01391000 HOHOKUS BROOK AT HO-HO-KUS, NJ

PASSAIC RIVER BASIN

LOCATION.--Lat 40°59′52″, long 74°06′43″ referenced to North American Datum of 1983, Ho-Ho-Kus Borough, Bergen County, NJ, Hydrologic Unit 02030103, on left bank 500 ft upstream from bridge on Maple Avenue in Ho-Ho-Kus, and 3.5 mi upstream from mouth.

DRAINAGE AREA.--16.4 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Continuous-record gaging station, water years 1954-73, 1977-96, and 2006 to current year. Annual maximum, water years 1997 to 2005.

REVISED RECORDS.--WDR NJ-77-1: 1955(M), 1968(M), 1976(M). WDR NJ-95-1: 1984-94(P).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 120.09 ft above NGVD of 1929.

REMARKS.--Records fair. Some regulation and diurnal fluctuation at low and medium flows caused by unknown sources, possibly sewage treatment plant upstream of gage. Several measurements of water temperature were made during the year. Satellite stage telemetry at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 450 ft^3/s and (or) maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct 27	1100	1,260	3.30
Dec 23	2345	1,310	3.34
Feb 1	2145	568	2.77
Feb 13	1500	1,220	3.27
Mar 8	1615	929	3.05
Aug 6	0815	1,040	3.13
Sep 6	2200	*2,050	*3.98

01391000 HOHOKUS BROOK AT HO-HO-KUS, NJ—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	15	26	26	80	137	64	63	58	28	22	18	18
2	15	25	26	64	166	58	94	54	27	21	36	18
3	15	24	47	47	59	54	56	53	26	20	30	18
4	15	23	34	42	46	99	80	51	41	20	21	19
5	15	23	28	41	48	216	72	50	32	57	20	20
6	14	32	26	44	56	122	54	50	28	25	244	519
7	14	26	25	42	55	104	50	48	27	23	47	331
8	14	23	25	41	49	413	46	46	29	22	28	50
9	23	22	26	40	43	223	44	90	28	26	23	83
10	44	29	38	37	42	111	43	128	26	24	21	54
11	78	25	29	66	41	94	42	63	27	22	31	37
12	107	23	28	52	39	89	72	52	24	19	23	46
13	30	28	30	41	559	79	67	47	23	19	20	50
14	21	25	33	59	153	74	55	40	35	32	19	37
15	19	46	29	46	81	73	50	38	64	23	58	32
16	19	38	33	39	67	72	46	87	54	20	33	29
17	18	27	32	37	64	63	44	128	50	19	22	28
18	18	25	26	63	179	60	44	68	33	18	20	27
19	22	25	25	49	98	122	44	58	34	18	18	26
20	62	28	27	41	67	147	42	51	27	18	18	25
21	24	28	28	36	58	82	41	62	30	18	19	24
22	20	26	27	35	59	68	39	47	48	18	19	24
23	18	24	257	35	58	61	38	39	40	35	18	24
24	17	23	272	34	54	57	38	36	28	99	19	23
25	19	22	65	32	53	54	37	34	24	33	19	21
26	21	64	63	32	72	53	37	34	24	21	18	133
27	394	66	112	32	91	52	37	35	24	47	18	49
28	70	35	61	31	62	55	73	42	24	40	18	62
29	36	29	130	31	52	51	139	32	23	24	18	59
30	30	28	68	39	---	45	74	29	23	20	18	37
31	27	---	92	34	---	49	---	28	---	19	17	---
Total	1,254	888	1,768	1,342	2,608	2,964	1,661	1,678	951	842	951	1,923
Mean	40.5	29.6	57.0	43.3	89.9	95.6	55.4	54.1	31.7	27.2	30.7	64.1
Max	394	66	272	80	559	413	139	128	64	99	244	519
Min	14	22	25	31	39	45	37	28	23	18	17	18
Cfsm	2.47	1.80	3.48	2.64	5.48	5.83	3.38	3.30	1.93	1.66	1.87	3.91
In.	2.84	2.01	4.01	3.04	5.92	6.72	3.77	3.81	2.16	1.91	2.16	4.36

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	29.0	37.0	36.7	37.0	41.9	52.3	55.2	40.9	31.1	25.9	25.4	24.4
Max	136	102	91.7	85.9	90.0	95.6	152	108	101	85.5	84.9	96.5
(WY)	(2006)	(1978)	(1984)	(1996)	(1973)	(2008)	(2007)	(1989)	(1972)	(1984)	(1955)	(1971)
Min	6.21	7.10	12.3	9.07	15.3	20.8	19.4	13.9	7.58	3.91	5.17	5.78
(WY)	(1965)	(1965)	(1981)	(1981)	(1980)	(1981)	(1985)	(1955)	(1965)	(1966)	(1966)	(1964)

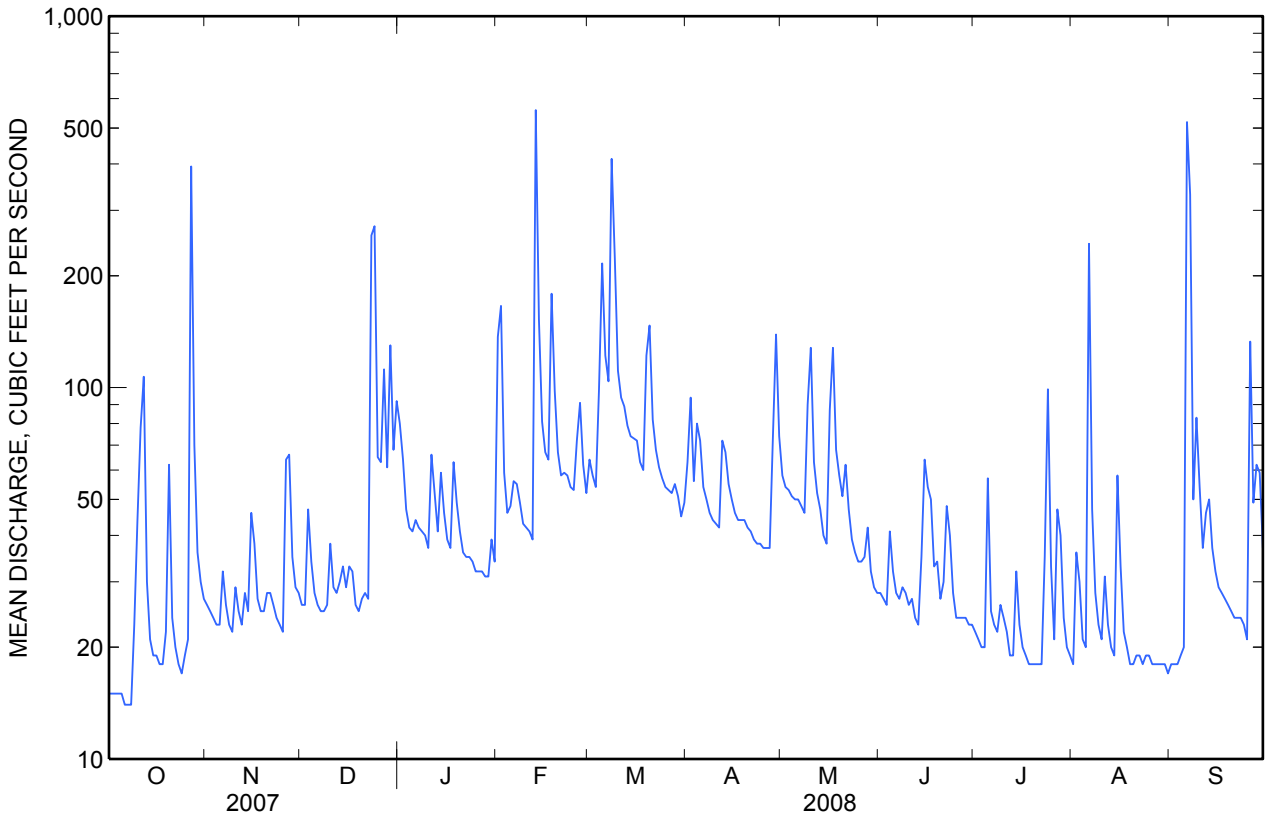
01391000 HOHOKUS BROOK AT HO-HO-KUS, NJ—Continued

SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 1955 - 2008	
Annual total	17,828		18,830			
Annual mean	48.8		51.4		[a]36.4	
Highest annual mean					[a]61.3	1984
Lowest annual mean					[a]16.1	1965
Highest daily mean	1,360	Apr 16	559	Feb 13	[a]1,360	Apr 16, 2007
Lowest daily mean	14	Oct 6	14	Oct 6-8	[a]2.5	Jul 13, 1966
Annual seven-day minimum	15	Oct 2	15	Oct 2	[a]2.8	Aug 2, 1966
Maximum peak flow			[b]2,050	Sep 6	[b]4,670	Sep 16, 1999
Maximum peak stage			3.98	Sep 6	7.32	Sep 16, 1999
Instantaneous low flow			9.1	Oct 7	[a]1.9	Aug 2, 1966
Annual runoff (cfsm)	2.98		3.14		[a]2.22	
Annual runoff (inches)	40.44		42.71		[a]30.12	
10 percent exceeds	72		84		[a]65	
50 percent exceeds	28		36		[a]25	
90 percent exceeds	18		19		[a]11	

[a] Monthly and annual statistics based on water years 1954-73, 1977-96, and 2006 to current year.

[b] From rating extended above 850 ft³/s on basis of flow-over-dam computation.



WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1959, 1962-63, 1979-80, 2001, 2007-08.

COOPERATION.--Physical measurements and samples for laboratory analysis were collected in cooperation with the NJ Department of Environmental Protection. Determinations of suspended residue were performed by the NJ Department of Health and Senior Services, Environmental and Chemical Laboratory.

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 1 of 3

[QC, quality control sample. Remark codes: E, estimated.]

Date	Time	Sample medium and type	Instantaneous discharge, ft3/s (00061)	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)	Specific conductance, wat unf µS/cm 25 degC (00095)
Oct									
09...	1020	Surface water, regular	17	.7	753	8.3	95	7.5	960
Feb									
19...	1230	Surface water, regular	101	6.0	749	12.6	104	7.6	852
Apr									
01...	1320	Surface water, regular	63	2.7	754	11.7	106	7.7	894
28...	1412	Surface water, regular	51	13	754	10.1	98	7.2	864
Jun									
25...	1330	Surface water, regular	27	2.8	760	8.2	94	7.6	921
Jul									
16...	1250	Surface water, regular	22	1.7	760	8.4	100	7.6	885
16...	*1251*	*QC - Surface water, replicate*	--	--	--	--	--	--	--
24...	1140	Surface water, regular	123	8.4	756	8.3	96	7.7	480
Aug									
05...	1345	Surface water, regular	21	1.5	756	8.4	101	7.8	856
21...	1040	Surface water, regular	20	1.7	763	8.6	97	7.8	898
Sep									
08...	0930	Surface water, regular	54	3.5	760	8.5	96	7.6	565
18...	1320	Surface water, regular	29	2.2	758	8.4	94	7.8	841

01391000 HOHOKUS BROOK AT HO-HO-KUS, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
Part 2 of 3
[QC, quality control sample. Remark codes: E, estimated.]

Date	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total non-filterable, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate + nitrite water fltrd, mg/L as N (00631)	Total nitrogen, water, unfltrd mg/L (00600)	Phosphorus, water, fltrd, mg/L as P (00666)	Phosphorus, water, unfltrd mg/L as P (00665)	Organic carbon, water, unfltrd mg/L (00680)
Oct													
09...	16.5	21.9	121	--	541	3	.79	E.018	11.6	12	2.66	2.73	7.0
Feb													
19...	--	6.8	75	196	457	6	.86	.081	3.29	4.1	.42	.47	6.6
Apr													
01...	22.0	11.0	110	186	515	6	.69	E.019	4.90	5.6	.67	.71	5.3
28...	13.0	14.0	121	168	527	20	1.8	.062	5.38	7.2	.76	1.05	10.8
Jun													
25...	27.0	22.2	123	161	530	3	1.0	.087	9.26	10	1.95	1.93	8.2
Jul													
16...	31.0	23.6	98	163	552	3	.71	.042	10.8	11	2.29	2.31	6.1
16...	--	--	*98*	*163*	*571*	*3*	*.70*	*.041*	*11.0*	*12*	*2.27*	*2.29*	*5.9*
24...	22.5	22.6	65	87.1	301	7	.70	.051	2.74	3.4	.49	.59	6.9
Aug													
05...	--	23.9	103	160	505	2	.79	.023	10.0	11	2.18	2.25	5.5
21...	27.0	21.5	120	161	531	4	.70	.036	10.7	11	2.05	2.06	5.8
Sep													
08...	22.0	21.0	81	99.9	328	2	.78	.037	2.99	3.8	.59	.60	7.0
18...	20.5	20.5	101	151	502	2	.83	.033	10.6	11	1.57	1.58	4.8

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
Part 3 of 3
[QC, quality control sample. Remark codes: E, estimated.]

Date	Chloro-phyll a phyto-plank-ton, fluoro, µg/L (70953)	Pheo-phytin a, phyto-plank-ton, µg/L (62360)	Boron, water, unfltrd recover -able, µg/L (01022)	Iron, water, unfltrd recover -able, µg/L (01045)
Oct				
09...	.6	.9	223	92
Feb				
19...	4.5	1.9	60	262
Apr				
01...	14.9	8.9	92	196
28...	30.7	26.2	118	570
Jun				
25...	.8	1.6	163	170
Jul				
16...	.9	1.4	190	117
16...	*.9*	*1.4*	*192*	*115*
24...	8.5	6.3	63	338
Aug				
05...	1.3	1.6	190	115
21...	1.3	1.5	185	102
Sep				
08...	4.8	2.8	91	175
18...	1.4	1.0	144	111

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
[Remark codes: <, less than.]

Date	Time	Phos-phorus, bed sedimnt total, mg/kg as P (00668)	Total carbon, bed sed <2 mm, wsv nat field g/kg (49272)	Inorg. carbon, bed sed <2 mm, wsv nat field g/kg (49270)	Organic carbon, bed sed <2 mm, wsv nat field g/kg (49271)
Sep					
23...	1050	340	4.7	.3	4.4
25...	1100	210	2.2	<.2	2.0