

Water-Data Report 2007

02140991 JOHNS RIVER AT ARNEYS STORE, NC

Santee Basin
Upper Catawba Subbasin

LOCATION.--Lat 35°50'01", long 81°42'43" referenced to North American Datum of 1983, Burke County, NC, Hydrologic Unit 03050101, on right bank 12 ft downstream of bridge on Secondary Road 1438, 0.2 mi downstream of Sims Branch, and 0.8 mi northeast of Arneys Store.

DRAINAGE AREA.--201 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Occasional discharge measurements, water years 1974-84. May 1985 to current year.

REVISED RECORDS.--WDR NC-87-1: 1985-86 (P). WDR NC-04-1: 1994(M), 1995(M).

GAGE.--Water-stage recorder. Datum of gage is 1,001.74 ft above NGVD of 1929. Satellite and telephone telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Maximum discharge for period of record from rating curve extended above 12,500 ft³/s on basis of slope-area measurement; maximum gage height from high-water mark. Minimum discharge for period of record also occurred September 14, 2002.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
DAILY MEAN VALUES

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	136	171	986	2,730	282	290	341	227	148	170	151	118
2	129	182	854	1,250	284	1,570	337	222	196	147	125	91
3	126	173	581	870	273	765	319	222	175	140	112	79
4	124	154	475	717	261	538	314	282	173	133	106	70
5	124	151	409	757	252	443	299	265	155	126	99	62
6	184	149	365	835	237	392	291	262	145	121	95	59
7	141	190	338	755	264	360	293	239	136	120	90	54
8	129	1,420	308	1,780	250	344	288	225	133	115	84	51
9	132	667	285	1,170	242	325	279	222	136	108	81	50
10	126	439	273	874	238	312	275	218	127	114	76	48
11	122	352	263	727	232	303	279	226	121	187	73	46
12	126	393	251	634	232	289	331	282	128	135	312	48
13	119	314	246	572	235	281	286	229	139	112	156	47
14	114	288	239	524	280	276	269	210	144	109	105	156
15	112	271	230	488	238	272	387	201	358	105	91	294
16	112	1,460	222	459	224	1,330	389	199	197	137	83	130
17	341	979	215	417	218	1,070	307	198	167	130	80	95
18	447	652	211	393	224	680	296	187	145	248	77	84
19	215	509	204	383	210	543	294	184	134	140	73	78
20	221	427	200	363	217	481	302	182	135	113	69	75
21	194	368	198	358	241	474	280	176	134	102	70	76
22	172	340	1,290	472	250	426	270	173	119	94	71	82
23	156	324	1,640	396	219	401	261	169	113	87	66	81
24	145	291	773	359	211	378	257	170	112	126	e63	74
25	141	270	791	342	276	359	255	167	140	261	e62	71
26	139	254	935	327	335	346	252	166	222	385	e65	70
27	149	242	711	320	263	336	256	163	152	227	e69	68
28	363	233	578	317	241	329	246	158	215	224	87	65
29	253	228	502	300	---	393	237	153	251	170	102	61
30	198	273	451	292	---	389	232	148	212	148	93	57
31	181	---	513	287	---	343	---	145	---	190	94	---
Total	5,371	12,164	15,537	20,468	6,929	15,038	8,722	6,270	4,862	4,724	2,980	2,440
Mean	173	405	501	660	247	485	291	202	162	152	96.1	81.3
Max	447	1,460	1,640	2,730	335	1,570	389	282	358	385	312	294
Min	112	149	198	287	210	272	232	145	112	87	62	46
Cfsm	0.86	2.02	2.49	3.28	1.23	2.41	1.45	1.01	0.81	0.76	0.48	0.40
In.	0.99	2.25	2.88	3.79	1.28	2.78	1.61	1.16	0.90	0.87	0.55	0.45

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 2007, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	262	348	342	438	396	513	455	328	326	273	296	312
Max	890	938	602	1,388	838	1,151	883	595	963	831	1,070	2,087
(WY)	(1991)	(1993)	(1997)	(1995)	(1990)	(1993)	(1987)	(1993)	(1992)	(2005)	(1994)	(2004)
Min	79.1	104	113	170	138	179	206	128	94.5	75.5	42.6	81.3
(WY)	(2001)	(2002)	(1989)	(2001)	(2001)	(1988)	(1986)	(2001)	(2002)	(1988)	(2002)	(2007)

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SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 1985 - 2007	
Annual total	111,461		105,505			
Annual mean	305		289		358	
Highest annual mean					521	2004
Lowest annual mean					164	2002
Highest daily mean	1,640	Sep 5	2,730	Jan 1	19,400	Sep 8, 2004
Lowest daily mean	105	Aug 6	46	Sep 11	19	Sep 13, 2002
Annual seven-day minimum	117	Aug 24	49	Sep 7	24	Sep 8, 2002
Maximum peak flow			4,450	Jan 1	^a 39,000	Sep 8, 2004
Maximum peak stage			8.51	Jan 1	^a 28.60	Sep 8, 2004
Instantaneous low flow			44	Sep 11	^a 19	Sep 13, 2002
Annual runoff (cfsm)	1.52		1.44		1.78	
Annual runoff (inches)	20.63		19.53		24.21	
10 percent exceeds	536		517		620	
50 percent exceeds	234		224		259	
90 percent exceeds	135		82		104	

^a See Remarks.

