

02034000 RIVANNA RIVER AT PALMYRA, VA

LOCATION.--Lat 37°51'28", long 78°15'58", Fluvanna County, Hydrologic Unit 02080204, on left bank 10 ft upstream from bridge on U.S. Highway 15 at Palmyra, 0.5 mi upstream from Cunningham Creek, and 15 mi upstream from mouth.

DRAINAGE AREA.--664 mi².

PERIOD OF RECORD.--October 1933 to current year. Monthly discharge only for some periods, published in WSP 1303.

REVISED RECORDS.--WSP 802: 1936(M). WSP 852: 1937. WSP 892: 1934-35. WSP 1303: 1945-46(M). WSP 1503: 1956. WSP 2104: Drainage area. WDR VA-72-1: 1969(M).

GAGE.--Water-stage recorder. Datum of gage is 210.39 ft above sea level. Prior to Oct. 24, 1942, water-stage recorder at site 200 ft downstream at same datum. Oct. 24, 1942, to Dec. 18, 1947, nonrecording gage 10 ft downstream at same datum.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 6,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Sep 30	2200	*22,700	*23.31	No other peak greater than base discharge.			

Minimum discharge, 18 ft³/s, Aug 13.

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	59	115	138	158	401	510	400	260	163	54	47	43
2	70	115	143	146	688	463	545	230	131	76	48	38
3	60	147	141	558	906	370	459	213	130	75	43	36
4	52	270	140	1430	651	794	429	214	136	62	36	36
5	53	197	138	592	522	682	384	200	128	74	32	402
6	65	122	137	375	487	527	378	245	122	58	30	790
7	74	123	139	343	454	529	355	229	115	50	28	1570
8	191	140	144	311	444	459	330	511	111	66	29	687
9	661	115	359	281	443	425	330	626	107	73	28	385
10	325	167	443	325	369	467	341	390	99	60	26	1030
11	299	118	280	332	360	482	376	256	88	53	25	595
12	183	181	212	323	337	473	388	249	80	49	23	314
13	142	181	265	325	365	402	354	255	81	46	19	191
14	124	172	376	342	326	474	309	380	79	55	21	190
15	115	136	314	629	312	3860	310	501	81	49	135	231
16	112	184	245	983	272	2690	331	354	81	46	155	676
17	110	105	210	603	256	1310	324	290	94	45	65	822
18	110	103	192	675	501	1020	311	265	93	47	44	453
19	109	130	173	999	785	947	276	264	94	76	36	332
20	137	133	165	642	626	809	284	255	92	49	100	229
21	103	142	159	501	540	822	290	230	88	60	108	205
22	101	143	155	430	481	1040	281	192	90	60	67	336
23	118	141	156	411	468	869	284	448	96	104	51	361
24	116	143	164	3000	384	754	355	416	90	74	45	260
25	106	138	189	2870	394	676	377	350	83	67	43	208
26	111	144	174	1270	370	599	260	289	74	64	76	162
27	112	174	157	899	368	534	304	257	66	49	114	168
28	114	152	155	677	390	513	274	213	61	44	78	269
29	116	146	181	628	---	474	255	160	64	45	80	980
30	119	138	186	485	---	432	278	191	60	67	60	15500
31	115	---	176	436	---	398	---	179	---	49	49	---
TOTAL	4282	4415	6206	21979	12900	24804	10172	9112	2877	1846	1741	27499
MEAN	138	147	200	709	461	800	339	294	95.9	59.5	56.2	917
MAX	661	270	443	3000	906	3860	545	626	163	104	155	15500
MIN	52	103	137	146	256	370	255	160	60	44	19	36
CFSM	.21	.22	.30	1.07	.69	1.21	.51	.44	.14	.09	.08	1.38
IN.	.24	.25	.35	1.23	.72	1.39	.57	.51	.16	.10	.10	1.54

02034000 RIVANNA RIVER AT PALMYRA, VA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935 - 1999, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	557	587	760	951	1054	1209	1053	766	591	395	464	470
MAX	3535	3521	2667	2620	3468	3415	3662	2472	4473	1524	3404	2915
(WY)	1943	1986	1949	1936	1998	1993	1937	1989	1972	1975	1969	1979
MIN	46.4	79.8	88.9	104	302	225	214	212	95.9	39.0	20.2	19.1
(WY)	1942	1942	1966	1966	1954	1981	1981	1956	1999	1966	1966	1954

SUMMARY STATISTICS FOR 1998 CALENDAR YEAR FOR 1999 WATER YEAR WATER YEARS 1935 - 1999

ANNUAL TOTAL	405773	127833	
ANNUAL MEAN	1112	350	736
HIGHEST ANNUAL MEAN			1401
LOWEST ANNUAL MEAN			241
HIGHEST DAILY MEAN	19000	Feb 18	15500
LOWEST DAILY MEAN	43	Sep 6	19
ANNUAL SEVEN-DAY MINIMUM	57	Sep 1	24
INSTANTANEOUS PEAK FLOW			22700
INSTANTANEOUS PEAK STAGE			23.31
INSTANTANEOUS LOW FLOW			18
ANNUAL RUNOFF (CFSM)	1.67	.53	
ANNUAL RUNOFF (INCHES)	22.73	7.16	15.07
10 PERCENT EXCEEDS	2450	634	1430
50 PERCENT EXCEEDS	451	192	422
90 PERCENT EXCEEDS	91	52	110

a Also Sep 10, 11, 1966.

