

Water-Data Report 2008

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 (maximum discharge). WDR NC-04-1: 1994-1995 (maximum discharge).

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. Minimum discharge for current water year also occurred August 13.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	56	134	100	272	333	172	208	247	114	81	64	254
2	57	126	99	222	444	168	203	224	107	67	57	210
3	57	119	99	e184	280	162	196	209	103	61	47	164
4	63	113	98	e166	315	926	245	200	102	60	43	138
5	211	110	97	e156	526	2,520	263	186	100	62	39	119
6	212	111	96	159	394	838	828	179	93	114	36	107
7	112	108	96	154	431	778	565	169	90	146	34	97
8	89	105	94	147	333	925	421	167	148	101	33	90
9	79	105	95	143	279	730	356	206	118	107	33	640
10	77	105	96	145	242	564	316	169	129	137	32	558
11	74	102	96	219	212	468	289	160	142	272	30	368
12	68	102	94	229	203	400	285	164	117	145	28	295
13	68	102	94	180	203	344	263	148	101	104	33	240
14	69	103	92	166	195	308	238	145	98	151	45	196
15	69	118	93	156	177	313	227	145	109	128	48	167
16	68	120	162	148	169	413	213	189	107	93	41	190
17	68	106	160	156	165	306	205	166	90	81	58	190
18	69	102	120	179	409	276	197	145	82	74	64	155
19	75	102	110	e156	315	332	194	147	76	69	42	135
20	112	103	106	e146	256	728	261	140	73	65	37	124
21	102	102	122	e139	230	478	211	135	73	61	34	116
22	83	106	148	e136	215	395	195	127	84	55	30	111
23	95	102	336	e133	206	341	187	121	109	54	29	102
24	250	97	421	e130	191	303	180	120	96	62	29	98
25	660	98	228	e127	182	276	176	121	74	55	32	92
26	516	115	188	e124	204	258	186	115	68	55	63	98
27	318	146	176	127	229	243	237	111	89	69	3,960	354
28	218	126	176	124	188	231	398	123	85	65	1,450	306
29	175	110	356	123	174	234	396	162	78	62	593	198
30	156	103	291	127	---	236	284	135	93	64	317	164
31	143	---	367	128	---	213	---	122	---	57	215	---
Total	4,469	3,301	4,906	4,901	7,700	14,879	8,423	4,897	2,948	2,777	7,596	6,076
Mean	144	110	158	158	266	480	281	158	98.3	89.6	245	203
Max	660	146	421	272	526	2,520	828	247	148	272	3,960	640
Min	56	97	92	123	165	162	176	111	68	54	28	90
Cfs/m	0.72	0.55	0.79	0.79	1.32	2.39	1.40	0.79	0.49	0.45	1.22	1.01
In.	0.83	0.61	0.91	0.91	1.43	2.75	1.56	0.91	0.55	0.51	1.41	1.12

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	257	338	334	426	390	512	448	321	317	265	294	308
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	158	138	179	206	128	94.5	75.5	42.6	81.3
(WY)	(2001)	(2002)	(1989)	(2008)	(2001)	(1988)	(1986)	(2001)	(2002)	(1988)	(2002)	(2007)

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SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 1985 - 2008	
Annual total	85,109		72,873			
Annual mean	233		199		351	
Highest annual mean					521	
Lowest annual mean					164	
Highest daily mean	2,730	Jan 1	3,960	Aug 27	19,400	Sep 8, 2004
Lowest daily mean	46	Sep 11	28	Aug 12	19	Sep 13, 2002
Annual seven-day minimum	49	Sep 7	32	Aug 7	24	Sep 8, 2002
Maximum peak flow			7,720	Aug 27	^a 39,000	Sep 8, 2004
Maximum peak stage			12.63	Aug 27	^a 28.60	Sep 8, 2004
Instantaneous low flow			^a 27	Aug 12	^a 19	Sep 13, 2002
Annual runoff (cfs)	1.16		0.991		1.75	
Annual runoff (inches)	15.75		13.49		23.74	
10 percent exceeds	392		347		612	
50 percent exceeds	167		138		253	
90 percent exceeds	73		62		102	

^aSee Remarks.