



Water-Data Report 2010

02096960 HAW RIVER NEAR BYNUM, NC

Cape Fear Basin
Haw Subbasin

LOCATION.--Lat 35°45'55", long 79°08'09" referenced to North American Datum of 1983, Chatham County, NC, Hydrologic Unit 03030002, on right bank 500 ft upstream from Pokeberry Creek, 0.9 mi south of Bynum, and 1.1 mi downstream of U.S. Highways 15 and 501.

DRAINAGE AREA.--1,275 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1973 to current year.

REVISED RECORDS.--WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 283.31 ft above National Geodetic Vertical Datum of 1929. U.S. Army Corps of Engineers satellite telemetry at streamgage.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Considerable regulation for short periods at low flow caused by power plant above station. Maximum discharge for period of record, from rating curve extended above 36,000 ft³/s, on basis of slope-conveyance measurement of peak flow; maximum gage height, 21.76 ft, from floodmarks. Minimum discharge for period of record also occurred September 27, 1983. Minimum for current water year also occurred September 22. Minimum discharge affected by regulation.

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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	226	565	796	1,380	1,390	932	2,810	315	762	161	229	125
2	150	2,200	1,150	1,190	1,370	862	1,840	316	1,860	155	188	124
3	142	764	13,600	930	3,590	1,080	1,400	304	1,670	143	195	120
4	125	429	4,370	841	5,820	1,610	1,100	307	919	126	190	112
5	103	365	2,060	737	8,230	1,400	911	281	569	106	177	101
6	101	304	2,200	732	33,500	1,080	843	285	468	109	277	88
7	105	242	1,580	655	11,000	946	716	276	376	107	473	84
8	120	184	1,190	659	4,400	847	698	273	337	103	298	95
9	95	192	7,800	648	3,760	802	874	229	361	e148	194	86
10	90	172	8,630	599	3,130	775	1,540	209	230	e120	175	95
11	95	5,000	3,270	539	2,420	756	1,000	196	263	e143	165	96
12	110	21,400	2,150	521	1,840	813	882	196	249	e115	200	100
13	158	23,500	1,690	620	1,650	2,790	846	202	402	113	937	100
14	141	11,400	2,980	543	1,560	3,920	700	211	802	734	392	88
15	169	3,920	2,040	520	1,420	2,690	480	213	652	2,050	273	80
16	146	2,060	1,550	520	1,810	1,820	510	297	603	475	386	85
17	151	1,360	1,250	3,170	1,490	1,450	504	3,040	1,310	262	273	85
18	174	968	1,130	6,700	1,220	1,200	481	9,970	894	1,270	712	85
19	98	747	2,540	2,940	1,100	1,020	435	3,360	644	816	1,200	84
20	91	706	2,530	2,180	996	920	415	1,760	501	433	564	83
21	99	658	2,160	1,860	921	822	404	1,130	321	508	538	81
22	99	578	1,840	3,400	939	859	639	666	265	416	370	78
23	105	1,960	1,550	3,130	1,530	899	619	870	241	285	224	83
24	107	5,520	1,540	2,050	1,460	817	463	1,540	212	181	212	83
25	106	2,270	2,990	12,000	1,860	675	526	897	203	180	225	85
26	158	1,450	20,100	13,900	2,070	702	1,140	672	209	165	189	91
27	120	1,710	6,730	6,270	1,610	948	602	505	193	416	149	175
28	322	1,620	3,650	3,360	1,080	752	439	430	178	1,850	180	512
29	1,170	1,040	2,210	2,060	---	7,450	382	3,220	153	821	148	430
30	397	794	1,770	1,700	---	12,600	317	2,510	185	365	117	6,750
31	206	---	1,490	1,650	---	5,400	---	1,050	---	236	130	---
Total	5,479	94,078	110,536	78,004	103,166	59,637	24,516	35,730	16,032	13,112	9,980	10,284
Mean	177	3,136	3,566	2,516	3,684	1,924	817	1,153	534	423	322	343
Max	1,170	23,500	20,100	13,900	33,500	12,600	2,810	9,970	1,860	2,050	1,200	6,750
Min	90	172	796	520	921	675	317	196	153	103	117	78
Cfsm	0.14	2.46	2.80	1.97	2.89	1.51	0.64	0.90	0.42	0.33	0.25	0.27
In.	0.16	2.74	3.23	2.28	3.01	1.74	0.72	1.04	0.47	0.38	0.29	0.30

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 2010, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	632	828	1,222	1,973	1,982	2,390	1,687	1,049	880	743	574	890
Max	2,906	3,136	3,566	5,895	5,465	6,110	5,363	3,936	4,632	4,477	2,422	4,904
(WY)	(1991)	(2010)	(2010)	(1978)	(1979)	(1975)	(2003)	(1978)	(1982)	(1975)	(2003)	(1996)
Min	129	109	218	262	498	353	380	171	109	135	113	83.3
(WY)	(2002)	(2002)	(2002)	(1981)	(2009)	(2006)	(2002)	(2002)	(2002)	(1986)	(2002)	(2007)

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SUMMARY STATISTICS

	Calendar Year 2009		Water Year 2010		Water Years 1973 - 2010	
Annual total	471,260		560,554			
Annual mean	1,291		1,536		1,234	
Highest annual mean					2,948	2003
Lowest annual mean					370	2002
Highest daily mean	23,500	Nov 13	33,500	Feb 6	58,000	Sep 6, 1996
Lowest daily mean	69	Sep 10	78	Sep 22	0.18	Sep 10, 1983
Annual seven-day minimum	75	Sep 10	82	Sep 18	46	Sep 7, 1983
Maximum peak flow			37,300	Feb 6	^a 76,700	Sep 6, 1996
Maximum peak stage			15.00	Feb 6	^a 21.76	Sep 6, 1996
Instantaneous low flow			^a 77	Sep 15	^a 0.18	Sep 10, 1983
Annual runoff (cfsm)	1.01		1.20		0.967	
Annual runoff (inches)	13.75		16.35		13.15	
10 percent exceeds	2,590		3,150		2,650	
50 percent exceeds	477		644		550	
90 percent exceeds	103		107		149	

^a See Remarks.

