



Water-Data Report 2009

**01405340 MANALAPAN BROOK AT FEDERAL ROAD, NEAR MANALAPAN, NJ**

RARITAN RIVER BASIN

LOCATION.--Lat 40°17'46", long 74°23'52" referenced to North American Datum of 1983, Monroe Township, Middlesex County, NJ, Hydrologic Unit 02030105, at bridge on Federal Road, 2.6 mi north of Manalapan, 3.1 mi southwest of Matchaponix, 3.3 mi downstream from Still House Brook, and 4.1 mi northeast of Applegarth.

DRAINAGE AREA.--20.9 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--Miscellaneous measurements, water years 1969, 1971, 1979-80, 1986 to current year.

GAGE.--Staff gage.

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

<b>Date</b>	<b>Discharge, in ft<sup>3</sup>/s</b>
Nov 5, 2008	9.71
May 11, 2009	30.1
Aug 11, 2009	14.7

## 01405340 MANALAPAN BROOK AT FEDERAL ROAD, NEAR MANALAPAN, NJ—Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

REMARKS.--Cooperative Network Site Descriptor: Mixed Land Use Indicator, NJ Department of Environmental Protection Watershed Management Area 9.

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: &lt;, 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)
Nov 05...	1140	761	18.5	.073	.058	9.7	10.1	94	6.2	259	11.9	5.5	147
Feb 10...	1030	769	8.0	.041	.032	E25	13.8	99	6.1	288	1.6	8.7	146
May 11...	1100	763	17.0	.185	.148	30	9.6	95	6.4	213	14.8	12	133
Aug 11...	1100	757	31.0	.221	.179	15	7.9	92	6.5	246	23.3	14	142

## WATER-QUALITY DATA

## WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 2 of 3

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

Date	Dis- solved solids, sum of consti- tuents, mg/L (70301)	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)
Nov 05...	E139	46	3	11.2	4.46	4.27	26.7	10	.4	49.5	.14	<.04	10.8
Feb 10...	E147	44	11	10.6	4.22	2.84	30.2	E5	.8	57.6	.12	<.04	10.0
May 11...	E113	37	8	8.82	3.54	2.67	19.4	10	1.1	38.2	.12	<.04	9.8
Aug 11...	E131	43	6	10.5	4.09	3.17	25.3	16	.8	49.4	.18	E.1	8.8

## 01405340 MANALAPAN BROOK AT FEDERAL ROAD, NEAR MANALAPAN, NJ—Continued

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

Part 3 of 3

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

Date	Sulfate water, fltrd, mg/L (00945)	Ammonia	Ammonia	Nitrate	Ortho-	Partic-	Phos-	Phos-	Total	Total	Organic	Organic
		+ org-N, water, fltrd, mg/L as N (00623)	water, fltrd, mg/L as N (00608)	+ nitrite water, fltrd, mg/L as N (00631)	phos- phate, water, fltrd, mg/L as P (00671)	ulate nitro- gen, susp, water, mg/L (49570)	phorus, water, fltrd, mg/L as P (00666)	phorus, water, unfltrd mg/L as P (00665)	nitro- gen, water, fltrd, mg/L (00602)	nitro- gen, water, unfltrd mg/L (00600)	carbon, suspnd sedimnt total, mg/L (00689)	carbon, water, fltrd, mg/L (00681)
<b>Nov</b> 05...	23.1	.16	.028	.64	E.003	.05	<.008	.033	.80	.85	.45	2.2
<b>Feb</b> 10...	22.9	.25	.139	1.14	.012	.08	<.008	.043	1.4	1.5	.76	1.3
<b>May</b> 11...	20.7	.33	.097	.78	E.005	.09	.010	.090	1.1	1.2	1.08	3.5
<b>Aug</b> 11...	17.1	.27	.052	.66	E.009	.07	.021	.091	.93	1.0	.74	3.5