05484500 RACCOON RIVER AT VAN METER, IA

Des Moines Basin
North Raccoon Subbasin

LOCATION.--Lat 41°32′02″, long 93°56′59″ referenced to North American Datum of 1927, in SW ¼ SW ¼ sec.22, T.78 N., R.27 W., Dallas County, IA, Hydrologic Unit 07100006, on right bank 160 ft downstream from bridge on County Highway R16 (revised), 0.3 mi northeast of Van Meter, 0.7 mi upstream from small left bank tributary, 1.2 mi downstream from confluence of North and South Raccoon Rivers, and 29.3 mi upstream from mouth.

DRAINAGE AREA.--3,441 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--April 1915 to current year. Prior to October 1934, monthly discharge only, published in WSP 1308.

REVISED RECORDS.--WSP 1308: 1927 (M), WSP 1438: Drainage area, WSP 1508: 1915 (M), 1925 (M), 1926, 1933 (M), 1939 (M), 1947 (M), 1949 (M).

GAGE.--Water-stage recorder. Datum of gage is 841.16 ft above NGVD of 1929. See WSP 1308 for history of changes prior to August 8, 1934.

REMARKS.--Records are considered good, except for those estimated daily discharges, which are poor. U.S. Army Corps of Engineers rain gage and data collection platform with satellite telemetry at station. Precipitation records are available online at the U.S. Army Corps of Engineers website: www2.mvr.usace.army.mil/WaterControl/datamining2.cfm.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	1,240	726	555	3,550	e898	e768	4,990	12,500	5,220	1,540	406	8,800
2	1,180	692	e407	3,540	e851	e757	5,560	9,520	4,970	1,470	396	6,310
3	1,130	676	e275	3,310	e851	e735	6,230	7,830	4,590	1,380	364	4,120
4	1,060	686	e335	3,050	e805	e647	6,260	7,060	4,380	1,340	348	3,220
5	987	697	e521	2,980	e780	e754	5,800	6,420	3,940	1,300	649	2,710
6	913	694	706	2,900	e736	e724	5,410	9,240	3,620	1,230	1,170	2,310
7	849	693	e626	2,570	e736	e752	4,620	18,300	3,420	1,180	1,380	5,900
8	837	709	e655	2,410	e736	e812	3,980	17,200	3,170	1,130	1,370	3,430
9	820	690	e696	2,220	e759	e921	3,560	15,000	2,910	1,040	1,330	2,260
10	804	662	e744	2,000	e713	e1,200	3,310	15,100	2,700	1,070	1,060	1,860
11	813	640	734	1,870	e736	e1,990	3,740	14,800	2,550	959	866	1,710
12	808	630	750	1,750	e736	7,750	5,130	13,100	2,430	861	734	1,560
13	756	673	779	e1,390	e713	12,700	5,310	10,300	2,310	799	684	1,680
14	721	733	754	e907	e709	e15,900	5,210	7,860	2,180	768	627	1,590
15	717	743	749	e1,230	e652	e15,600	5,260	6,850	2,070	725	513	1,440
16	740	725	744	e1,200	e667	15,100	5,060	6,090	1,990	740	474	1,350
17	817	711	694	e1,230	e690	15,000	4,570	5,470	1,940	750	452	1,300
18	801	699	650	e1,250	e690	13,200	4,110	4,970	1,860	665	433	1,250
19	798	671	606	e1,170	e729	9,070	3,690	4,600	1,860	641	428	1,400
20	799	650	605	e1,130	e764	7,060	3,370	4,280	2,020	655	431	1,380
21	818	646	978	e1,150	e873	6,380	3,150	3,930	1,920	633	454	1,950
22	861	648	1,670	e1,120	e1,180	6,150	2,970	3,630	2,310	608	2,080	2,330
23	867	640	1,700	e1,050	e1,050	5,270	3,270	3,480	6,100	611	6,540	2,020
24	846	653	1,480	e982	e1,060	4,750	3,960	12,200	4,470	642	8,350	1,790
25	841	640	1,350	e1,030	e1,040	5,460	18,300	17,300	3,110	654	9,090	1,580
26	842	641	1,230	e986	e983	5,160	26,500	12,900	2,460	556	9,670	1,470
27	851	642	1,160	e929	e805	4,580	20,800	12,000	2,230	546	10,500	1,850
28	839	780	1,120	e953	e757	4,090	20,800	9,090	1,980	610	9,180	2,450
29	818	803	1,100	e912	---	3,630	19,300	7,640	1,780	511	6,470	2,180
30	818	748	1,080	e921	---	3,360	16,400	7,070	1,620	456	6,790	1,890
31	776	---	1,560	e875	---	3,790	---	5,960	---	423	8,170	---
Total	26,767	20,641	27,013	52,565	22,699	174,060	230,620	291,690	88,110	26,493	91,409	75,090
Mean	863	688	871	1,696	811	5,615	7,687	9,409	2,937	855	2,949	2,503
Max	1,240	803	1,700	3,550	1,180	15,900	26,500	18,300	6,100	1,540	10,500	8,800
Min	717	630	275	875	652	647	2,970	3,480	1,620	423	348	1,250
Ac-ft	53,090	40,940	53,580	104,300	45,020	345,200	457,400	578,600	174,800	52,550	181,300	148,900
Cfsm	0.25	0.20	0.25	0.49	0.24	1.63	2.23	2.73	0.85	0.25	0.86	0.73
In.	0.29	0.22	0.29	0.57	0.25	1.88	2.49	3.15	0.95	0.29	0.99	0.81

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1916 - 2007, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	797	746	560	490	968	2,580	2,658	2,844	3,305	1,902	1,005	869
Max	6,840	4,774	3,085	3,461	5,438	10,480	10,630	9,409	13,970	17,260	7,414	7,222
(WY)	(1974)	(1973)	(1983)	(1932)	(1984)	(1979)	(1983)	(2007)	(1947)	(1993)	(1993)	(1926)
Min	48.6	51.5	31.0	17.2	31.5	146	125	121	112	68.1	28.1	43.1
(WY)	(1940)	(1938)	(1938)	(1940)	(1940)	(1931)	(1956)	(1934)	(1977)	(1936)	(1936)	(1939)

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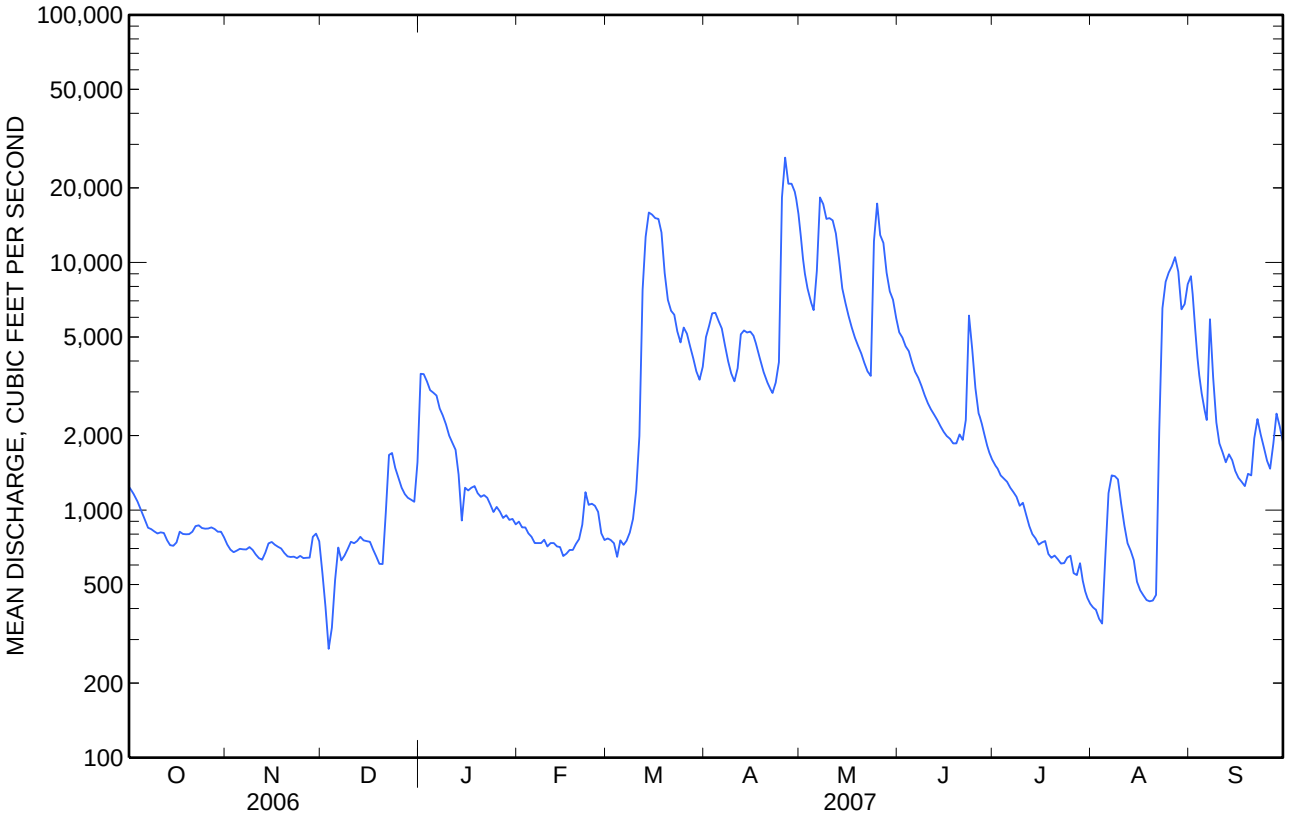
SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 1916 - 2007	
Annual total	355,245		1,127,157			
Annual mean	973		3,088		1,561	
Highest annual mean					5,717	1993
Lowest annual mean					166	1956
Highest daily mean	7,350	May 3	26,500	Apr 26	57,500	Jul 10, 1993
Lowest daily mean	123	Feb 17	275	Dec 3	10	Jan 22, 1940[a]
Annual seven-day minimum	194	Feb 12	415	Jul 29	10	Jan 22, 1940
Maximum peak flow			29,600	Apr 26	70,100	Jul 10, 1993
Maximum peak stage			20.24	Apr 26	26.34	Jul 10, 1993
Instantaneous low flow					10	Jan 22, 1940
Annual runoff (ac-ft)	704,600		2,236,000		1,131,000	
Annual runoff (cfsm)	0.283		0.897		0.454	
Annual runoff (inches)	3.84		12.19		6.16	
10 percent exceeds	2,100		7,840		3,960	
50 percent exceeds	650		1,230		604	
90 percent exceeds	249		642		120	

[a] Also Jan 23-31, 1940.