02096500 HAW RIVER AT HAW RIVER, NC

Cape Fear Basin
Haw Subbasin

LOCATION.--Lat 36°05′14″, long 79°21′58″ referenced to North American Datum of 1983, Alamance County, NC, Hydrologic Unit 03030002, on left bank at Haw River, 650 ft downstream of Southern Railway bridge, 800 ft downstream of bridge on U.S. Highway 70 and North Carolina Highway 49, and 3 mi downstream of Stony Creek.

DRAINAGE AREA.--606 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1928 to current year.

REVISED RECORDS.--WSP 757: 1929 (M). WSP 782: 1934. WSP 1383: 1930,1932(M), 1933(m), 1936, 1943, 1944 (M), 1947(m). WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 471.69 ft above NGVD of 1929. U.S. Army Corps of Engineers satellite telemetry at streamgage.

REMARKS.--No estimated daily discharges. Records fair. Diurnal fluctuations and occasional regulation at low flows. City of Burlington diverted an average of 4.4 ft^3/s from the Stony Creek Reservoirs for municipal water supply, about half of which was returned upstream of station as treated effluent, the remainder was returned downstream of station. Maximum discharge for period of record from rating curve extended above 38,000 ft^3/s, by logarithmic plotting; maximum gage height, 32.83 ft, from flood mark. Minimum discharge for current water year also occurred September 9.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	606	107	973	230	273	1,960	814	190	177	104	186	240
2	551	103	442	213	247	5,040	582	266	155	97	129	101
3	304	105	359	217	294	2,250	1,750	217	132	90	123	78
4	226	122	310	256	379	1,330	1,070	194	4,090	85	118	72
5	188	186	252	322	262	1,210	625	474	8,390	85	84	69
6	161	245	218	2,110	223	1,050	549	2,080	6,310	105	112	67
7	147	145	197	4,440	223	791	973	1,250	1,330	123	161	61
8	129	127	181	3,130	235	507	574	573	663	107	89	59
9	123	123	171	1,290	222	428	399	346	432	91	75	59
10	123	113	159	941	216	367	351	316	967	92	72	61
11	117	115	1,350	898	218	330	2,280	261	1,260	89	74	61
12	116	112	4,030	519	221	311	1,500	324	967	89	80	62
13	107	115	1,500	387	224	290	750	248	505	123	84	61
14	106	185	882	336	208	425	951	213	361	171	77	60
15	102	531	806	302	201	2,760	1,010	233	285	108	74	61
16	105	479	508	266	193	4,220	659	264	680	92	64	61
17	105	343	490	227	192	2,530	744	244	1,950	85	67	88
18	140	346	504	228	223	1,740	434	310	978	81	68	204
19	165	285	403	244	523	1,020	359	275	589	75	66	116
20	112	213	371	254	296	761	394	204	368	76	75	81
21	103	178	1,150	232	249	561	593	247	277	75	278	72
22	103	159	1,480	212	223	455	396	181	226	73	146	71
23	106	156	711	204	205	386	368	154	195	75	413	151
24	95	142	469	199	197	337	316	148	169	74	152	332
25	99	157	976	195	182	441	283	186	149	76	91	159
26	275	192	682	182	185	341	250	215	135	70	81	99
27	154	161	415	198	184	458	236	223	182	73	76	861
28	129	145	365	296	423	1,470	218	198	209	365	80	388
29	121	136	481	648	---	2,440	205	709	131	171	100	286
30	105	285	294	454	---	1,320	200	298	108	175	89	167
31	112	---	265	332	---	854	---	216	---	160	81	---
Total	5,135	5,811	21,394	19,962	6,921	38,383	19,833	11,257	32,370	3,355	3,465	4,308
Mean	166	194	690	644	247	1,238	661	363	1,079	108	112	144
Max	606	531	4,030	4,440	523	5,040	2,280	2,080	8,390	365	413	861
Min	95	103	159	182	182	290	200	148	108	70	64	59
Cfsm	0.27	0.32	1.14	1.06	0.41	2.04	1.09	0.60	1.78	0.18	0.18	0.24
In.	0.32	0.36	1.31	1.23	0.42	2.36	1.22	0.69	1.99	0.21	0.21	0.26

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2009, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	387	416	583	870	968	1,010	829	478	433	392	350	443
Max	2,480	1,360	1,553	2,977	2,492	3,276	2,771	1,948	2,145	2,348	1,662	4,373
(WY)	(1960)	(2007)	(2003)	(1937)	(1998)	(1993)	(1987)	(1978)	(1982)	(1984)	(1939)	(1996)
Min	48.9	61.1	118	172	236	215	164	107	74.5	70.9	57.2	33.4
(WY)	(1942)	(1954)	(1934)	(1956)	(2002)	(2006)	(2002)	(2002)	(2002)	(1932)	(1953)	(1954)

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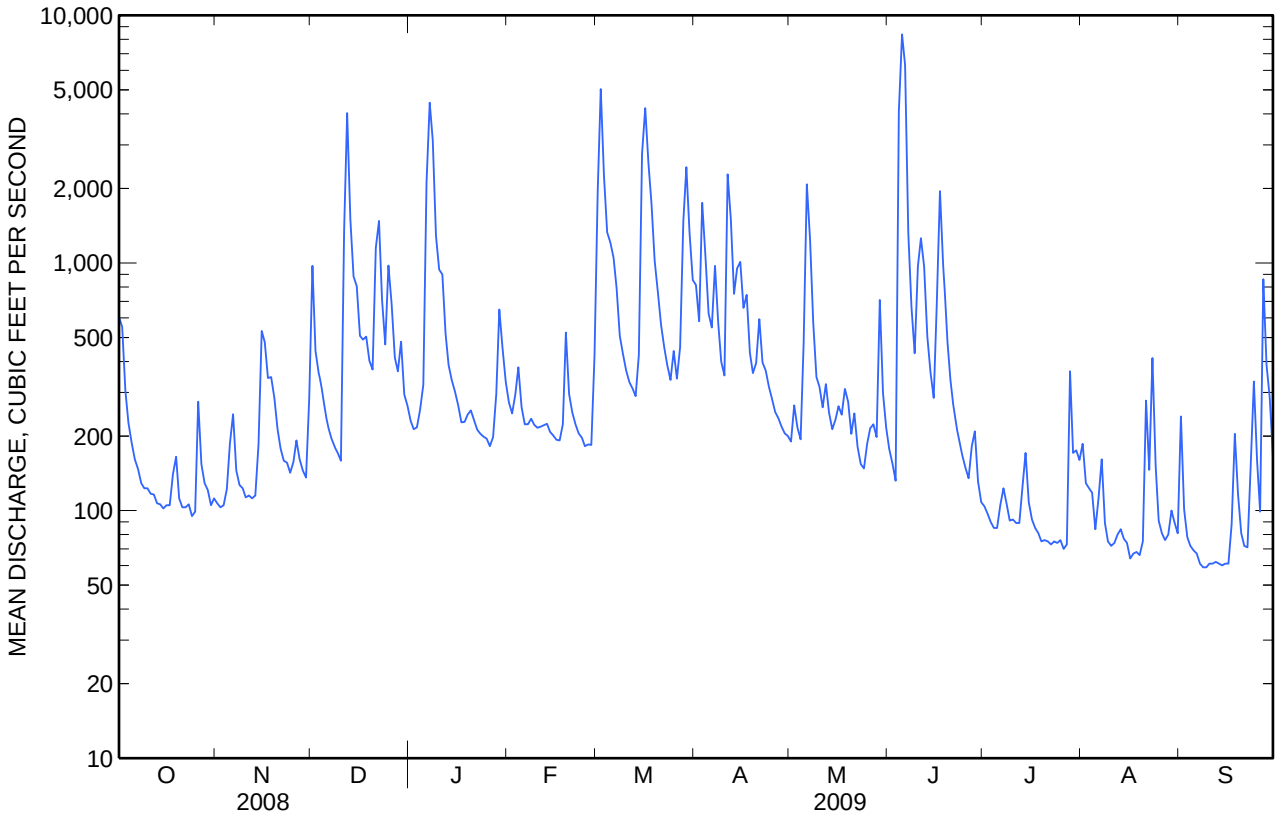
SUMMARY STATISTICS

	Calendar Year 2008		Water Year 2009		Water Years 1929 - 2009	
Annual total	156,319		172,194			
Annual mean	427		472		594	
Highest annual mean					1,489	2003
Lowest annual mean					200	2002
Highest daily mean	7,500	Aug 28	8,390	Jun 5	42,000	Sep 7, 1996
Lowest daily mean	68	Aug 21	59	Sep 8	5.0	Sep 6, 1930
Annual seven-day minimum	73	Aug 16	60	Sep 8	16	Oct 7, 1954
Maximum peak flow			12,700	Jun 5	[a]51,400	Sep 6, 1996
Maximum peak stage			19.18	Jun 5	[a]32.83	Sep 6, 1996
Instantaneous low flow			[a]56	Sep 8	3.0	Sep 5, 1930
Annual runoff (cfsm)	0.705		0.778		0.981	
Annual runoff (inches)	9.60		10.57		13.33	
10 percent exceeds	867		991		1,240	
50 percent exceeds	196		218		291	
90 percent exceeds	86		79		99	

[a] See Remarks.



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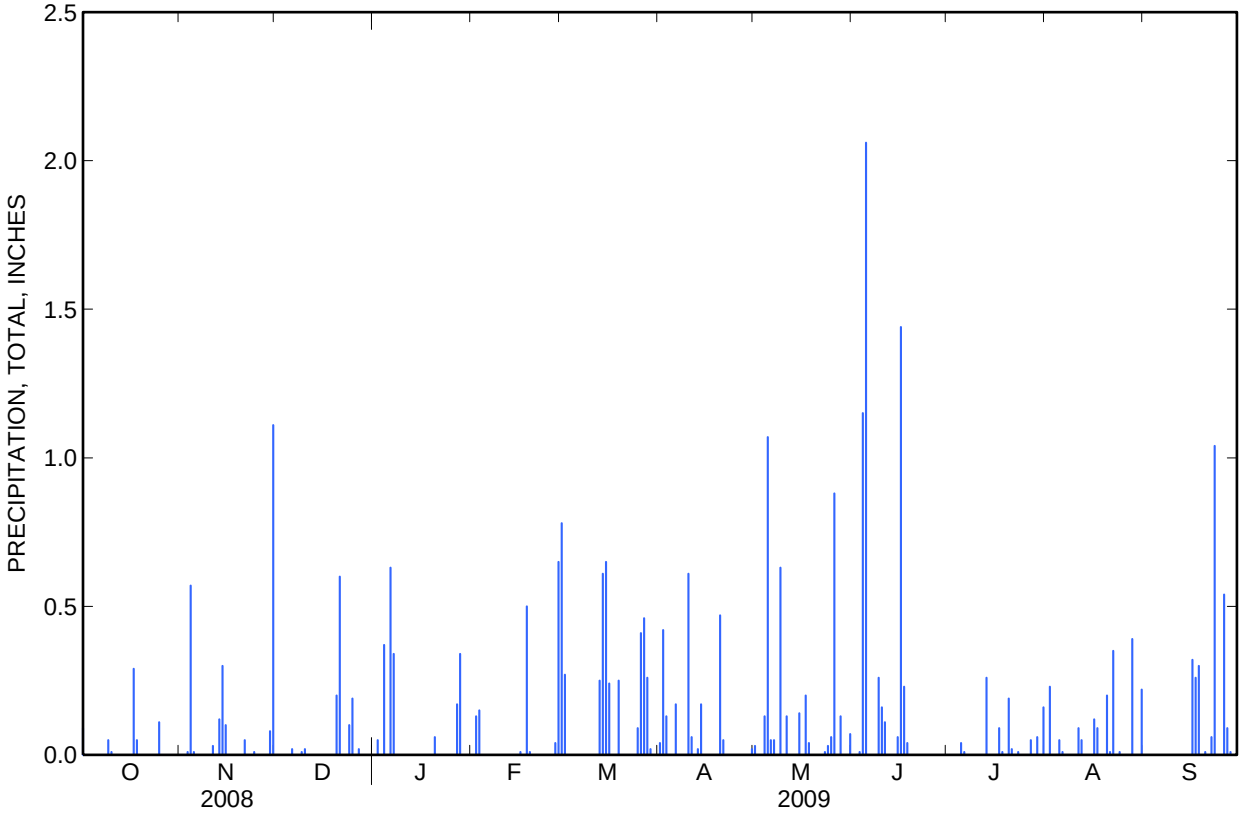
CLIMATOLOGICAL RECORDS

PERIOD OF RECORD.--August 1998 to current year. Records for August 1998 to September 2003 are unpublished and available from the USGS Water Science Center in Raleigh, NC.

INSTRUMENTATION.--Tipping bucket raingage. Satellite telemetry at station.

REMARKS.--Precipitation data collected during freezing periods may not be accurately reflected in daily record; consequently, winter record is poor.

PRECIPITATION, TOTAL, INCHES
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009
DAILY SUM VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	0.09	0.00	0.00	0.00	0.00	0.78	0.04	0.03	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.05	0.13	0.27	0.42	0.00	0.00	0.00	0.23	0.00
3	0.00	0.01	0.00	0.00	0.15	0.00	0.13	0.00	0.01	0.00	0.00	0.00
4	0.00	0.57	0.00	0.37	0.00	0.00	0.00	0.13	1.15	0.00	0.00	0.00
5	0.00	0.01	0.00	0.00	0.00	0.00	0.00	1.07	2.06	0.04	0.05	0.00
6	0.00	0.00	0.02	0.63	0.00	0.00	0.17	0.05	0.00	0.01	0.01	0.00
7	0.00	0.00	0.00	0.34	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.05	0.00	0.01	0.00	0.00	0.00	0.00	0.63	0.26	0.00	0.00	0.00
10	0.01	0.00	0.02	0.00	0.00	0.00	0.61	0.00	0.16	0.00	0.00	0.00
11	0.00	0.03	---	0.00	0.00	0.00	0.06	0.13	0.11	0.00	0.09	0.00
12	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00
13	0.00	0.12	---	0.00	0.00	0.25	0.02	0.00	0.00	0.26	0.00	0.00
14	0.00	0.30	---	0.00	0.00	0.61	0.17	0.00	0.00	0.00	0.00	0.00
15	0.00	0.10	---	0.00	0.00	0.65	0.00	0.14	0.06	0.00	0.00	0.00
16	0.00	0.00	---	0.00	0.01	0.24	0.00	0.00	1.44	0.00	0.12	0.32
17	0.29	0.00	---	0.00	0.00	0.00	0.00	0.20	0.23	0.09	0.09	0.26
18	0.05	0.00	---	0.00	0.50	0.00	0.00	0.04	0.04	0.01	0.00	0.30
19	0.00	0.00	---	0.00	0.01	0.25	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.20	0.06	0.00	0.00	0.47	0.00	0.00	0.19	0.20	0.01
21	0.00	0.05	0.60	0.00	0.00	0.00	0.05	0.00	0.00	0.02	0.01	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.06
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00	1.04
24	0.00	0.01	0.10	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.01	0.00
25	0.11	0.00	0.19	0.00	0.00	0.09	0.00	0.06	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.41	0.00	0.88	0.00	0.00	0.00	0.54
27	0.00	0.00	0.02	0.17	0.04	0.46	0.00	0.00	0.00	0.05	0.00	0.09
28	0.00	0.00	0.00	0.34	0.65	0.26	0.00	0.13	0.00	0.00	0.39	0.01
29	0.00	0.08	0.00	0.00	---	0.02	0.00	0.00	0.00	0.06	0.00	0.00
30	0.00	1.11	0.00	0.00	---	0.00	0.02	0.00	0.00	0.00	0.00	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.07	---	0.16	0.22	---
Total	0.60	2.39	---	1.96	1.49	4.29	2.16	3.65	5.52	0.90	1.82	2.63

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