN					1230 1993	
LOWEST ANNUAL MEAN					376 2002	
HIGHEST DAILY MEAN	1370	Aug 6	1460	Mar 20	12300	Aug 18 1994
LOWEST DAILY MEAN	112	Jul 17	36	Sep 12	36	Sep 12 2002
ANNUAL SEVEN-DAY MINIMUM	254	Jan 28	147	Sep 8	112	Oct 10 1993
MAXIMUM PEAK FLOW			2340	Oct 3	12300*	Aug 18 1994
MAXIMUM PEAK STAGE			4.11	Oct 3	16.40	Aug 18 1994
INSTANTANEOUS LOW FLOW			2.1*	Sep 12	2.1*	Sep 12 2002
10 PERCENT EXCEEDS	702		535		1680	
50 PERCENT EXCEEDS	368		344		577	
90 PERCENT EXCEEDS	256		197		262	

† Change in contents, equivalent in cubic feet per second, in Lake James, provided by Duke Power Company.

‡ Adjusted for change in contents.

* See REMARKS.

0213903612 CATAWBA RIVER AT CALVIN, NC--Continued

