

03431700 RICHLAND CREEK AT CHARLOTTE AVENUE AT NASHVILLE, TN

LOCATION.--Lat 36°09'04", long 86°51'15", Davidson County, Hydrologic Unit 05130202, near right bank on downstream end of pier of Charlotte Avenue bridge on U.S. Highway 70, 4.0 mi southwest of the State Capitol in Nashville, and at mile 3.7.

DRAINAGE AREA.--24.3 mi².

PERIOD OF RECORD.--July 1964 to September 1990, August 1993 to current year.

GAGE.--Data collection platform and crest-stage gage. Datum of gage is 409.56 ft above NGVD of 1929.

REMARKS.--Records good, except for discharges below 5 ft³/s and estimated daily discharges, which are fair. Diversions above station used for irrigation of golf courses. Periodic observations of specific conductance and water temperature are published in this report as miscellaneous water quality data.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct 19	0300	*3,850	*9.90	Apr 30	0045	1,980	7.06
Nov 24	0200	1,620	6.36	Aug 30	0630	1,640	6.39
Dec 7	0615	3,020	8.74				

Minimum discharge, 1.1 ft³/s, Aug. 11, 13.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.3	20	171	28	30	51	209	96	11	3.2	2.7	35
2	5.8	17	99	42	39	42	125	67	23	3.1	2.8	23
3	5.5	15	73	36	37	37	85	50	15	2.9	2.5	17
4	5.1	16	56	33	33	33	67	40	9.2	3.0	2.6	13
5	4.9	13	57	31	30	30	54	33	7.3	3.9	2.2	11
6	4.8	12	92	61	28	27	87	28	7.4	3.5	2.2	8.9
7	4.8	11	547	259	41	30	273	23	7.0	3.0	2.1	7.4
8	4.9	9.7	134	180	54	34	215	20	6.0	2.7	2.0	6.5
9	4.9	9.0	354	107	40	26	118	17	5.5	2.6	2.1	5.8
10	5.2	8.3	148	81	34	23	88	16	5.3	2.5	1.7	5.3
11	5.1	20	102	111	31	21	70	13	20	24	1.7	4.8
12	86	21	78	83	28	19	59	12	97	7.2	1.7	4.5
13	29	13	61	221	72	18	49	11	34	13	1.5	4.3
14	15	11	49	133	59	16	41	40	20	8.6	1.6	4.1
15	13	10	41	95	48	14	34	19	14	7.3	3.2	31
16	10	9.6	35	74	43	21	30	13	11	7.0	3.4	12
17	8.6	9.4	31	59	38	17	27	11	9.0	5.4	8.9	7.2
18	69	9.0	27	49	34	15	23	9.6	7.5	4.5	6.1	6.2
19	576	10	23	43	31	14	20	31	6.7	24	3.6	5.3
20	80	9.8	19	37	221	13	18	18	5.9	10	2.8	4.9
21	51	9.2	18	33	e150	12	17	11	5.4	6.4	2.3	4.6
22	37	8.6	241	29	e108	21	37	9.2	4.9	12	2.2	4.3
23	42	34	282	24	86	84	21	8.0	4.6	6.5	2.0	3.8
24	38	326	104	22	69	38	17	7.3	4.1	5.2	1.8	3.7
25	28	76	77	20	56	34	15	6.6	3.9	4.3	6.5	13
26	29	51	62	20	47	29	20	6.4	3.9	3.8	13	19
27	90	44	50	16	41	44	16	6.1	6.0	18	6.2	7.5
28	55	38	43	16	70	72	28	5.5	4.4	6.2	83	6.2
29	39	32	38	65	---	55	99	5.5	3.5	4.4	21	5.4
30	30	501	34	43	---	45	421	5.2	3.2	3.5	388	4.7
31	24	---	31	35	---	47	---	4.9	---	2.9	66	---
TOTAL	1,405.9	1,373.6	3,177	2,086	1,598	982	2,383	643.3	365.7	214.6	649.4	289.4
MEAN	45.4	45.8	102	67.3	57.1	31.7	79.4	20.8	12.2	6.92	20.9	9.65
MAX	576	501	547	259	221	84	421	96	97	24	388	35
MIN	4.8	8.3	18	16	28	12	15	4.9	3.2	2.5	1.5	3.7
CFSM	1.87	1.88	4.22	2.77	2.35	1.30	3.27	0.85	0.50	0.28	0.86	0.40
IN.	2.15	2.10	4.86	3.19	2.45	1.50	3.65	0.98	0.56	0.33	0.99	0.44

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2005, BY WATER YEAR (WY)

	12.7	32.1	54.6	51.3	58.7	62.1	45.8	39.5	21.6	11.2	8.75	13.7
MEAN	12.7	32.1	54.6	51.3	58.7	62.1	45.8	39.5	21.6	11.2	8.75	13.7
MAX	53.0	89.8	247	151	205	208	146	131	107	42.0	24.6	127
(WY)	(1976)	(1987)	(1965)	(1974)	(1989)	(1975)	(1979)	(1984)	(1998)	(1979)	(1994)	(1979)
MIN	0.41	1.79	2.57	3.96	10.3	18.2	5.76	5.06	1.33	1.34	1.18	0.92
(WY)	(1966)	(1972)	(1966)	(1986)	(1968)	(1966)	(1986)	(1977)	(1988)	(1966)	(1980)	(1980)

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SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1964 - 2005	
ANNUAL TOTAL	17,611.8		15,167.9		34.3	
ANNUAL MEAN	48.1		41.6		71.3	
HIGHEST ANNUAL MEAN					13.6	
LOWEST ANNUAL MEAN					1979	
HIGHEST DAILY MEAN	1,130	Feb 5	576	Oct 19	7,020	Nov 2, 1990
LOWEST DAILY MEAN	4.8	Oct 6	1.5	Aug 13	0.05	Oct 8, 1980
ANNUAL SEVEN-DAY MINIMUM	4.9	Oct 4	1.8	Aug 8	0.23	Oct 8, 1965
MAXIMUM PEAK FLOW			3,850	Oct 19	9,470	Sep 13, 1979
MAXIMUM PEAK STAGE			9.90	Oct 19	15.13	Sep 13, 1979
INSTANTANEOUS LOW FLOW			a1.1	Aug 11	0.05	Oct 7, 1980
ANNUAL RUNOFF (CFSM)	1.98		1.71		1.41	
ANNUAL RUNOFF (INCHES)	26.96		23.22		19.17	
10 PERCENT EXCEEDS	93		87		74	
50 PERCENT EXCEEDS	20		20		12	
90 PERCENT EXCEEDS	7.2		3.8		1.8	

a Also occurred Aug. 13.
e Estimated

