

0213903612 CATAWBA RIVER AT CALVIN, NC

LOCATION.--Lat 35°41'05", long 81°24'11", 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 mi<sup>2</sup>.

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

REVISED RECORDS.--WDR NC-04-1: 1994(M), 1995(M), 1996(M), 2003(M).

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 11.8 ft<sup>3</sup>/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 from rating curve extended above 26,000 ft<sup>3</sup>/s, by logarithmic plotting, maximum gage-height, 26.30 ft, from high-water mark at gage. Minimum discharge for period of record and current water year affected by regulation.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,500	1,030	1,760	894	831	903	532	714	349	1,440	1,400	958
2	2,470	1,030	1,490	1,350	832	832	1,040	807	1,180	1,380	1,200	957
3	2,470	1,040	2,350	2,360	862	817	571	814	1,660	1,100	977	938
4	2,450	1,430	1,930	1,180	841	549	966	715	1,270	619	396	1,130
5	2,440	1,290	979	193	674	449	920	521	1,160	1,430	1,180	1,300
6	2,360	958	1,120	196	577	441	1,220	644	675	1,810	883	1,070
7	2,380	1,270	1,590	189	1,030	584	1,080	437	809	3,280	799	1,060
8	1,520	1,020	1,460	187	1,050	388	1,370	416	603	3,270	1,020	1,090
9	1,260	986	998	494	899	509	2,080	606	743	2,930	1,370	1,020
10	1,260	966	1,040	774	1,050	580	2,510	622	1,830	2,800	1,340	1,160
11	1,250	857	1,500	802	1,250	570	2,050	551	2,410	2,660	1,590	1,110
12	1,060	1,230	1,180	749	1,690	561	1,130	510	1,640	2,850	2,410	893
13	1,270	1,240	663	737	1,710	568	1,380	531	1,530	2,880	1,780	916
14	1,250	1,150	551	1,210	1,720	568	2,010	541	2,420	2,800	1,680	853
15	1,260	936	799	1,140	1,740	470	1,930	659	2,420	2,360	1,670	908
16	1,250	870	671	1,040	1,260	481	1,850	1,120	2,420	2,660	1,360	898
17	1,250	870	1,070	1,280	1,040	517	1,830	536	1,990	2,680	1,010	667
18	1,230	2,280	1,040	1,940	1,050	952	1,780	532	877	2,530	5,310	634
19	1,210	2,290	1,040	2,370	1,030	557	1,770	524	893	2,660	2,750	425
20	1,220	2,300	1,010	2,370	638	484	1,800	564	964	2,650	2,610	648
21	1,210	2,290	1,040	1,960	1,130	735	1,250	554	970	2,620	2,540	625
22	1,180	1,870	726	683	1,170	736	1,550	531	962	2,750	2,610	596
23	1,660	996	1,130	825	1,130	770	950	539	732	2,630	2,810	602
24	1,530	897	1,060	1,670	959	1,190	1,060	532	697	2,570	2,560	611
25	337	1,080	1,190	1,700	940	1,160	1,070	515	710	1,910	2,490	604
26	328	1,230	1,300	1,250	936	981	1,080	518	732	1,420	2,480	604
27	753	1,150	1,680	916	926	975	799	514	685	1,080	2,420	608
28	689	1,120	1,690	901	837	2,300	906	351	1,120	781	2,490	605
29	359	1,270	1,930	577	---	1,490	898	344	1,860	1,240	2,410	609
30	549	1,720	1,850	592	---	2,370	705	347	1,960	1,150	1,390	543
31	523	---	1,510	689	---	629	---	335	---	998	982	---
TOTAL	42,478	38,666	39,347	33,218	29,802	25,116	40,087	17,444	38,271	65,938	57,917	24,642
MEAN	1,370	1,289	1,269	1,072	1,064	810	1,336	563	1,276	2,127	1,868	821
MAX	2,500	2,300	2,350	2,370	1,740	2,370	2,510	1,120	2,420	3,280	5,310	1,300
MIN	328	857	551	187	577	388	532	335	349	619	396	425
†	-366	-87	-74	+9	-213	+418	+49	+125	-30	-173	+67	-108

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2005, BY WATER YEAR (WY)

MEAN	637	703	880	1,127	1,120	1,122	1,099	815	866	767	872	915
MAX	1,943	1,615	1,700	2,438	2,659	2,093	2,259	1,627	2,103	2,127	2,078	5,505
(WY)	(1996)	(1993)	(1993)	(1995)	(1998)	(1993)	(2003)	(2003)	(1992)	(2005)	(1994)	(2004)
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

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SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1991 - 2005 (UNADJUSTED)	
ANNUAL TOTAL	460,682		452,926		910	
ANNUAL MEAN	1,259		1,241		1,241	
HIGHEST ANNUAL MEAN					2005	
LOWEST ANNUAL MEAN					2002	
HIGHEST DAILY MEAN	34,700	Sep 9	5,310	Aug 18	34,700	Sep 9, 2004
LOWEST DAILY MEAN	256	Apr 6	187	Jan 8	36	Sep 12, 2002
ANNUAL SEVEN-DAY MINIMUM	453	Aug 6	394	May 26	112	Oct 10, 1993
MAXIMUM PEAK FLOW			8,920	Aug 18	52,600*	Sep 9, 2004
MAXIMUM PEAK STAGE			9.12	Aug 18	26.30*	Sep 9, 2004
INSTANTANEOUS LOW FLOW			104*	Jan 5	2.1*	Sep 12, 2002
10 PERCENT EXCEEDS	2,040		2,420		1,790	
50 PERCENT EXCEEDS	760		1,050		657	
90 PERCENT EXCEEDS	532		532		274	

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

\*\* Adjusted for change in contents.

\* See REMARKS.

