



Water-Data Report 2007

01409500 BATSTO RIVER AT BATSTO, NJ

MULLICA RIVER BASIN

LOCATION.--Lat 39°38'30", long 74°39'01" referenced to North American Datum of 1983, Washington Township, Burlington County, NJ, Hydrologic Unit 02040301, on right bank 30 ft downstream from bridge on County Highway 542 at Batsto, 0.6 mi east of Pleasant Mills, and 1.0 mi upstream from mouth.

DRAINAGE AREA.--67.8 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Continuous-record gaging station, water years 1927-2005. Monthly discharge only for April to September 1939, published in WSP 1302. Miscellaneous measurements, water year 2007.

REVISED RECORDS.--WSP 1432: 1930, 1933, 1936, 1938. WDR NJ-83-1: Drainage area. WDR NJ-87-1: 1939(M). WDR NJ-94-1: 1993(M).

GAGE.--Staff gage.

REMARKS.--Considerable regulation at times by sluice gates prior to December 1954 and by automatic Bascule and sluice gates since July 1959 at Batsto Lake, 300 ft upstream; the capacity of Batsto Lake is about 60,000,000 gal. The channel was straightened for approximately 800 ft downstream of gage in 1939.

**DISCHARGE MEASUREMENTS
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Date	Discharge, in ft³/s
Nov 27, 2006	290
Feb 20, 2007	113
May 9, 2007	102
Sep 4, 2007	52.7

01409500 BATSTO RIVER AT BATSTO, NJ—Continued**WATER-QUALITY RECORDS**

PERIOD OF RECORD.--Water years 1925, 1956, 1962-63, 1976 to September 2007 (discontinued).

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, New Jersey Department of Environmental Protection Watershed Management Area 14. The sample on Sep 27 was for the trace element assessment.

COOPERATION.--Physical measurements and samples for laboratory analysis were collected in cooperation with 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. Physical measurements and samples for laboratory analysis on Sep 27 were provided by personnel of the NJ Department of Environmental Protection.

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 1 of 4

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

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity white light, 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 (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)
Nov													
27...	1300	290	1.4	.534	.412	768	10.8	88	4.5	59	17.5	7.0	10
Feb													
20...	0900	112	1.9	.133	.100	757	13.1	95	5.1	71	8.5	1.9	12
May													
09...	1120	102	2.8	.382	.299	763	9.2	94	5.1	50	24.0	16.6	10
Sep													
04...	1100	53	2.0	.136	.109	762	9.1	102	5.7	36	--	21.3	7
27...	0930	--	1.6	--	--	761	8.6	94	5.7	24	25.5	19.9	--

01409500 BATSTO RIVER AT BATSTO, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 2 of 4

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

Date	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 on evap. at 180degC wat flt mg/L (70300)	Residue total non- filter- able, mg/L (00530)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)
Nov 27...	2.00	1.12	1.16	4.01	<5	7.60	<.10	5.1	6.37	43	3	.33	.026
Feb 20...	2.62	1.42	1.19	6.05	<5	10.7	<.10	5.3	7.39	40	1	.22	.034
May 09...	2.06	1.08	.96	4.72	<5	7.81	<.10	2.0	4.96	47	3	.29	.014
Sep 04...	1.38	.748	.73	3.04	E1.4	5.37	<.10	4.7	3.85	25	1	E.07	.026
27...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 3 of 4

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

Date	Nitrate + nitrite water fltrd, mg/L as N (00631)	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)	Phos- phorus, water, fltrd, mg/L (00666)	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)	Boron, water, fltrd, µg/L (01020)	Mercury water, fltrd, µg/L (71890)
Nov 27...	.23	.03	.55	.59	E.005	E.005	.011	.4	<.1	.4	10.4	12	--
Feb 20...	.56	.04	.78	.82	--	<.008	E.008	.5	<.1	.5	3.1	9.2	--
May 09...	.07	.07	.36	.43	E.003	E.007	.012	1.3	<.1	1.3	6.4	11	--
Sep 04...	.09	.04	--	--	<.010	<.008	E.006	.6	<.1	.6	2.3	9.0	--
27...	--	--	--	--	--	--	--	--	--	--	--	--	<.010

01409500 BATSTO RIVER AT BATSTO, NJ—Continued

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

Part 4 of 4

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

Date	Mercury water, unfltrd recover -able, µg/L (71900)
Nov	
27...	--
Feb	
20...	--
May	
09...	--
Sep	
04...	--
27...	<.010