

02053200 POTEKASI CREEK NEAR UNION, NC

LOCATION.--Lat 36°22'15", long 77°01'32", Hertford County, Hydrologic Unit 03010204, on right bank at downstream side of bridge on State Highway 11, 2.8 mi north of Union, 3 mi downstream of Cutawhiskie Swamp, and 3.5 mi upstream from Bells Branch.

DRAINAGE AREA.--225 mi².

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1953-57. March 1958 to current year.

REVISED RECORDS.--WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 3.53 ft above NGVD of 1929. Prior to Dec. 1, 1958, nonrecording gage at same site and datum. Satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Maximum discharge for period of record from rating curve extended above 5,800 ft³/s on basis of discharge-conveyance ratios of peak flow; maximum gage height from outside floodmarks.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1929 reached a stage of 19.1 ft; discharge, 4,050 ft³/s; and flood of August 1940 reached a stage of 24.1 ft; discharge, 7,000 ft³/s, from rating curve extended above 4,000 ft³/s, from information furnished by North Carolina State Highway Commission.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	335	683	123	209	205	152	83	145	10	128	429	331
2	254	623	107	193	197	139	109	122	8.4	213	339	436
3	193	541	91	179	205	128	119	128	7.4	122	351	462
4	153	450	81	169	253	117	117	185	8.3	60	380	460
5	124	395	129	160	287	109	138	207	10	191	356	544
6	98	337	211	169	282	104	154	185	22	146	313	517
7	76	287	243	187	308	102	151	184	25	44	300	420
8	61	248	235	194	372	111	138	175	22	100	299	354
9	51	218	238	195	389	119	118	147	26	197	284	320
10	46	191	247	213	423	118	99	110	24	245	253	314
11	43	165	331	211	525	115	89	75	19	186	210	279
12	41	147	474	202	572	120	86	50	26	275	162	227
13	41	133	551	191	546	121	99	37	28	270	149	189
14	41	116	841	181	496	112	131	30	21	219	237	e160
15	44	97	1,560	171	438	111	178	25	16	151	1,190	e170
16	45	78	1,860	161	411	131	228	21	13	70	e2,600	251
17	43	65	1,990	152	413	183	281	18	12	31	e3,200	269
18	39	56	2,010	151	418	218	321	15	11	32	e3,600	252
19	35	59	1,900	156	416	220	336	14	10	58	3,210	250
20	33	143	1,670	161	394	246	320	14	10	58	2,660	235
21	32	199	1,400	157	366	266	283	12	8.2	31	2,090	191
22	29	202	1,120	150	339	260	236	11	7.0	22	1,670	149
23	27	177	760	149	311	234	189	9.9	6.8	25	1,370	122
24	26	173	516	145	284	201	148	8.7	8.4	45	1,060	103
25	25	191	427	136	257	169	108	8.0	15	76	850	84
26	25	194	387	e125	231	142	82	8.0	34	203	714	70
27	24	182	348	e130	206	120	93	22	54	232	533	60
28	26	166	313	136	185	101	128	25	31	224	377	56
29	219	151	283	137	167	86	146	20	19	745	289	55
30	592	135	256	160	---	74	150	14	19	1,170	215	57
31	786	---	231	191	---	67	---	11	---	771	213	---
TOTAL	3,607	6,802	20,933	5,221	9,896	4,496	4,858	2,036.6	531.5	6,340	29,903	7,387
MEAN	116	227	675	168	341	145	162	65.7	17.7	205	965	246
MAX	786	683	2,010	213	572	266	336	207	54	1,170	3,600	544
MIN	24	56	81	125	167	67	82	8.0	6.8	22	149	55
CFSM	0.52	1.01	3.00	0.75	1.52	0.64	0.72	0.29	0.08	0.91	4.29	1.09
IN.	0.60	1.12	3.46	0.86	1.64	0.74	0.80	0.34	0.09	1.05	4.94	1.22

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 2004, BY WATER YEAR (WY)

MEAN	126	103	210	391	487	451	305	147	122	105	171	152
MAX	1,108	619	675	957	1,135	1,439	994	925	700	531	1,131	2,515
(WY)	(1960)	(1986)	(2004)	(1987)	(1960)	(1989)	(1983)	(1979)	(1979)	(1975)	(1992)	(1999)
MIN	2.12	4.71	11.3	51.3	54.9	46.7	27.7	5.36	3.98	2.32	2.50	1.65
(WY)	(1995)	(2002)	(2002)	(1981)	(1991)	(1988)	(1995)	(1994)	(2002)	(1983)	(1987)	(1995)

02053200 POTECASTI CREEK NEAR UNION, NC—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1959 - 2004	
ANNUAL TOTAL	160,191		102,011.1			
ANNUAL MEAN	439		279		229	
HIGHEST ANNUAL MEAN					458	1979
LOWEST ANNUAL MEAN					56.1	2002
HIGHEST DAILY MEAN	2,850	Sep 22	3,600	Aug 18	15,200	Sep 17, 1999
LOWEST DAILY MEAN	21	Jul 13	6.8	Jun 23	0.30	Jun 30, 1959
ANNUAL SEVEN-DAY MINIMUM	26	Oct 22	8.8	Jun 18	0.51	Jun 25, 1959
MAXIMUM PEAK FLOW			NOT DETERMINED		17000*	Sep 17, 1999
MAXIMUM PEAK STAGE			NOT DETERMINED		28.90*	Sep 17, 1999
INSTANTANEOUS LOW FLOW			6.2	Jun 23	0.20	Jul 1, 1959
ANNUAL RUNOFF (CFSM)	1.95		1.24		1.02	
ANNUAL RUNOFF (INCHES)	26.48		16.87		13.86	
10 PERCENT EXCEEDS	1,150		519		640	
50 PERCENT EXCEEDS	234		161		77	
90 PERCENT EXCEEDS	36		22		5.3	

* See REMARKS.
e Estimated.

