

SANTÉE RIVER BASIN

02145000 SOUTH FORK CATAWBA RIVER AT LOWELL, NC

LOCATION.--Lat 35°17'07", long 81°06'04", North American Datum of 1983, Gaston County, Hydrologic Unit 03050102, on right bank 50 ft north of private mill road, 120 ft downstream of Housers Creek, 1.0 mi north of Lowell, 2.5 mi upstream from bridge on Interstate Highway 85, and 3.0 mi downstream of Long Creek.

DRAINAGE AREA.--628 mi².

PERIOD OF RECORD.--January 1942 to September 1971, October 1983 to current year.

REVISED RECORDS.--WSP 1002: 1943(M). WSP 1303: 1950(M).

GAGE.--Water-stage recorder. Datum of gage is 603.10 ft above NGVD of 1929. Satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Considerable diurnal fluctuation and slight regulation for short periods at low flow caused by power plant upstream from station. For diversion by Town of Bessemer City, see Long Creek near Bessemer City (station 02144000). Minimum discharge for all water years affected by regulation.

EXTREMES OUTSIDE PERIOD OF RECORD.--The flood of Aug. 15, 1940, reached a stage of 21.33 ft, from floodmarks; discharge, 34,000 ft³/s. Depth of flow over dam during the July 1916 flood at High Shoals, 11 mi upstream, was about 1 ft higher than that for August 1940, from information by local resident.

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	146	146	e240	199	424	306	599	251	132	101	84	123
2	92	177	e200	215	413	376	484	249	152	86	81	143
3	133	126	e205	214	390	682	444	250	135	80	80	98
4	100	148	199	221	378	646	420	279	136	75	81	103
5	136	152	189	215	317	540	418	339	125	71	81	104
6	90	173	172	289	312	410	405	337	130	87	81	93
7	78	141	186	454	557	401	365	293	229	77	79	89
8	e80	149	177	366	1040	365	381	253	196	73	76	85
9	e70	151	180	310	896	362	390	238	173	68	75	81
10	117	157	211	285	694	366	396	220	130	65	71	82
11	94	154	509	270	619	357	392	205	146	64	68	73
12	133	150	495	259	535	396	392	207	99	61	67	66
13	97	173	381	263	500	634	393	247	101	57	47	63
14	122	138	284	257	448	998	394	377	100	60	28	67
15	240	156	278	244	420	885	429	309	103	58	25	102
16	362	176	244	237	388	659	412	254	94	144	104	173
17	231	e170	265	247	e390	626	337	194	90	150	250	201
18	180	e152	605	210	e380	1120	376	206	96	107	482	198
19	133	158	520	324	e360	941	362	200	88	84	410	132
20	112	179	418	899	326	743	337	216	81	77	163	129
21	138	143	327	689	349	737	326	198	76	70	117	120
22	162	158	257	639	351	689	326	206	75	68	96	112
23	121	158	261	1290	347	584	307	205	75	69	89	109
24	142	225	270	2330	330	538	288	168	73	77	102	148
25	159	266	276	1760	307	508	293	175	72	159	138	141
26	187	269	264	1140	315	494	275	162	70	353	98	203
27	93	240	223	837	306	542	235	155	68	337	88	372
28	121	208	201	662	300	469	271	165	346	224	99	959
29	166	208	223	551	---	447	309	154	161	163	110	647
30	130	244	220	493	---	454	253	174	115	122	100	320
31	123	---	223	435	---	488	---	191	---	90	116	---
TOTAL	4288	5245	8703	16804	12392	17763	11009	7077	3667	3377	3586	5336
MEAN	138.3	174.8	280.7	542.1	442.6	573.0	367.0	228.3	122.2	108.9	115.7	177.9
MAX	362	269	605	2330	1040	1120	599	377	346	353	482	959
MIN	70	126	172	199	300	306	235	154	68	57	25	63
CFSM	0.22	0.28	0.45	0.86	0.70	0.91	0.58	0.36	0.19	0.17	0.18	0.28
IN.	0.25	0.31	0.52	1.00	0.73	1.05	0.65	0.42	0.22	0.20	0.21	0.32

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 2002,® BY WATER YEAR (WY)

MEAN	617.6	612.9	766.4	997.4	1201	1280	1026	729.0	610.3	519.6	560.8	483.4
MAX	2862	2034	1748	2468	3204	3511	2676	1759	1424	1361	2266	2460
(WY)	1965	1958	1968	1993	1960	1952	1958	1984	1962	1943	1970	1945
MIN	104	175	235	242	443	561	367	228	122	109	116	110
(WY)	1955	2002	1956	1956	2002	1955	2002	2002	2002	2002	2002	1954

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1942 - 2002®	
ANNUAL TOTAL	128335		99247			
ANNUAL MEAN	351.6		271.9		782.6	
HIGHEST ANNUAL MEAN					1341	1993
LOWEST ANNUAL MEAN					272	2002
HIGHEST DAILY MEAN	4840	Mar 30	2330	Jan 24	21700	Aug 11 1970
LOWEST DAILY MEAN	70	Oct 9	25	Aug 15	25	Aug 15 2002
ANNUAL SEVEN-DAY MINIMUM	94	Sep 13	54	Aug 9	54	Aug 9 2002
MAXIMUM PEAK FLOW			2580		Jan 24	24800
MAXIMUM PEAK STAGE			5.93		Jan 24	17.38
INSTANTANEOUS LOW FLOW			22*		Aug 15	13*
ANNUAL RUNOFF (CFSM)	0.56		0.43		1.25	
ANNUAL RUNOFF (INCHES)	7.60		5.88		16.93	
10 PERCENT EXCEEDS	609		526		1350	
50 PERCENT EXCEEDS	264		205		550	
90 PERCENT EXCEEDS	121		78		260	

e Estimated.

® See PERIOD OF RECORD.

* See REMARKS.

02145000 SOUTH FORK CATAWBA RIVER AT LOWELL, NC--Continued

