



Water-Data Report 2006

**01403385 BOUND BROOK AT ROUTE 28, AT MIDDLESEX, NJ**

RARITAN RIVER BASIN

LOCATION.--Lat 40°34'51", long 74°29'57" referenced to North American Datum of 1983, Middlesex Borough, Middlesex County, NJ, Hydrologic Unit 02030105, at bridge on State Route 28, 0.3 mi upstream from Green Brook, 0.9 mi northeast of Middlesex, and 2.4 mi west of the intersection of State Route 28 and Washington Avenue in Dunellen.

DRAINAGE AREA.--23.9 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--Miscellaneous measurements, water years 1998 to current year.

GAGE.--Staff gage.

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

<b>Date</b>	<b>Discharge, in ft<sup>3</sup>/s</b>
Nov 9, 2005	9.20
Feb 2, 2006	18.0
May 4, 2006	11.3
Aug 8, 2006	4.74

## 01403385 BOUND BROOK AT ROUTE 28, AT MIDDLESEX, NJ—Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1998 to current year.

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: Urban Land Use Indicator and Statewide Status, New Jersey Department of Environmental Protection (NJDEP) Watershed Management Area 9.

COOPERATION.--Samples were collected in cooperation with 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.

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006**

Part 1 of 5

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

Date	Time	Sample type	Instan- taneous dis- charge, cfs (00061)	Turbdy white light, det ang 90+/-30 corrctd NTRU (63676)	UV absorb- ance, 254 nm, wat flt units /cm (50624)	UV absorb- ance, 280 nm, wat flt units /cm (61726)	Baro- metric pres- sure, mm Hg (00025)	Dis- solved oxygen, mg/L (00300)	Dis- solved oxygen, percent of sat- uration (00301)	pH, water, unfltrd field, std units (00400)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Temper- ature, air, deg C (00020)
<b>Nov</b>												
09...	1300	Environmental	9.2	1.9	.149	.115	764	8.0	73	7.6	627	15.5
<b>Feb</b>												
02...	1032	Field Blank	--	--	--	--	--	--	--	--	--	--
02...	1110	Environmental	18	8.4	.116	.084	763	11.8	93	7.7	634	7.0
<b>May</b>												
04...	1010	Environmental	11	3.8	.139	.103	760	6.5	66	7.3	586	20.5
<b>Aug</b>												
08...	1030	Field Blank	--	--	--	--	--	--	--	--	--	--
08...	1140	Environmental	4.7	4.3	.154	.111	763	4.1	50	7.3	629	26.5

## 01403385 BOUND BROOK AT ROUTE 28, AT MIDDLESEX, NJ—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006**

Part 2 of 5

[Remark codes: &lt;, 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)
Nov 09...	11.5	240	70.4	15.2	3.01	32.9	124	71.6	.14	17.6	71.4	362	--
Feb 02...	--	--	--	--	--	--	--	--	--	--	--	--	--
02...	5.3	170	51.5	10.6	2.47	51.5	102	102	.12	11.6	43.9	342	363
May 04...	16.2	190	55.3	12.7	2.46	36.9	126	85.3	.14	9.4	34.9	316	333
Aug 08...	--	--	--	--	--	--	--	--	--	--	--	--	--
08...	25.2	230	68.7	13.9	3.14	33.2	146	68.4	E.09	16.3	61.9	355	385

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006**

Part 3 of 5

[Remark codes: &lt;, 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 water, fltrd, mg/L as N (00608)	Nitrite + nitrate 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)
Nov 09...	1	.52	.177	1.02	<.02	1.5	--	.021	.028	.049	.2	<.1	.2
Feb 02...	--	--	--	--	--	--	--	--	--	--	--	--	--
02...	2	.48	.152	1.37	.07	1.8	1.9	E.009	.011	.054	.7	<.1	.7
May 04...	1	.62	.161	.81	.05	1.4	1.5	.024	.032	.066	.4	<.1	.4
Aug 08...	--	--	--	--	--	--	--	--	--	--	--	--	--
08...	2	1.2	.583	.27	.14	1.5	1.6	.118	.165	.25	.8	<.1	.8

01403385 BOUND BROOK AT ROUTE 28, AT MIDDLESEX, NJ—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006**

Part 4 of 5

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

Date	Organic carbon, water, fltrd, mg/L (00681)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	Arsenic water, fltrd, ug/L (01000)	Arsenic water, unfltrd ug/L (01002)	Barium, water, unfltrd recover-able, ug/L (01007)	Beryllium, water, unfltrd recover-able, ug/L (01012)	Boron, water, fltrd, ug/L (01020)	Boron, water, unfltrd recover-able, ug/L (01022)	Cadmium water, unfltrd ug/L (01027)	Chromium, water, unfltrd recover-able, ug/L (01034)	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recover-able, ug/L (01042)	Iron, water, unfltrd recover-able, ug/L (01045)
Nov 09...	5.4	E1.1	--	--	--	--	183	--	--	--	--	--	--
Feb 02...	--	--	<.12	--	--	--	--	--	--	--	<.4	--	--
02...	3.5	E1.6	.60	.93	91.8	<.06	108	116	.25	.50	--	3.6	716
May 04...	4.1	E1.6	--	--	--	--	113	--	--	--	--	--	--
Aug 08...	--	--	<.12	--	--	--	--	--	--	--	<.40	--	--
08...	5.0	<1.0	2.5	3.4	138	<.06	192	189	E.03	.20	--	1.2	539

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006**

Part 5 of 5

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

Date	Lead, water, fltrd, ug/L (01049)	Lead, water, unfltrd recover-able, ug/L (01051)	Manganese, water, unfltrd recover-able, ug/L (01055)	Mercury water, fltrd, ug/L (71890)	Mercury water, unfltrd recover-able, ug/L (71900)	Nickel, water, fltrd, ug/L (01065)	Nickel, water, unfltrd recover-able, ug/L (01067)	Selenium, water, unfltrd ug/L (01147)	Silver, water, unfltrd recover-able, ug/L (01077)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recover-able, ug/L (01092)
Nov 09...	--	--	--	--	--	--	--	--	--	--	--
Feb 02...	<.08	--	--	<.010	--	E.03	--	--	--	E.4	--
02...	--	1.97	203	--	<.010	--	3.48	.28	<.16	--	21
May 04...	--	--	--	--	--	--	--	--	--	--	--
Aug 08...	<.08	--	--	<.010	--	E.05	--	--	--	.66	--
08...	--	.23	325	--	<.010	--	3.54	.18	<.16	--	3

## 01403385 BOUND BROOK AT ROUTE 28, AT MIDDLESEX, NJ—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006**

Part 1 of 5

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

Date	Time	2,4-D methyl ester, water, fltrd, ug/L (50470)	2,4-D water, fltrd, ug/L (39732)	2,4-DB water, fltrd, 0.7u GF ug/L (38746)	CIAT, water, fltrd, ug/L (04040)	CEAT, water, fltrd, ug/L (04038)	OIET, water, fltrd, ug/L (50355)	3- Hydroxy carbo- furan, wat flt 0.7u GF ug/L (49308)	Aldi- carb sulfone water, fltrd 0.7u GF ug/L (49313)	Aldi- carb sulf- oxide, wat flt 0.7u GF ug/L (49314)	Aldi- carb, water, fltrd 0.7u GF ug/L (49312)	Atra- zine, water, fltrd, ug/L (39632)	Bendio- carb, water, fltrd, ug/L (50299)
May 04...	1010	<.016	<.04	<.02	<.03	<.08	E.010	<.008	<.02	<.022	<.04	E.004	<.02

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006**

Part 2 of 5

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

Date	Benomyl water, fltrd, ug/L (50300)	Bensul- furon- methyl, water, fltrd, ug/L (61693)	Ben- tazon, water, fltrd 0.7u GF ug/L (38711)	Broma- cil, water, fltrd, ug/L (04029)	Brom- oxynil, water, fltrd 0.7u GF ug/L (49311)	Caf- feine, water, fltrd, ug/L (50305)	Car- baryl, water, fltrd 0.7u GF ug/L (49310)	Carbo- furan, water, fltrd 0.7u GF ug/L (49309)	Chlor- amben methyl ester, water, fltrd, ug/L (61188)	Chlori- muron, water, fltrd, ug/L (50306)	Chloro- di- amino- s-tri- azine, wat flt 0.7u GF ug/L (04039)	Clopyr- alid, water, fltrd 0.7u GF ug/L (49305)	Cyclo- ate, water, fltrd, ug/L (04031)
May 04...	E.011	<.02	<.01	E.01	<.03	.028	<.02	<.016	<.02	<.032	<.04	<.02	<.01

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006**

Part 3 of 5

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

Date	Dacthal mono- acid, water, fltrd 0.7u GF ug/L (49304)	Dicamba water, fltrd 0.7u GF ug/L (38442)	Di- chlor- prop, water, fltrd 0.7u GF ug/L (49302)	Diphen- amid, water, fltrd, ug/L (04033)	Diuron, water, fltrd 0.7u GF ug/L (49300)	Fenuron water, fltrd 0.7u GF ug/L (49297)	Flumet- sulam, water, fltrd, ug/L (61694)	Fluo- meturon water, fltrd 0.7u GF ug/L (38811)	Imaza- quin, water, fltrd, ug/L (50356)	Imaze- thapyr, water, fltrd, ug/L (50407)	Imida- clopid water, fltrd, ug/L (61695)	Linuron water, fltrd 0.7u GF ug/L (38478)	MCPA, water, fltrd 0.7u GF ug/L (38482)
May 04...	<.03	<.04	<.03	<.01	.18	<.02	<.04	<.02	<.04	<.04	E.021	<.01	<.03

01403385 BOUND BROOK AT ROUTE 28, AT MIDDLESEX, NJ—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006**

Part 4 of 5

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

Date	MCPB, water, fltrd 0.7u GF ug/L (38487)	Meta- laxyl, water, fltrd, ug/L (50359)	Methio- carb, water, fltrd 0.7u GF ug/L (38501)	Meth- omyl, water, fltrd 0.7u GF ug/L (49296)	Metsul- furon, water, fltrd, ug/L (61697)	N-(4- Chloro- phenyl)- N'- methyl- urea, ug/L (61692)	Neburon water, fltrd 0.7u GF ug/L (49294)	Nico- sul- furon, water, fltrd, ug/L (50364)	Norflur azon, water, fltrd 0.7u GF ug/L (49293)	Ory- zalin, water, fltrd 0.7u GF ug/L (49292)	Oxamyl, water, fltrd 0.7u GF ug/L (38866)	Pic- loram, water, fltrd 0.7u GF ug/L (49291)	Propham water, fltrd 0.7u GF ug/L (49236)
May 04...	<.01	<.01	<.010	<.020	<.07	<.04	<.01	<.04	<.02	<.01	<.03	<.03	<.030

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006**

Part 5 of 5

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

Date	Propi- cona- zole, water, fltrd, ug/L (50471)	Pro- poxur, water, fltrd 0.7u GF ug/L (38538)	Siduron water, fltrd, ug/L (38548)	Sulfo- met- ruron, water, fltrd, ug/L (50337)	Tebu- thiuron water, fltrd 0.7u GF ug/L (82670)	Terba- cil, water, fltrd, ug/L (04032)	Tri- clopyr, water, fltrd 0.7u GF ug/L (49235)
May 04...	<.01	<.008	E.02	<.106	<.031	<.016	<.03

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006**

[Remark codes: <, less than.]

Date	Time	Temper- ature, water, deg C (00010)	Entero- 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 07...	0955	19.1	780	<10	1,100
14...	0945	20.5	520	630	3,000
21...	0940	22.9	400	580	800
28...	0959	22.3	3,800	1,300	9,000
Jul 12...	0955	25.3	400	<10	800