



Water-Data Report 2009

**01409387 MULLICA RIVER AT OUTLET OF ATSION LAKE, AT ATSION, NJ**

MULLICA RIVER BASIN

LOCATION.--Lat 39°44'25", long 74°43'36" referenced to North American Datum of 1983, Shamong Township, Burlington County, NJ, Hydrologic Unit 02040301, at bridge on U.S. Route 206 in Atsion, at outlet of Atsion Lake, and 0.2 mi upstream from Wesickaman Creek.

DRAINAGE AREA.--26.7 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--Miscellaneous measurements, water years 1980 to current year.

GAGE.--Staff gage.

REMARKS.--Occasional regulation by Atsion Lake and small ponds upstream.

**DISCHARGE MEASUREMENTS  
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

<b>Date</b>	<b>Discharge, in ft<sup>3</sup>/s</b>
Dec 1, 2008	30.8
Feb 24, 2009	31.8
May 6, 2009	59.8
Aug 4, 2009	51.5

01409387 MULLICA RIVER AT OUTLET OF ATSION LAKE, AT ATSION, NJ—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1975 to current year.

REMARKS.--Cooperative Network Site Descriptor: Undeveloped Land Use Indicator, NJ Department of Environmental Protection Watershed Management Area 13.

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.

WATER-QUALITY DATA  
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 1 of 3

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

Date	Time	Baro- metric pres- sure, mm Hg (00025)	Temper- ature, air, deg C (00020)	UV absorb- ance, 254 nm, wat flt units /cm (50624)	UV absorb- ance, 280 nm, wat flt units /cm (61726)	Instan- taneous dis- charge, ft <sup>3</sup> /s (00061)	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, water, deg C (00010)	Turbdty white light, det ang 90+/-30 corrctd NTRU (63676)	Dis- solved solids dried @ 180degC wat flt mg/L (70300)
Dec 01...	1050	758	13.5	.192	.144	31	11.4	95	3.8	63	7.3	2.7	43
Feb 24...	1215	770	8.0	.188	.141	32	14.6	100	4.6	59	.1	3.1	32
May 06...	1030	764	15.0	.436	.332	60	9.4	92	4.4	56	14.7	2.5	33
Aug 04...	1120	762	27.0	1.09	.869	51	6.7	79	4.5	46	23.9	13	43

WATER-QUALITY DATA  
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 2 of 3

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

Date	Hard- ness, water, mg/L as CaCO3 (00900)	Sus- pended solids, water, unfltrd mg/L (00530)	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)	Total carbon, suspnd sedimnt total, mg/L (00694)	Chlor- ide, water, fltrd, mg/L (00940)	Fluor- ide, water, fltrd, mg/L (00950)	Inor- ganic carbon, suspnd sedimnt total, mg/L (00688)	Silica, water, fltrd, mg/L as SiO2 (00955)	Sulfate water, fltrd, mg/L (00945)
Dec 01...	9	3	1.88	.941	.96	4.78	<1.7	.5	8.10	<.08	<.04	5.4	9.71
Feb 24...	8	5	1.66	.865	.89	4.90	<1.7	.8	7.39	<.08	<.04	4.4	7.30
May 06...	6	<1	1.31	.672	.79	4.51	<1.7	1.6	7.78	<.08	<.04	2.6	5.84
Aug 04...	5	7	1.18	.617	.71	3.87	<1.7	5.1	6.99	<.08	<.04	5.4	3.56

## 01409387 MULLICA RIVER AT OUTLET OF ATSION LAKE, AT ATSION, NJ—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Part 3 of 3

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

Date	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate + nitrite water, fltrd, mg/L as N (00631)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Partic- ulate nitro- gen, susp, water, mg/L (49570)	Phos- phorus, water, fltrd, mg/L as P (00666)	Phos- phorus, water, unfltrd mg/L as P (00665)	Total nitro- gen, water, fltrd, mg/L (00602)	Total nitro- gen, water, unfltrd mg/L (00600)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)
<b>Dec</b> <b>01...</b>	.17	.029	.14	<.010	E.01	<.008	.008	.32	E.33	.45	4.8
<b>Feb</b> <b>24...</b>	.19	.018	.23	E.003	.06	E.004	E.007	.42	.47	.77	4.4
<b>May</b> <b>06...</b>	.29	.020	.08	E.006	.11	E.007	E.008	.37	.48	1.60	8.5
<b>Aug</b> <b>04...</b>	.34	.080	.08	<.010	.24	<.008	.029	.42	.66	5.10	15.8