

Water-Data Report 2007

01407705 SHARK RIVER NEAR NEPTUNE CITY, NJ

SHARK RIVER BASIN

LOCATION.--Lat 40°11'55", long 74°04'12" referenced to North American Datum of 1983, Neptune Township, Monmouth County, NJ, Hydrologic Unit 02030104, on left bank 100 ft upstream from bridge on Remsen Mill Road, 0.3 mi downstream from Robins Swamp Brook, and 1.7 mi west of Neptune City.

DRAINAGE AREA.--9.96 mi².

SURFACE-WATER RECORDS

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

REVISED RECORDS.--WDR NJ-05-01: 1967-1973, 1975, 1978-1980, and 1983(M).

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Datum of gage is 7.05 ft above NGVD of 1929.

REMARKS.--Records fair, except for estimated daily discharges, which are poor. Diversion above station by New Jersey-American Water Company for municipal supply (see 01407704) and by farmers for irrigation. Entire flow from 0.34 mi² of drainage area, subsequent to November 1962, controlled by Glendola Reservoir (capacity 1,000 million gal) on Robins Swamp Brook, 0.6 mi southwest of gage. Water pumped into Glendola Reservoir from Manasquan River or Reservoir subsequent to July 1990 (see 0140802890). Satellite gage-height telemetry at gage. Several measurements of water temperature were made during the year.

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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	9.7	11	18	66	8.3	20	11	20	6.9	5.0	6.9	6.3
2	8.4	12	19	55	9.1	205	14	24	8.0	5.3	5.8	6.4
3	7.8	10	16	25	9.4	65	15	20	14	7.0	5.5	6.6
4	7.7	8.2	16	21	8.1	31	56	18	49	7.2	5.0	7.4
5	14	8.6	14	21	9.1	24	50	16	18	5.4	5.0	8.0
6	12	8.8	13	23	10	21	24	15	9.2	16	4.2	8.0
7	7.8	7.4	12	20	10	20	21	14	7.7	5.1	4.9	6.5
8	9.6	124	11	130	10	19	19	13	5.6	5.3	4.4	5.9
9	10	102	12	60	10	19	19	13	5.0	5.3	5.1	7.5
10	9.8	29	12	29	10	19	16	13	4.9	5.3	12	5.0
11	27	20	14	23	10	22	14	12	7.0	10	8.9	5.9
12	75	25	16	22	11	20	100	13	6.4	6.3	9.0	6.6
13	22	41	17	21	11	19	52	19	6.1	5.2	8.5	6.1
14	15	58	17	23	91	19	24	11	5.0	5.1	7.8	4.8
15	13	27	16	22	38	19	168	9.6	7.1	6.7	7.8	4.7
16	11	30	15	20	24	37	197	13	6.5	5.8	8.0	4.8
17	24	100	15	19	17	55	63	15	6.3	6.0	8.6	4.7
18	51	33	15	e16	17	35	40	8.0	6.6	39	10	5.1
19	17	24	15	e16	15	24	27	7.0	6.3	15	12	6.6
20	18	18	14	13	16	29	22	8.6	8.3	6.4	15	7.3
21	15	16	14	11	19	25	21	11	6.6	5.1	21	8.5
22	12	19	15	13	16	20	19	11	8.8	4.9	8.5	7.2
23	11	121	63	12	11	20	19	9.2	6.5	55	4.8	6.4
24	10	141	26	16	7.6	20	19	8.0	5.5	18	5.9	7.3
25	10	51	23	15	6.5	18	19	7.8	5.0	5.2	7.1	4.4
26	8.3	30	82	13	27	15	18	6.9	5.2	5.0	5.0	4.5
27	10	24	31	13	21	14	87	7.4	5.2	5.1	7.0	4.5
28	90	20	22	15	21	13	53	7.0	29	7.5	5.8	4.4
29	44	18	19	11	---	12	25	8.0	6.7	38	6.7	4.6
30	20	17	18	5.0	---	10	21	6.3	5.4	19	6.4	4.5
31	16	---	17	6.3	---	11	---	5.5	---	8.0	4.6	---
Total	616.1	1,154.0	627	775.3	473.1	900	1,253	370.3	277.8	343.2	237.2	180.5
Mean	19.9	38.5	20.2	25.0	16.9	29.0	41.8	11.9	9.26	11.1	7.65	6.02
Max	90	141	82	130	91	205	197	24	49	55	21	8.5
Min	7.7	7.4	11	5.0	6.5	10	11	5.5	4.9	4.9	4.2	4.4

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 2007, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	11.5	13.9	17.7	18.4	16.7	22.3	20.6	15.8	10.2	9.49	10.4	9.47
Max	61.6	38.5	61.6	41.1	42.4	56.3	48.3	50.9	37.0	30.1	29.2	32.0
(WY)	(2006)	(2007)	(1970)	(1978)	(1998)	(1993)	(1983)	(1998)	(2003)	(1984)	(1992)	(2006)
Min	2.81	1.73	4.07	3.57	3.56	6.53	6.39	3.51	2.13	2.39	3.11	1.28
(WY)	(1982)	(1982)	(1999)	(1981)	(2002)	(1986)	(1985)	(1986)	(1986)	(2002)	(1995)	(1988)

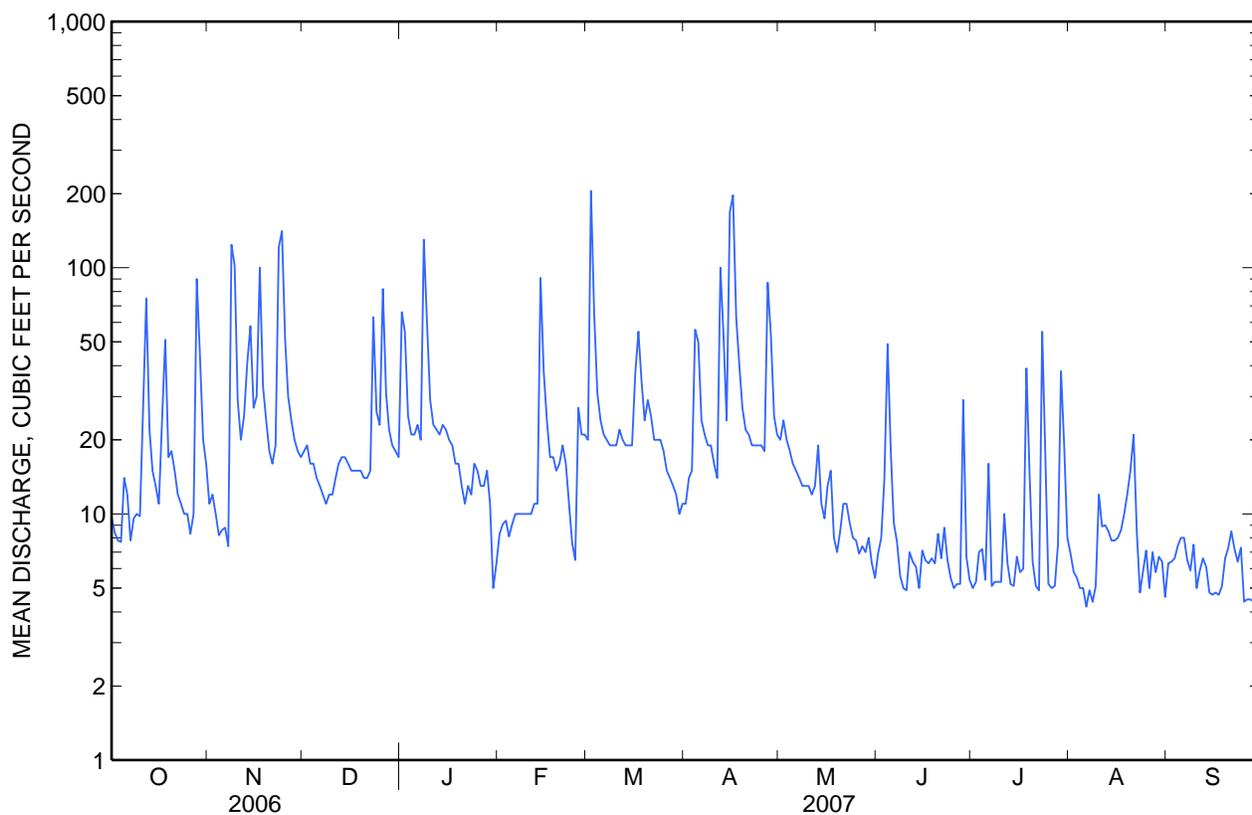
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SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 1967 - 2007	
Annual total	7,960.4		7,207.5			
Annual mean	21.8		19.7		14.7	
Highest annual mean					24.9	1984
Lowest annual mean					6.27	2002
Highest daily mean	234	Sep 2	205	Mar 2	^a 1,100	Dec 26, 1969
Lowest daily mean	4.7	Aug 22	4.2	Aug 6	0.00	Sep 20, 1981
Annual seven-day minimum	5.0	Aug 17	4.9	Aug 3	0.70	Sep 26, 1988
Maximum peak flow			357	Apr 15	2,340	Dec 26, 1969
Maximum peak stage			5.07	Apr 15	7.94	Dec 26, 1969
Instantaneous low flow			0.31	Apr 10, Jun 15	^b 0.00	Many days
10 percent exceeds	41		38		28	
50 percent exceeds	15		13		8.2	
90 percent exceeds	7.1		5.2		2.7	

^a Estimated.

^b First occurrence of 0.00 ft³/s on Aug 20, 1978.



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WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1965-66, 1968-91, 2007.

REMARKS.--Cooperative Network Site Descriptor: Perchlorate Assessment special study site.

COOPERATION.--Physical measurements and samples for laboratory analyses were provided by personnel of the NJ Department of Environmental Protection. Determination of perchlorate was performed by TestAmerica Laboratories, Inc.

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

[Remark codes: E, estimated.]

Date	Time	Instan- taneous dis- charge, cfs (00061)	Turbdty white light, det ang 90+/-30 corrctd NTRU (63676)	Baro- metric pres- sure, mm Hg (00025)	Dis- solved oxygen, mg/L (00300)	Dis- solved oxygen, percent of sat- uration (00301)	pH, water, unfltrd field, std units (00400)	Specif- ic conduc- tance, wat unf µS/cm 25 degC (00095)	Temper- ature, air, deg C (00020)	Temper- ature, water, deg C (00010)	Per- chlor- ate, water, unfltrd µg/L (61209)
Jul											
24...	1100	18	25	766	7.9	83	6.7	203	22.3	17.2	E.0710