

0213903612 CATAWBA RIVER AT CALVIN, NC

LOCATION.--Lat 35°44'23", long 81°43'43", 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 11.6 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 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	205	353	1,030	249	320	1,310	1,330	1,410	1,420	1,420	705	674
2	194	361	534	753	305	1,300	1,320	1,470	1,390	2,920	524	523
3	191	353	197	1,260	392	1,290	1,300	1,540	1,380	2,720	681	531
4	187	356	700	1,290	396	1,260	1,300	1,420	1,310	2,580	1,620	483
5	183	359	1,030	1,260	396	1,240	1,320	1,470	1,410	2,350	1,400	664
6	185	400	644	1,260	481	1,500	1,350	2,160	1,390	2,240	1,350	690
7	175	379	493	1,240	489	1,430	1,120	2,420	1,780	1,560	2,340	690
8	172	367	477	1,210	494	1,370	671	2,360	2,330	1,750	2,830	515
9	171	368	441	1,170	475	1,330	889	2,150	1,930	1,810	2,770	984
10	174	361	986	1,220	480	1,300	2,490	1,940	1,970	1,820	2,260	1,680
11	218	591	1,010	1,270	483	1,290	4,020	1,770	1,840	1,320	2,400	2,040
12	404	686	1,330	1,260	474	1,280	3,540	1,630	1,680	1,850	2,690	682
13	244	681	1,490	1,270	472	1,250	3,120	1,520	1,630	2,660	2,590	684
14	106	598	1,580	987	479	1,270	2,640	1,430	1,550	2,540	2,530	683
15	182	582	1,360	698	544	1,250	2,270	1,480	1,750	2,590	2,630	913
16	758	727	1,290	1,170	542	1,370	1,920	1,460	2,120	2,530	2,650	916
17	418	602	1,320	1,010	631	874	1,730	1,430	1,800	2,240	2,230	918
18	286	529	1,170	318	645	832	5,020	1,500	1,700	1,720	1,240	898
19	236	438	1,200	313	643	1,400	5,490	1,420	1,820	1,750	2,480	924
20	206	748	1,460	469	625	1,960	4,310	1,370	1,750	1,800	2,240	662
21	210	1,170	1,340	473	615	984	3,460	1,370	1,640	1,560	1,350	663
22	202	1,030	1,270	475	1,580	1,060	2,970	1,730	1,530	1,690	1,360	909
23	194	581	1,240	473	1,860	1,520	2,470	1,740	1,450	1,570	1,350	706
24	184	575	1,630	935	1,530	1,440	2,110	1,680	1,410	1,270	1,340	760
25	181	712	1,690	809	1,370	1,380	1,860	1,570	1,400	1,140	1,320	919
26	199	1,250	1,460	311	1,340	1,340	1,750	1,590	1,390	750	1,420	910
27	187	1,230	1,380	300	1,340	1,330	1,660	1,570	1,390	738	1,510	703
28	193	1,230	1,300	319	1,320	1,310	1,540	1,480	1,410	730	812	713
29	196	1,200	1,240	316	---	1,310	1,430	1,490	1,460	666	1,100	763
30	199	1,210	1,110	330	---	1,430	1,380	1,440	1,420	393	1,530	936
31	194	---	239	327	---	1,380	---	1,430	---	524	1,080	---
TOTAL	7,034	20,027	33,641	24,745	20,721	40,590	67,780	50,440	48,450	53,201	54,332	24,736
MEAN	227	668	1,085	798	740	1,309	2,259	1,627	1,615	1,716	1,753	825
MAX	758	1,250	1,690	1,290	1,860	1,960	5,490	2,420	2,330	2,920	2,830	2,040
MIN	106	353	197	249	305	832	671	1,370	1,310	393	524	483
†	+203	+92	+60	-159	+301	+104	+54	-21	-86	-113	-161	+103

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2003, BY WATER YEAR (WY)

MEAN	559	625	784	1,154	1,148	1,179	1,111	852	841	669	822	569
MAX	1,943	1,615	1,700	2,438	2,659	2,093	2,259	1,627	2,103	1,716	2,078	1,146
(WY)	(1996)	(1993)	(1993)	(1995)	(1998)	(1993)	(2003)	(2003)	(1992)	(2003)	(1994)	(1995)
MIN	227	294	298	327	291	409	437	322	355	380	278	200
(WY)	(2003)	(2001)	(1999)	(2002)	(2002)	(1999)	(1999)	(2002)	(2001)	(2001)	(2002)	(2002)

SANTEE RIVER BASIN

0213903612 CATAWBA RIVER AT CALVIN, NC—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1991 - 2003	
ANNUAL TOTAL	165,255		445,697		857 (UNADJUSTED)	
ANNUAL MEAN	453		1,221 ‡1,250		1,230 1993	
HIGHEST ANNUAL MEAN					376 2002	
LOWEST ANNUAL MEAN					12,300 Aug 18, 1994	
HIGHEST DAILY MEAN	1,690	Dec 25	5,490	Apr 19	36	Sep 12, 2002
LOWEST DAILY MEAN	36	Sep 12	106	Oct 14	112	Oct 10, 1993
ANNUAL SEVEN-DAY MINIMUM	147	Sep 8	178	Oct 4	12,300*	Aug 18, 1994
MAXIMUM PEAK FLOW			6,860	Apr 18	16.40	Aug 18, 1994
MAXIMUM PEAK STAGE			8.02	Apr 18	2.1*	Sep 12, 2002
INSTANTANEOUS LOW FLOW			29*	Oct 9		
10 PERCENT EXCEEDS	1,030		2,240		1,740	
50 PERCENT EXCEEDS	361		1,270		604	
90 PERCENT EXCEEDS	189		317		264	

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

‡ Adjusted for change in contents.

** See REMARKS.

