



Water-Data Report 2010

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,001.74 ft above National Geodetic Vertical Datum of 1929. Satellite telemetry at streamgage.

REMARKS.--Records fair 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 September 22.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010
DAILY MEAN VALUES

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	292	559	269	e550	590	415	589	282	285	155	144	151
2	271	502	498	e505	747	412	554	283	251	149	146	145
3	252	432	1,060	e470	838	414	529	392	248	141	146	140
4	225	380	639	e440	738	386	497	406	271	e136	138	132
5	237	346	532	e420	969	367	469	313	257	e132	175	126
6	227	317	462	e400	1,350	353	450	290	228	127	287	124
7	210	296	414	e385	976	345	433	266	219	115	177	121
8	197	282	393	e370	846	345	451	257	202	111	144	123
9	187	266	1,470	e355	775	350	647	244	197	122	133	140
10	185	301	1,030	e345	738	361	467	241	201	176	136	125
11	180	1,320	737	e335	656	380	433	250	191	135	171	120
12	178	1,060	600	e327	604	509	416	261	188	126	181	139
13	196	726	679	e320	568	990	400	249	187	146	143	130
14	250	575	713	e312	520	729	385	242	219	141	720	114
15	364	487	615	e306	512	599	374	376	211	120	661	107
16	252	429	540	303	483	527	367	334	259	125	516	103
17	226	387	488	1,180	454	485	361	375	247	223	321	104
18	206	371	488	916	438	459	345	402	190	272	675	105
19	194	488	548	723	422	432	334	320	179	349	408	101
20	190	429	466	e620	412	407	330	278	207	206	367	98
21	186	381	431	e670	418	411	357	266	177	179	287	94
22	182	360	419	691	482	2,460	328	301	169	150	450	92
23	183	385	421	649	579	e1,230	315	277	182	140	300	177
24	916	358	441	1,000	572	e930	313	251	166	129	239	111
25	614	339	2,680	5,590	525	e775	459	288	169	120	256	97
26	444	324	2,220	1,690	488	e680	367	260	200	120	231	143
27	397	305	1,140	1,110	463	e620	325	246	165	266	242	253
28	e845	291	908	894	439	e710	320	232	415	285	204	261
29	e590	282	762	778	---	e900	297	227	197	262	182	162
30	e465	277	664	771	---	e740	289	219	161	165	170	164
31	432	---	e605	648	---	661	---	253	---	141	160	---
Total	9,773	13,255	23,332	24,073	17,602	19,382	12,201	8,881	6,438	5,164	8,510	4,002
Mean	315	442	753	777	629	625	407	286	215	167	275	133
Max	916	1,320	2,680	5,590	1,350	2,460	647	406	415	349	720	261
Min	178	266	269	303	412	345	289	219	161	111	133	92
Cfsm	1.57	2.20	3.74	3.86	3.13	3.11	2.02	1.43	1.07	0.83	1.37	0.66
In.	1.81	2.45	4.32	4.46	3.26	3.59	2.26	1.64	1.19	0.96	1.57	0.74

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 2010, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	254	334	351	436	391	510	446	340	323	259	288	302
Max	890	938	753	1,388	838	1,151	883	861	963	831	1,070	2,087
(WY)	(1991)	(1993)	(2010)	(1995)	(1990)	(1993)	(1987)	(2009)	(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 2009		Water Year 2010		Water Years 1985 - 2010	
Annual total	151,431		152,613			
Annual mean	415		418		353	
Highest annual mean					521	2004
Lowest annual mean					164	2002
Highest daily mean	2,910	May 27	5,590	Jan 25	19,400	Sep 8, 2004
Lowest daily mean	118	Sep 15	92	Sep 22	19	Sep 13, 2002
Annual seven-day minimum	137	Sep 2	100	Sep 16	24	Sep 8, 2002
Maximum peak flow			8,650	Jan 25	^a 39,000	Sep 8, 2004
Maximum peak stage			13.55	Jan 25	^a 28.60	Sep 8, 2004
Instantaneous low flow			^a 91	Sep 21	^a 19	Sep 13, 2002
Annual runoff (cfsm)	2.06		2.08		1.76	
Annual runoff (inches)	28.03		28.24		23.89	
10 percent exceeds	763		738		621	
50 percent exceeds	291		328		254	
90 percent exceeds	154		140		103	

^a See Remarks.

