



Water-Data Report 2006

01382000 PASSAIC RIVER AT TWO BRIDGES, NJ

PASSAIC RIVER BASIN

LOCATION.--Lat 40°53'50", long 74°16'22" referenced to North American Datum of 1983, Fairfield Township, Essex County, NJ, Hydrologic Unit 02030103, at bridge on Two Bridges Road in Two Bridges, and 50 ft upstream from Pompton River.

DRAINAGE AREA.--361 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Miscellaneous and occasional low-flow measurements, water years 1963-68 and 1983 to current year.

GAGE.--Reference point only.

REMARKS.--Flow regulated by Boonton Reservoir (see 01380900) and includes some sewage effluent.

**DISCHARGE MEASUREMENTS
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006**

Date	Discharge, in ft³/s
Dec 8, 2005	977
Feb 6, 2006	1,140
May 9, 2006	187
Jun 22, 2006	190
Jul 28, 2006	298
Aug 23, 2006	113

01382000 PASSAIC RIVER AT TWO BRIDGES, NJ—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1962 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: June 1969 to September 1974.

pH: June 1969 to September 1974.

WATER TEMPERATURE: October 1962 to May 1969 (once daily), June 1969 to September 1974.

DISSOLVED OXYGEN: June 1969 to September 1974.

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). Bacteria samples were collected synoptically over a 30-day period during the summer.

COOPERATIVE NETWORK SITE DESCRIPTOR: Watershed Integrator and Low-Level Mercury Assessment special study site, New Jersey Department of Environmental Protection (NJDEP) Watershed Management Area 6. The sample on Oct. 31 was for the low-level mercury assessment.

COOPERATION.--Physical measurements and samples for laboratory analyses on Oct. 31 were provided by personnel of the NJDEP. Bacteria samples were provided by the local county health department under the direction of the NJDEP through the County Environmental Health Act. Determinations of filtered ammonia, filtered orthophosphorus, BOD, total suspended residue, fecal coliform, E. coli, and enterococcus bacteria were performed by the NJ Department of Health and Senior Services. Analysis of the split and concurrent replicate samples was performed by the Laboratory Branch of the U.S. EPA, Region II, Division of Environmental Science and Assessment.

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Part 1 of 4

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

Date	Time	Sample type	Instantaneous discharge, cfs (00061)	Turbidity white light, det ang 90+/-30 corrctd NTRU (63676)	UV absorbance, 254 nm, wat flt units /cm (50624)	UV absorbance, 280 nm, wat flt units /cm (61726)	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 25 degC uS/cm (00095)	Temperature, air, deg C (00020)
Oct												
31...	0945	Field Blank	--	--	--	--	--	--	--	--	--	--
31...	1000	Environmental	--	2.9	--	--	762	9.4	82	7.5	338	10.5
Dec												
08...	1140	Environmental	977	3.8	.262	.204	775	10.7	76	7.0	437	--
Feb												
06...	1100	Environmental	1140	4.3	.135	.103	751	11.2	89	7.1	451	5.0
May												
09...	1030	Environmental	187	8.1	.153	.115	760	5.9	62	7.2	665	20.0
09...	1030	Split Replicate	--	--	--	--	--	--	--	--	--	--
09...	1031	Concurrent Replicate	--	--	--	--	--	--	--	--	--	--
Aug												
23...	0920	Environmental	113	5.3	.129	.098	756	6.1	74	7.3	789	24.5

01382000 PASSAIC RIVER AT TWO BRIDGES, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Part 2 of 4

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

Date	Temperature, water, deg C (00010)	Hard- ness, water, mg/L as CaCO3 (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 end pt, lab, mg/L as CaCO3 (90410)	Chlor- ide, water, fltrd, mg/L (00940)	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)
Oct 31...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	9.4	--	--	--	--	--	--	--	--	--	--	--	--
Dec 08...	1.9	89	23.3	7.54	2.64	41.1	48	83.2	E.08	12.6	19.5	224	255
Feb 06...	5.0	78	19.9	6.77	1.93	50.8	43	96.7	E.08	7.8	16.1	230	237
May 09...	17.2	160	39.4	14.1	4.51	62.4	86	126	.14	11.7	28.8	352	375
09...	--	150	38.0	13.0	5.50	64.0	85	130	<.05	--	31.0	346	410
09...	--	150	37.0	13.0	5.50	64.0	85	130	<.05	--	31.0	345	410
Aug 23...	24.7	170	43.1	16.2	7.29	71.5	99	142	.12	11.9	37.2	412	455

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Part 3 of 4

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

Date	Residue total at 105 deg. C, sus- pended, mg/L (00530)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Partic- ulate nitro- gen, susp, water, mg/L (49570)	Total nitro- gen, water, fltrd, mg/L (00602)	Total nitro- gen, water, unfltrd mg/L (00600)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Ortho- phos- phate, water, unfltrd mg/L as P (70507)	Phos- phorus, water, fltrd, mg/L (00666)
Oct 31...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
Dec 08...	3	.52	--	.035	--	1.15	--	.05	1.7	1.7	.129	--	.13
Feb 06...	2	.29	--	.026	--	.88	--	.06	1.2	1.2	.105	--	.09
May 09...	11	.82	--	.243	--	2.64	--	.08	3.5	3.5	.422	--	.45
09...	<10	E.71	E.95	.240	.250	2.60	.085	--	--	--	.430	.49	.400
09...	<10	E.77	E1.2	.240	.250	2.70	.082	--	--	--	.430	.50	.400
Aug 23...	5	.66	--	.093	--	4.62	--	.04	5.3	5.3	.784	--	.79

01382000 PASSAIC RIVER AT TWO BRIDGES, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Part 4 of 4

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

Date	Phos- phorus, water, unfltrd mg/L (00665)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inor- ganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	Boron, water, fltrd, ug/L (01020)	Mercury water fltrd, low level, ng/L (50287)
Oct								
31...	--	--	--	--	--	--	--	<.04
31...	--	--	--	--	--	--	--	1.41
Dec								
08...	.17	.6	<.1	.6	6.3	E1.6	58	--
Feb								
06...	.14	.6	<.1	.6	3.5	E1.6	36	--
May								
09...	.57	.6	<.1	.6	4.3	E1.4	106	--
09...	.500	--	--	--	5.4	--	120	--
09...	.510	--	--	--	5.8	--	120	--
Aug								
23...	.86	.3	<.1	.3	4.2	<1.1	161	--

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

[Remark codes: <, less than.]

Date	Time	Temper- ature, water, deg C (00010)	Enter- cocci, m-E MF, water, col/ 100 mL (31649)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli- form, ECbroth water, MPN/ 100 mL (31615)
Jun					
28...	0955	--	5,000	1,700	2,400
Jul					
12...	0948	25.1	10	<10	40
19...	0950	28.3	40	<10	130
26...	0943	24.0	10	200	260
Aug					
02...	0949	29.8	<10	20	70