



Water-Data Report 2006

01408009 MINGAMAHONE BROOK NEAR EARLE, NJ

MANASQUAN RIVER BASIN

LOCATION.--Lat 40°12'45", long 74°10'06" referenced to North American Datum of 1983, Howell Township, Monmouth County, NJ, Hydrologic Unit 02040301, at bridge on Cranberry Bog Road, 0.6 mi upstream from East Branch Mingamahone Brook, and 1.7 mi west of Earle.

DRAINAGE AREA.--3.32 mi².

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**

Date	Discharge, in ft³/s
Nov 21, 2005	4.75
Mar 8, 2006	5.76
May 8, 2006	4.72
Aug 3, 2006	2.05

01408009 MINGAMAHONE BROOK NEAR EARLE, NJ—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1971-74, 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: Undeveloped Land Use Indicator, New Jersey Department of Environmental Protection (NJDEP) Watershed Management Area 12.

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. Analysis of the split and concurrent replicate samples was performed by the Laboratory Branch of the U.S. EPA, Region II, Division of Environmental Science and Assessment.

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Part 1 of 4

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

Date	Time	Sample type	Instan- taneous dis- charge, cfs (00061)	Turbdty 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 25 degC uS/cm (00095)	Temper- ature, air, deg C (00020)
Nov												
21...	1030	Environmental	4.8	4.3	.249	.206	761	10.2	84	5.5	129	11.0
Mar												
08...	0930	Environmental	5.8	6.4	.058	.049	774	12.0	88	6.0	123	7.0
08...	0930	<i>Split Replicate</i>	--	--	--	--	--	--	--	--	--	--
08...	0931	<i>Concurrent Replicate</i>	--	--	--	--	--	--	--	--	--	--
May												
08...	1030	Environmental	4.7	18	.220	.184	765	8.6	79	6.4	121	15.5
Aug												
03...	0845	Environmental	2.0	130	.842	.695	758	7.0	79	5.9	134	30.0

01408009 MINGAMAHONE BROOK NEAR EARLE, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Part 2 of 4

[Remark codes: <, 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, sum of consti- tuents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)
Nov 21...	6.9	31	9.69	1.77	1.81	7.82	9	13.3	E.06	13.9	19.4	73	86
Mar 08...	3.2	28	8.51	1.56	1.70	7.07	8	12.9	E.08	13.0	19.9	70	75
08...	--	27	8.30	1.50	1.90	5.40	6	14.0	<.10	--	23.0	58	80
08...	--	27	8.30	1.50	1.90	5.40	6	14.0	<.10	--	24.0	59	81
May 08...	12.0	29	9.16	1.38	1.67	6.43	13	12.3	.10	14.2	18.0	71	93
Aug 03...	20.9	45	15.5	1.56	1.99	5.93	--	11.3	E.10	18.8	13.3		108

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Part 3 of 4

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

Date	Residue total at 105 deg. C, sus- pended, mg/L (00530)	Ammonia + org-N, water, fltrd, mg/L (00623)	Ammonia + org-N, water, unfltrd mg/L (00625)	Ammonia water, fltrd, mg/L as N (00608)	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	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)	Ortho- phos- phate, water, unfltrd mg/L as P (70507)	Phos- phorus, water, fltrd, mg/L (00666)
Nov 21...	14	.15	--	.037	--	<.06	--	.06	--	--	E.002	--	.004
Mar 08...	20	.11	--	.028	--	.07	--	.06	.18	.24	.015	--	<.004
08...	<.10	<.10	E.27	<.050	<.050	.070	<.050	--	--	--	<.010	<.01	<.050
08...	<.10	<.10	<.10	<.050	<.050	.063	<.050	--	--	.16	<.010	<.01	<.050
May 08...	14	.25	--	.044	--	<.06	--	.08	--	--	E.004	--	E.003
Aug 03...	60	.38	--	.136	--	<.06	--	.23	--	--	.011	--	E.004

01408009 MINGAMAHONE BROOK NEAR EARLE, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Part 4 of 4

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

Date	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)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	Boron, water, fltrd, ug/L (01020)
Nov							
21...	.039	.9	<.1	.9	2.9	E1.3	18
Mar							
08...	.031	1.1	<.1	1.1	1.4	<1.0	15
08...	<.050	--	--	--	1.6	--	10
08...	<.050	--	--	--	1.6	--	10
May							
08...	.041	1.6	<.1	1.6	2.4	<1.0	16
Aug							
03...	.14	7.1	<.1	7.0	9.2	E1.2	21

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, EChroth water, MPN/ 100 mL (31615)
Jun					
15...	0924	13.4	10	100	<20
22...	0915	17.1	90	80	500
Jul					
13...	0920	20.3	80	480	170
20...	0920	19.8	230	150	230
27...	0952	20.1	120	230	300