

01674500 MATTAPONI RIVER NEAR BEULAHVILLE, VA

LOCATION.--Lat 37°53'02", long 77°09'55", King William County, Hydrologic Unit 02080105, on right bank, 10 ft upstream from bridge on State Highway 628, 2.4 mi north of Beulahville, and 3.3 mi downstream from Maracossic Creek.

DRAINAGE AREA.--601 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1941 to September 1987, October 1989 to current year.

REVISED RECORDS.--WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 12.43 ft above sea level (levels by Virginia Department of Transportation). Prior to Oct. 14, 1942, nonrecording gage. Oct. 14, 1942, to Aug. 8, 1974, water-stage recorder on right bank at site 0.6 mi upstream at same datum. Aug. 8 1974, water-stage recorder on left bank 80 ft downstream from previous site, at same datum. Sep. 8, 1987, to Aug. 31, 1989, nonrecording gage on downstream side of bridge at same datum. Sep. 1, 1989, to Mar. 31, 1994, water-stage recorder on upstream side of bridge at same datum. Apr. 1, 1994, to Sep. 28, 1995, nonrecording gage on downstream side of bridge at same datum. Sep. 29, 1995, water-stage recorder at present site and datum.

REMARKS.--Records good. Diurnal fluctuation at times during low flow caused by gristmill on Po River. Maximum discharge, 16,900 ft³/s, from rating curve extended above 11,760 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,560 ft³/s, Sep 18, gage height, 13.37 ft; minimum discharge, 0.70 ft³/s, Aug 13, gage height, 0.79 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	31	69	121	261	295	399	157	32	70	7.2	16
2	27	29	70	117	249	418	426	154	30	102	6.0	15
3	24	36	68	161	274	523	435	143	26	112	5.7	14
4	21	53	79	328	299	551	434	136	22	129	4.6	15
5	18	57	69	e388	306	502	430	137	21	89	3.9	36
6	19	51	60	e360	294	492	407	134	20	59	3.4	94
7	19	56	61	301	267	526	386	133	19	41	2.4	222
8	21	57	57	272	244	518	352	130	17	39	1.8	268
9	54	53	101	210	231	422	331	126	15	37	1.5	198
10	81	52	162	182	215	355	364	118	13	28	1.2	159
11	79	54	157	153	200	342	376	107	13	25	1.1	128
12	68	54	143	152	189	357	394	99	14	23	.89	100
13	55	52	174	150	214	369	394	90	14	25	.78	86
14	46	54	285	144	236	386	377	84	18	38	4.3	69
15	41	59	287	163	264	715	335	82	26	42	82	60
16	34	56	239	239	246	1110	308	78	26	37	97	670
17	32	56	182	249	224	1330	287	72	25	29	60	2020
18	29	56	155	251	233	1390	267	68	27	23	37	2440
19	25	52	129	322	301	1460	255	66	29	18	23	2020
20	24	51	113	431	432	1600	238	60	26	13	20	1650
21	28	59	100	440	506	1660	233	56	29	11	25	1050
22	25	63	95	363	453	1290	222	52	35	10	23	492
23	24	59	88	292	353	996	222	52	34	10	19	356
24	27	61	95	338	288	1080	237	57	27	8.7	17	273
25	28	68	104	566	250	1230	226	61	21	6.9	16	217
26	26	69	104	724	236	1320	215	63	18	6.6	36	177
27	25	76	100	789	239	1110	203	59	18	5.7	44	152
28	26	72	107	765	248	686	189	52	16	4.9	39	170
29	28	71	115	649	---	553	177	45	15	4.7	30	212
30	26	69	124	427	---	483	165	40	16	5.1	25	257
31	33	---	131	316	---	429	---	33	---	8.0	20	---
TOTAL	1031	1686	3823	10363	7752	24498	9284	2744	662	1060.6	657.77	13636
MEAN	33.3	56.2	123	334	277	790	309	88.5	22.1	34.2	21.2	455
MAX	81	76	287	789	506	1660	435	157	35	129	97	2440
MIN	18	29	57	117	189	295	165	33	13	4.7	.78	14
CFSM	.06	.09	.21	.56	.46	1.31	.51	.15	.04	.06	.04	.76
IN.	.06	.10	.24	.64	.48	1.52	.57	.17	.04	.07	.04	.84

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STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 1987, 1989 - 1999, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	316	427	626	809	933	1091	960	649	404	289	326	235
MAX	1801	1461	2115	2418	3100	2483	3291	1912	3217	2119	2409	1287
(WY)	1980	1973	1949	1978	1998	1979	1984	1978	1972	1945	1969	1975
MIN	26.1	49.9	96.8	131	277	229	288	88.5	22.1	34.2	20.3	17.4
(WY)	1942	1992	1966	1981	1999	1981	1995	1999	1999	1999	1977	1980

SUMMARY STATISTICS FOR 1998 CALENDAR YEAR FOR 1999 WATER YEAR WATER YEARS 1942 - 1987 1989 - 1999

ANNUAL TOTAL	300391	77197.37		
ANNUAL MEAN	823	211	586	
HIGHEST ANNUAL MEAN			1210	1972
LOWEST ANNUAL MEAN			185	1981
HIGHEST DAILY MEAN	6360	Feb 9	2440	Sep 18
LOWEST DAILY MEAN	11	Sep 17	.78	Aug 13
ANNUAL SEVEN-DAY MINIMUM	13	Sep 12	1.4	Aug 7
INSTANTANEOUS PEAK FLOW			2560	Sep 18
INSTANTANEOUS PEAK STAGE			13.37	Sep 18
INSTANTANEOUS LOW FLOW			.70	Aug 13
ANNUAL RUNOFF (CFSM)	1.37		.35	.98
ANNUAL RUNOFF (INCHES)	18.59		4.78	13.26
10 PERCENT EXCEEDS	2370		445	1330
50 PERCENT EXCEEDS	250		88	370
90 PERCENT EXCEEDS	25		16	61

e Estimated.

