



Water-Data Report 2007

01477120 RACCOON CREEK NEAR SWEDESBORO, NJ

DELAWARE RIVER BASIN

LOCATION.--Lat 39°44'26", long 75°15'33" referenced to North American Datum of 1983, Harrison Township, Gloucester County, NJ, Hydrologic Unit 02040202, on right bank 25 ft downstream from bridge on County Route 607 (Tomlin Station Road), 1.8 mi west of Mullica Hill, and 2.8 mi east of Swedesboro.

DRAINAGE AREA.--26.9 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--May 1966 to current year.

REVISED RECORDS.--WDR NJ-82-2: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is NGVD of 1929. Prior to July 28, 1969, at datum 7.96 ft higher. July 28, 1969 to Sept. 30, 1969, at datum 5.96 ft higher.

REMARKS.--Records fair, except for estimated daily discharges, which are poor. Occasional regulation from irrigation upstream of gage. Several measurements of water temperature were made during the year. Satellite gage-height telemetry at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft³/s and (or) maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov 8	1945	459	12.49
Jan 1	2200	322	11.87
Jan 8	1030	594	13.08
Mar 2	1545	318	11.84
Apr 12	1715	317	11.83
Apr 15	2100	*1,150	*14.49

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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	27	37	43	180	40	51	44	51	28	24	17	16
2	25	38	45	168	43	220	41	49	27	22	16	15
3	23	35	39	71	43	109	38	46	38	20	16	15
4	22	33	38	59	38	74	130	45	65	23	15	15
5	22	32	38	55	36	55	103	44	40	e32	15	15
6	63	32	37	54	43	49	58	42	32	e30	18	14
7	54	33	37	50	35	47	52	42	30	24	16	14
8	32	243	35	410	38	47	49	42	29	21	16	14
9	27	209	34	167	36	47	47	42	28	20	17	14
10	26	66	35	78	34	48	45	41	26	19	35	14
11	36	47	35	63	34	47	44	40	26	e30	19	16
12	100	58	35	59	36	44	184	41	27	e28	17	15
13	36	208	36	56	39	42	103	50	28	21	17	14
14	31	163	37	55	80	41	60	39	27	20	16	14
15	28	72	36	54	63	41	603	37	26	19	15	16
16	27	85	34	51	49	131	715	45	26	18	15	14
17	73	160	34	47	42	148	239	64	25	18	15	14
18	137	65	34	47	45	103	110	42	24	19	15	13
19	48	53	32	50	42	104	88	38	24	22	19	13
20	131	48	32	47	48	126	77	36	31	23	28	13
21	76	44	31	44	62	82	69	34	27	20	48	13
22	44	52	32	46	52	65	64	33	24	18	45	14
23	39	108	111	47	49	67	61	32	22	18	26	14
24	35	84	53	45	44	73	58	31	21	18	23	13
25	34	56	48	44	44	61	58	30	24	18	21	13
26	34	47	122	42	69	55	54	29	22	18	20	13
27	32	46	54	42	64	52	109	29	21	18	19	13
28	197	45	41	45	56	49	92	31	27	17	18	13
29	100	43	37	43	---	46	63	31	36	17	17	12
30	49	41	36	40	---	45	56	29	27	18	16	12
31	40	---	36	41	---	44	---	29	---	18	16	---
Total	1,648	2,283	1,327	2,300	1,304	2,213	3,514	1,214	858	651	626	418
Mean	53.2	76.1	42.8	74.2	46.6	71.4	117	39.2	28.6	21.0	20.2	13.9
Max	197	243	122	410	80	220	715	64	65	32	48	16
Min	22	32	31	40	34	41	38	29	21	17	15	12
Cfsm	1.98	2.83	1.59	2.76	1.73	2.65	4.35	1.46	1.06	0.78	0.75	0.52
In.	2.28	3.16	1.84	3.18	1.80	3.06	4.86	1.68	1.19	0.90	0.87	0.58

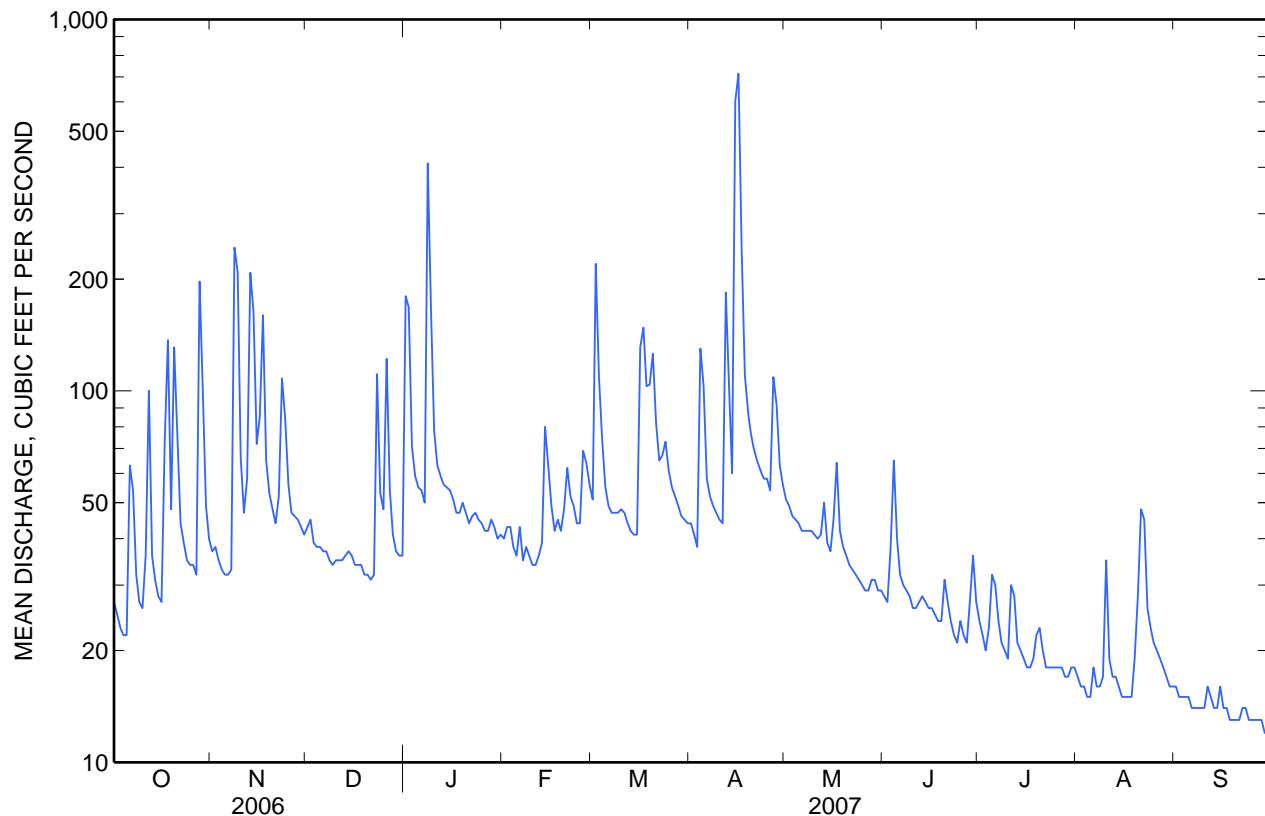
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2007, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	28.8	35.4	46.0	49.5	49.5	56.2	53.5	40.0	34.9	31.2	27.1	25.5
Max	65.2	93.9	144	123	115	132	134	72.6	95.5	112	121	71.9
(WY)	(1990)	(1973)	(1997)	(1978)	(1979)	(1994)	(1983)	(1989)	(2003)	(1975)	(1967)	(1971)
Min	13.0	15.3	16.3	20.2	16.5	22.7	21.3	15.9	10.7	6.01	5.89	8.98
(WY)	(1993)	(1999)	(1999)	(2002)	(2002)	(1981)	(1985)	(1977)	(1966)	(1966)	(1966)	(2002)

01477120 RACCOON CREEK NEAR SWEDESBORO, NJ—Continued**SUMMARY STATISTICS**

	Calendar Year 2006	Water Year 2007	Water Years 1966 - 2007	
Annual total	16,873	18,356		
Annual mean	46.2	50.3	40.0	
Highest annual mean			64.7	1973
Lowest annual mean			16.5	2002
Highest daily mean	674	Jul 6	715	Apr 16
Lowest daily mean	14	Jun 20	12	Sep 29, 30
Annual seven-day minimum	14	Jun 17	13	Sep 24
Maximum peak flow			1,150	Apr 15
Maximum peak stage			14.49	Apr 15
Instantaneous low flow			12	Sep 25-30
Annual runoff (cfsm)	1.72	1.87		1.49
Annual runoff (inches)	23.33	25.38		20.21
10 percent exceeds	75	84		66
50 percent exceeds	34	38		29
90 percent exceeds	20	16		14

^a Adjusted to current datum.



01477120 RACCOON CREEK NEAR SWEDESBORO, NJ—Continued**WATER-QUALITY RECORDS**

PERIOD OF RECORD.--Water years 1965 to current year.

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: June 1966 to September 1969.

WATER TEMPERATURE: May 1966 to September 1973, daily maximum-minimum; October 1998 to October 2001, recorded hourly.

REMARKS.--Total nitrogen (00600) equals the sum of filtered ammonia-plus-organic nitrogen (00623), filtered nitrite-plus-nitrate nitrogen (00631), and total particulate nitrogen (49570). Cooperative Network Site Descriptor: Watershed Integrator and Trace Element Assessment (303d) special study site, NJ Department of Environmental Protection Watershed Management Area 18. The sample on Sep 17 was for the trace element assessment special study.

COOPERATION.--Physical measurements and samples for laboratory analyses were provided by personnel of the NJ Department of Environmental Protection. Determinations of dissolved ammonia, dissolved orthophosphate, and suspended residue were performed by the NJ Department of Health and Senior Services, Environmental and Chemical Laboratory.

**WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 1 of 4

[Remark codes: <, less than; E, estimated.]

Date	Time	Sample type	Turbidity white light, det ang 90+/-30 corrctd cfs (00061)	UV absorb- ance, 254 nm, wat flt units	UV absorb- ance, 280 nm, wat flt units	Baro- metric pres- sure, mm Hg	Dissolved oxygen, mg/L (00025)	Dis- solved oxygen, percent of sat- uration (00301)	pH, water, unfltrd field, std units	Specif- ic conduc- tance, wat unf μS/cm (00095)	Temper- ature, air, deg C (00020)	
Dec												
06...	0930	Environmental	36	5.5	.134	.106	772	12.5	92	7.2	247	4.0
Mar												
01...	0930	Environmental	50	4.4	.059	.046	766	13.1	101	7.1	270	8.5
May												
01...	1000	Environmental	51	5.5	.160	.125	763	8.8	87	7.1	205	16.0
Aug												
09...	0930	Environmental	15	6.2	.135	.107	759	7.1	86	7.5	243	29.0
Sep												
17...	0930	<i>Trip Blank</i>	--	--	--	--	--	--	--	--	--	
17...	0945	<i>Field Blank</i>	--	--	--	--	--	--	--	--	--	
17...	1000	Environmental	14	5.2	--	--	772	8.8	87	7.6	238	13.5

01477120 RACCOON CREEK NEAR SWEDESBORO, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 2 of 4

[Remark codes: <, less than; E, estimated.]

Date	Temperature, water, deg C (00010)	Hard- ness, water, mg/L as CaCO ₃ (00900)	Calcium water, fltrd, mg/L (00915)	Magnes- ium, water, fltrd, mg/L (00925)	Potas- sium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed			Chlor- ide, lab, mg/L as CaCO ₃ (90410)	Fluor- ide, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of consti- tuents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)
							end pt,	lab,	mg/L as						
Dec															
06...	3.2	67	20.3	4.00	3.71	16.7	38	26.2	.22	10.4	25.1	136	135		
Mar															
01...	4.1	67	17.7	5.44	4.24	19.2	27	35.6	.13	8.7	27.1	149	148		
May															
01...	14.8	61	17.4	4.31	3.53	10.9	25	21.8	.13	7.2	26.1	115	140		
Aug															
09...	24.1	80	25.3	4.03	4.63	12.8	52	23.5	.24	12.7	22.7	140	141		
Sep															
17...	--	--	--	--	--	--	--	--	--	--	--	--	--		
17...	--	--	--	--	--	--	--	--	--	--	--	--	--		
17...	14.4	--	--	--	--	--	--	--	--	--	--	--	--		

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 3 of 4

[Remark codes: <, less than; E, estimated.]

Date	Residue total non- filter- able, mg/L (00530)	Ammonia		Nitrate + nitrite water, fltrd, mg/L (00608)	Partic- ulate nitro- gen, susp, water, fltrd, mg/L (49570)	Total nitro- gen, water, fltrd, mg/L (00602)	Total nitro- gen, water, unfltrd mg/L (00600)	Ortho- phosphate, water, fltrd, mg/L as P (00671)	Phos- phorus, water, fltrd, mg/L (00666)	Phos- phorus, water, unfltrd mg/L (00665)	Total carbon, suspnd sediment total, mg/L (00694)	Inor- ganic carbon, suspnd sediment total, mg/L (00688)	Organic carbon, suspnd sediment total, mg/L (00689)
		org-N, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)										
Dec													
06...	1	.38	.072	1.49	.02	1.9	1.9	<.010	.017	.089	.2	<.1	.2
Mar													
01...	2	.48	.072	3.28	.04	3.8	3.8	E.006	.017	.056	.3	<.1	.3
May													
01...	2	.37	.028	1.79	.03	2.2	2.2	E.005	.014	.065	.4	<.1	.4
Aug													
09...	3	.38	.061	.59	.03	.97	1.0	.132	.184	.248	.4	<.1	.4
Sep													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--

01477120 RACCOON CREEK NEAR SWEDESBORO, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 4 of 4

[Remark codes: <, less than; E, estimated.]

Date	Organic carbon, water, filtrd, mg/L (00681)	Boron, water, filtrd, μg/L (01020)	Silver, water, filtrd, μg/L (01075)	Silver, unfltrd recover -able, μg/L (01077)
Dec				
06...	3.2	54	--	--
Mar				
01...	1.7	46	--	--
May				
01...	3.8	29	--	--
Aug				
09...	3.1	48	--	--
Sep				
17...	--	--	--	<.02
17...	--	--	<.1	--
17...	--	--	<.1	<.02