01445500 PEQUEST RIVER AT PEQUEST, NJ

DELAWARE RIVER BASIN

LOCATION.--Lat 40°49′50″, long 74°58′40″ referenced to North American Datum of 1983, White Township, Warren County, NJ, Hydrologic Unit 02040105, on right bank at Pequest, 100 ft upstream from abandoned railroad bridge, and 300 ft downstream from Furnace Brook.

DRAINAGE AREA.--106 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1921 to current year. Monthly discharge only for October 1921, published in WSP 1302.

REVISED RECORDS.--WSP 1902: 1940(M), 1945, 1955(M), 1957, 1959(M).

GAGE.--Water-stage recorder. Concrete control since Sept. 29, 1929. Datum of gage is 398.78 ft above NGVD of 1929. Prior to June 22, 1926, nonrecording gage at site 10 ft upstream at same datum.

REMARKS.--Records good, except for estimated daily discharges, which are fair. Between 1958 and 1960 approximately ten miles of the Pequest River from Long Bridge to below Vienna was dredged and realigned by the U.S. Soil Conservation Service (now called Natural Resources Conservation Service). This work may have affected peak discharges at this gage. Several measurements of water temperature were made during the year. Some regulation from unknown sources upstream. Satellite gage-height telemetry at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 650 ft^3/s and (or) maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct 09	0630	*1,280	*4.64
Oct 12	1800	1,230	4.53
Oct 26	0015	738	3.41
Dec 16	1700	730	3.39
Jan 03	0930	665	3.23
Jan 18	2015	1,010	4.06
Jun 28	1600	995	4.02

01445500 PEQUEST RIVER AT PEQUEST, NJ—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	24	282	380	279	340	156	101	142	95	362	79	105
2	24	259	320	275	314	157	101	136	116	274	73	130
3	24	240	272	601	444	158	98	130	228	231	70	258
4	23	221	253	557	469	153	123	123	247	207	71	173
5	23	207	e240	486	498	151	128	117	199	272	68	131
6	23	200	229	427	408	152	126	112	158	283	64	120
7	24	203	214	377	354	150	115	105	166	227	61	107
8	537	195	198	343	323	147	148	102	281	185	61	94
9	1,240	182	195	321	300	146	202	98	230	162	58	85
10	1,020	191	199	306	280	153	164	96	183	186	55	80
11	689	187	195	301	265	156	141	94	156	153	54	75
12	1,030	171	189	380	266	155	130	215	144	150	54	71
13	1,110	160	177	340	266	159	125	207	134	227	52	69
14	1,070	154	148	436	257	161	120	167	123	170	50	79
15	1,130	148	155	508	253	154	127	148	126	143	54	243
16	967	164	498	401	260	141	122	234	115	132	56	203
17	719	317	521	373	316	133	115	293	104	120	52	161
18	534	270	379	685	282	126	111	242	98	110	49	130
19	416	219	308	e900	235	121	105	189	92	107	49	110
20	340	193	267	e745	212	118	100	181	94	100	49	99
21	294	182	240	618	203	114	94	168	95	96	48	91
22	276	256	222	526	196	113	104	152	89	105	49	83
23	438	271	215	564	195	110	305	138	87	119	45	79
24	372	239	215	588	196	110	370	128	106	100	45	77
25	535	209	221	523	187	111	286	122	124	92	45	74
26	663	186	377	445	179	115	223	117	190	89	64	72
27	538	179	331	382	165	111	189	124	301	89	75	69
28	459	178	283	350	160	107	166	121	724	131	133	66
29	388	176	288	342	---	103	160	116	693	124	133	76
30	343	503	341	375	---	101	156	103	527	100	170	74
31	311	---	308	358	---	103	---	96	---	87	130	---
Total	15,584	6,542	8,378	14,112	7,823	4,145	4,555	4,516	6,025	4,933	2,116	3,284
Mean	503	218	270	455	279	134	152	146	201	159	68.3	109
Max	1,240	503	521	900	498	161	370	293	724	362	170	258
Min	23	148	148	275	160	101	94	94	87	87	45	66
Cfsm	4.74	2.06	2.55	4.29	2.64	1.26	1.43	1.37	1.89	1.50	0.64	1.03
In.	5.47	2.30	2.94	4.95	2.75	1.45	1.60	1.58	2.11	1.73	0.74	1.15

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 2006, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	95.1	131	171	177	197	275	263	185	132	103	90.2	90.7
Max	503	409	714	627	372	750	720	430	556	487	409	354
(WY)	(2006)	(1928)	(1997)	(1979)	(1939)	(1936)	(1983)	(1989)	(1972)	(1945)	(1928)	(1989)
Min	18.0	21.4	27.0	33.9	42.9	52.1	76.9	55.7	35.0	19.0	15.1	16.6
(WY)	(1965)	(1966)	(1966)	(1966)	(2002)	(2002)	(1985)	(1965)	(1965)	(1965)	(1965)	(1964)

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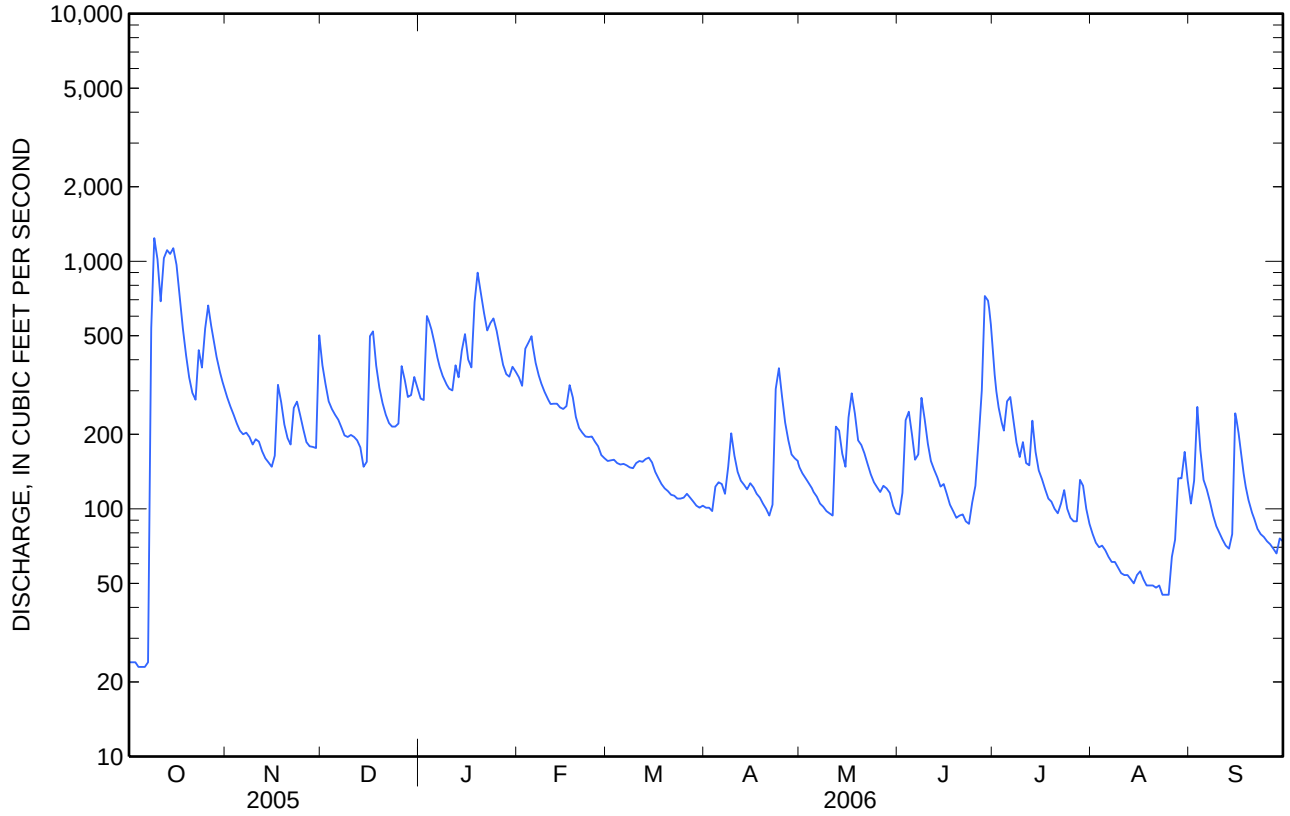
SUMMARY STATISTICS

	Calendar Year 2005		Water Year 2006		Water Years 1922 - 2006	
Annual total	83,418		82,013			
Annual mean	229		225		159	
Highest annual mean					285	1952
Lowest annual mean					45.8	1965
Highest daily mean	1,490	Apr 3	1,240	Oct 9	2,040	Jan 25, 1979
Lowest daily mean	23	Oct 4	23	Oct 4 - 6	12	Aug 18, 1965
Annual seven-day minimum	24	Oct 1	24	Oct 1	13	Aug 15, 1965
Maximum peak flow			1,280	Oct 9	2,130	Jan 25, 1979
Maximum peak stage			4.64	Oct 9	[a]5.97	Jan 25, 1979
Instantaneous low flow			22	Oct 6, 7	12	Sep 17, 1965
Annual runoff (cfsm)	2.16		2.12		1.50	
Annual runoff (inches)	29.27		28.78		20.36	
10 percent exceeds	479		444		333	
50 percent exceeds	186		164		113	
90 percent exceeds	32		73		36	

[a] From high-water mark.



WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1923-25, 1958-80, 1991-97, 2005 to current year.

REMARKS.--
COOPERATIVE NETWORK SITE DESCRIPTOR: Trace Element Assessment (303d) special study site.

COOPERATION.--Physical measurements and samples for laboratory analyses were provided by personnel of the New Jersey Department of Environmental Protection.

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Part 1 of 3

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

Date	Time	Sample type	Turbdty white light, det ang 90+/-30 corrctd NTRU (63676)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)
May												
18...	*0830*	*Field Blank*	--	--	--	--	--	--	--	--	--	*<.02*
18...	0845	Environmental	10	740	9.0	91	8.2	435	17.5	14.5	180	43.2

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Part 2 of 3

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

Date	Magnesium, water, fltrd, mg/L (00925)	Arsenic water, fltrd, ug/L (01000)	Arsenic water unfltrd ug/L (01002)	Cadmium water, fltrd, ug/L (01025)	Cadmium water, unfltrd ug/L (01027)	Chromium, water, fltrd, ug/L (01030)	Chromium, water, unfltrd recoverable, ug/L (01034)	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recoverable, ug/L (01042)	Lead, water, fltrd, ug/L (01049)	Lead, water, unfltrd recoverable, ug/L (01051)	Mercury water, fltrd, ug/L (71890)	Mercury water, unfltrd recoverable, ug/L (71900)
May													
18...	*<.008*	*<.12*	--	*<.04*	--	*E.03*	--	*<.4*	--	*<.08*	--	*<.010*	--
18...	18.6	.82	1.1	<.04	E.02	.19	.55	1.4	2.7	E.08	.76	<.010	<.010

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006
Part 3 of 3
[Remark codes: <, less than; E, estimated.]

Date	Nickel, water, fltrd, ug/L (01065)	Nickel, water, unfltrd recover -able, ug/L (01067)	Selen- ium, water, fltrd, ug/L (01145)	Selen- ium, water, unfltrd ug/L (01147)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recover -able, ug/L (01092)
May						
18...	*<.06*	--	*<.08*	--	*<.6*	--
18...	0.68	.84	.15	.17	.9	3