

Water-Data Report 2009

01409386 ATSION LAKE AT ATSION, NJ

NEW JERSEY COASTAL BASIN

LOCATION.--Lat 39°44'26", long 74°43'37" referenced to North American Datum of 1983, Shamong Township, Burlington County, NJ, Hydrologic Unit 02040301, 150 ft upstream from dam on Mullica River, at Atsion, 180 ft upstream of bridge on U.S. Route 206, 0.2 mi upstream from Wesickaman Creek, 8.4 mi northeast of Hammonton, and 9.0 mi south of Tabernacle.

DRAINAGE AREA.--26.7 mi².

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July to August 2009.

REMARKS.--Cooperative Network Site Descriptor: Development of Mercury-Bioaccumulation Factors special study site.

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

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009
 Part 1 of 2
 [Remark codes: <, less than.]

| Date | Time | Medium name | Sample type | Baro-metric pressure, mm Hg (00025) | Temper-ature, air, deg C (00020) | UV absorb-ance, 254 nm, wat flt units /cm (50624) | Dis-solved oxygen, mg/L (00300) | Dis-solved oxygen, percent of saturation (00301) |
|------------|------|----------------------------------|----------------------|-------------------------------------|----------------------------------|---|---------------------------------|--|
| Jul | | | | | | | | |
| 07... | 0900 | <i>QC sample - Artificial</i> | Field Blank | -- | -- | .001 | -- | -- |
| 07... | 0930 | Surface water | Replicate | 756 | 29.0 | .696 | -- | -- |
| 07... | 0931 | Surface water | Regular | 756 | -- | -- | 1.9 | 23 |
| 07... | 0932 | Surface water | Regular | 756 | -- | -- | 5.3 | 63 |
| 07... | 0933 | Surface water | Regular | 756 | -- | -- | 5.6 | 64 |
| 07... | 0935 | <i>QC sample - Surface water</i> | Sequential Replicate | -- | -- | .674 | -- | -- |
| Aug | | | | | | | | |
| 18... | 0830 | <i>QC sample - Artificial</i> | Field Blank | -- | -- | <.001 | -- | -- |
| 18... | 0915 | Surface water | Regular | 763 | 28.5 | .939 | -- | -- |
| 18... | 0916 | Surface water | Regular | 763 | -- | -- | 1.9 | 21 |
| 18... | 0917 | Surface water | Regular | 763 | -- | -- | 2.6 | 30 |
| 18... | 0918 | Surface water | Regular | 763 | -- | -- | 4.5 | 55 |

01409386 ATSION LAKE AT ATSION, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009
 Part 2 of 2
 [Remark codes: <, less than.]

| Date | pH, water, unfltrd field, std units (00400) | Specif- ic conduc- tance, wat unf μS/cm @ 25 degC (00095) | Temper- ature, water, corrctd deg C (00010) | Turbdty white light, det ang 90+/-30 NTRU (63676) | Depth of sensor below water surface feet (72147) | Sulfate water, filtrd, mg/L (00945) | Mercury water, unfltrd ng/L (50286) | Methyl- mercury water, filtrd, ng/L (50285) | Organic carbon, water, filtrd, mg/L (00681) |
|------------|---|--|--|---|---|---|---|--|--|
| Jul | | | | | | | | | |
| 07... | -- | -- | -- | -- | -- | <.18 | <.04 | <.04 | .3 |
| 07... | 4.6 | 51 | -- | 4.5 | -- | 3.55 | 7.33 | .64 | 14.4 |
| 07... | -- | -- | 22.1 | -- | 7.70 | -- | -- | -- | -- |
| 07... | -- | -- | 24.8 | -- | 4.10 | -- | -- | -- | -- |
| 07... | -- | -- | 25.2 | -- | .50 | -- | -- | -- | -- |
| 07... | -- | -- | -- | -- | -- | 3.77 | 7.54 | .58 | 14.2 |
| Aug | | | | | | | | | |
| 18... | -- | -- | -- | -- | -- | <.2 | .05 | <.04 | .5 |
| 18... | 4.4 | 55 | -- | 4.1 | -- | 3.1 | 10.6 | .86 | 19.0 |
| 18... | -- | -- | 22.6 | -- | 7.10 | -- | -- | -- | -- |
| 18... | -- | -- | 23.3 | -- | 3.50 | -- | -- | -- | -- |
| 18... | -- | -- | 25.1 | -- | 1.00 | -- | -- | -- | -- |