02171645 REDIVERSION CANAL AT SANTEE RIVER NEAR ST. STEPHENS, SC

LOCATION.--Lat 33°25'39'' (revised), long 79°54'54'' (revised), Berkeley County, Hydrologic Unit 03050112, on right bank, 0.2 mi downstream from St. Stephens Powerhouse, 3.8 mi upstream from Santee River, and 1.0 mi north of St. Stephens.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--October 1986 to current year.

REVISED RECORDS.--WRD SC-2004-1: Latitude and longitude.

GAGE.--Data collection platform and acoustic velocity meter. Datum of gage is NGVD of 1929.

REMARKS.--Records good except for Apr. 24, July 15, 16, Sep. 21-23, which are fair, and estimated daily discharges, which are poor. Flow is regulated by the St. Stephens Powerhouse and affected during low-flow by astronomical tides. The astromomical tides occur at primary harmonic periods of 12.42 hours for semi-diurnal tides and 24.84 hours for diurnal tides. Computed 24-hour daily mean discharge for this site may be affected by aliasing due to tides and, thus, may contain spurious fluctuations or oscillations that are not indicative of net downstream discharge. Water is diverted above station from Lake Moultrie for generation of power and for navigation, then discharged into the West Branch Cooper River (see station 02172002). During periods of incomplete gage-height or velocity record, values of daily mean discharge from St. Stephens Powerhouse were obtained and used to estimate daily discharges.

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	23400	64	11300	18800	2010	10400	23800	9260	5780	11700	779	6040
2	23200	6	12300	19600	1990	13500	23900	10600	9270	11000	3210	6690
3	23400	80	11900	18700	181	13900	23800	8940	13300	7610	5730	6420
4	23100	79	12300	20500	2780	15900	23900	9120	20500	12700	10600	6400
5	23200	125	10000	20000	208	14600	24000	6120	21200	16400	6890	5840
6	23000	187	15800	19600	109	11100	24000	5580	21100	21500	5870	3020
7	23000	5480	12500	16500	139	10900	23900	5960	21300	23200	5790	3170
8	21800	9310	12300	13000	149	10900	23600	6070	21000	23000	7460	2830
9	20500	9430	12300	9670	156	10400	23200	3120	20500	22800	7940	252
10	15300	9360	11400	9460	2970	10800	23300	2780	21500	22600	8300	58
11	15200	8760	12400	6720	6630	10700	23500	2990	14400	23000	8360	122
12	13300	9240	12900	6220	5420	10400	23600	3120	14500	23100	8600	648
13	10600	8910	15900	6310	3070	10300	23400	3270	15000	23000	9180	203
14	8890	9350	18400	10500	2790	10700	22400	205	11500	22900	8790	233
15	6000	9320	15300	9050	268	10500	23000	94	11300	e22600	9040	176
16	3250	8900	18400	11700	148	10300	23100	102	9150	e22600	9060	313
17	3300	8790	18900	11900	165	14400	23300	42	9140	23000	5480	108
18	2630	8890	17900	12700	3090	13000	23600	133	9130	22600	6540	15
19	3080	8820	18900	15100	2840	10800	22700	144	9090	21400	9420	27
20	2970	8980	19500	14700	200	11400	16200	98	5970	19900	9000	73
21	3090	8500	17200	15200	1540	11000	15200	87	3440	15400	8910	e0
22	2550	8710	18900	10700	1470	11000	10100	95	3830	16400	1740	e0
23	230	9130	15400	12800	1610	11000	7320	2890	3680	9100	6320	e0
24	99	8870	18900	15100	3820	10600	e6310	5760	3090	7770	6170	37
25	88	11700	18500	12400	5130	10400	10700	6430	3830	9010	8980	50
26	90	11900	18800	6340	6560	10700	11100	5840	3370	9420	11900	456
27	95	12100	18600	3000	6700	15200	10100	9020	3510	9570	11700	113
28	36	11800	19700	3150	8090	15800	10800	5860	6050	3080	11500	53
29	44	12200	19900	198	---	23100	10600	5800	6130	3380	10800	753
30	118	12000	19700	224	---	23500	10800	5000	9490	369	9860	77
31	39	---	19500	132	---	23700	---	5960	---	113	10700	---
TOTAL	295599	230991	495700	349974	70233	400900	565230	130490	331050	480222	244619	44177
MEAN	9535	7700	15990	11290	2508	12930	18840	4209	11040	15490	7891	1473
MAX	23400	12200	19900	20500	8090	23700	24000	10600	21500	23200	11900	6690
MIN	36	6	10000	132	109	10300	6310	42	3090	113	779	0

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2005, BY WATER YEAR (WY)

MEAN	5501	6301	11070	12260	12290	14690	12210	7477	5239	4737	5799	5104
MAX	16820	21590	24130	22410	23980	23900	24150	23930	22620	20260	23380	19330
(WY)	1996	1996	1993	1998	1998	1987	1998	1991	2003	2003	1991	2004
MIN	30.2	98.1	17.9	90.0	151	266	276	172	18.8	1.00	6.84	4.83
(WY)	1994	2001	2001	2001	2001	2002	2002	2001	1988	1988	2000	2000

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SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1987 - 2005	
ANNUAL TOTAL	2569364		3639185			
ANNUAL MEAN	7020		9970		8544	
HIGHEST ANNUAL MEAN					14760	2003
LOWEST ANNUAL MEAN					185	2002
HIGHEST DAILY MEAN	25500	Sep 16	24000	Apr 5	31200	Nov 17 1989
LOWEST DAILY MEAN	6	Nov 2	0	Sep 21	-155	Jun 25 1993
ANNUAL SEVEN-DAY MINIMUM	46	Aug 21	22	Sep 18	0.00	Oct 1 1986
MAXIMUM PEAK FLOW			27300	Jun 5	31200	Nov 17 1988
MAXIMUM PEAK STAGE			24.80	Apr 4	a 30.59	Mar 27 2003
10 PERCENT EXCEEDS	20100		22600		22700	
50 PERCENT EXCEEDS	4300		9260		5940	
90 PERCENT EXCEEDS	99		133		4.0	

a Caused by backwater from the Santee River.

e Estimated