

## Water-Data Report 2007

**01399820 CHAMBERS BROOK NEAR NORTH BRANCH, NJ**

## RARITAN RIVER BASIN

LOCATION.--Lat 40°37'26", long 74°39'47" referenced to North American Datum of 1983, Brachburg Township, Somerset County, NJ, Hydrologic Unit 02030105, at bridge on Love Road, 0.2 miles south from Somerset Airport access road, 0.6 miles above the confluence with North Branch Raritan River, and 1.7 miles northeast from Village of North Branch.

DRAINAGE AREA.--4.71 mi<sup>2</sup>.

**WATER-QUALITY RECORDS**

PERIOD OF RECORD.--December 2006 to August 2007.

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). Cooperative Network Site Descriptor: Statewide Status, NJ Department of Environmental Protection Watershed Management Area 8.

COOPERATION.--Physical measurements and samples for laboratory analyses were provided by personnel of the NJ Department of Environmental Protection. Determinations of dissolved ammonia, dissolved orthophosphate, suspended residue, ammonia-plus-organic nitrogen in bed sediment, and phosphorus in bed sediment were performed by the NJ Department of Health and Senior Services, Environmental and Chemical Laboratory.

**WATER-QUALITY DATA  
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 1 of 5

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

Date	Time	Turbdty white light, det ang 90+/-30 corrctd	UV absorb- ance, 254 nm, wat flt units	UV absorb- ance, 280 nm, wat flt units	Baro- metric pres- sure, mm Hg	Dis- solved oxygen, mg/L (00025)	Dis- solved oxygen, percent of sat- uration (00300)	pH, water, unfltrd field, std units (00400)	Specif- ic conduc- tance, wat unf μS/cm (00095)	Temper- ature, air, deg C (25 degC (00020))	Temper- ature, water, deg C (00010)	Hard- ness, water, mg/L as CaCO <sub>3</sub> (00900)	Calcium water, fltrd, mg/L (00915)
Dec 05...	0945	1.6	.074	.054	768	13.5	97	8.2	463	1.0	2.0	150	38.6
Feb 06...	0845	1.5	.069	.051	769	14.0	96	8.1	1,160	-7.0	.3	230	61.8
May 08...	0830	1.2	.084	.062	768	9.0	83	7.6	574	10.0	11.7	140	35.8
Aug 08...	0845	310	.328	.260	755	7.6	90	7.4	200	27.5	24.0	43	11.4

## 01399820 CHAMBERS BROOK NEAR NORTH BRANCH, NJ—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 2 of 5

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

Date	ANC, wat unf fixed						Chlor- ide, lab, mg/L as CaCO <sub>3</sub>	Fluor- ide, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total non-filter- able, mg/L (00530)	Ammonia	
	Magnes- ium, water, fltrd, mg/L (00925)	Potas- sium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	end pt, mg/L as CaCO <sub>3</sub>	mg/L (00940)	mg/L (00940)							org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)	
Dec 05...	12.2	1.43	34.3	81	74.1	E.08	11.9	29.7	252	263	2	.21	E.006		
Feb 06...	18.7	1.64	122	98	274	.12	12.6	45.0	597	651	1	.24	.013		
May 08...	11.6	1.35	52.6	72	113	.10	11.4	26.8	298	329	1	.26	.014		
Aug 08...	3.51	2.18	19.6	29	32.3	E.06	5.9	8.26	103	124	164	.50	.172		

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 3 of 5

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

Date	Nitrate + nitrite water fltrd, mg/L as N (00631)	Partic- ulate nitro- gen, water, fltrd, mg/L (49570)	Total nitro- gen, water, unfltrd mg/L (00602)	Total nitro- gen, water, unfltrd mg/L (00600)	Ortho- phosphate, water, fltrd, mg/L as P (00671)	Phos- phorus, water, fltrd, mg/L (00666)	Phos- phorus, water, unfltrd mg/L (00665)	Total carbon, suspnd water, sediment mg/L (00694)	Inor- ganic carbon, suspnd water, sediment mg/L (00688)	Organic carbon, suspnd water, sediment mg/L (00689)	Organic carbon, total, water, fltrd, mg/L (00681)	Arsenic water, fltrd, µg/L (01000)	Arsenic water, unfltrd µg/L (01002)
Dec 05...	.20	.02	.40	.43	E.007	E.008	.012	.3	<.1	.3	2.7	--	--
Feb 06...	.40	<.02	.64	--	E.004	E.005	.010	<.1	<.1	<.1	2.5	.27	.63
May 08...	.35	.03	.61	.64	E.007	.009	.014	.2	<.1	.2	2.7	--	--
Aug 08...	.51	E.63	1.0	--	.045	.065	.293	E5.2	E.2	E5.0	6.5	.87	1.2

## 01399820 CHAMBERS BROOK NEAR NORTH BRANCH, NJ—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 4 of 5

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

Date	Barium, water, unfltrd recover -able, µg/L (01007)	Beryll- ium, water, unfltrd recover -able, µg/L (01012)	Boron, water, unfltrd recover -able, µg/L (01020)	Boron, water, unfltrd recover -able, µg/L (01022)	Cadmium water, unfltrd recover -able, µg/L (01027)	Chrom- ium, water, unfltrd recover -able, µg/L (01034)	Copper, water, unfltrd recover -able, µg/L (01042)	Iron, water, unfltrd recover -able, µg/L (01045)	Lead, water, unfltrd recover -able, µg/L (01051)	Mangan- ese, water, unfltrd recover -able, µg/L (01055)	Mercury water, unfltrd recover -able, µg/L (71900)	Nickel, water, unfltrd recover -able, µg/L (01067)	Selen- ium, water, unfltrd recover -able, µg/L (01147)
<b>Dec</b>													
05...	--	--	135	--	--	--	--	--	--	--	--	--	
<b>Feb</b>													
06...	74.6	<.06	156	179	.02	<.60	1.8	121	.06	37.7	E.009	1.13	
<b>May</b>													
08...	--	--	122	--	--	--	--	--	--	--	--	--	
<b>Aug</b>													
08...	55.3	.20	69	69	.10	7.0	12.6	6,060	7.22	81.7	.017	6.2	
												.16	

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2006**  
**TO SEPTEMBER 2007**

Part 5 of 5

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

Date	Silver, water, unfltrd recover -able, µg/L (01077)	Zinc, water, unfltrd recover -able, µg/L (01092)
<b>Dec</b>		
05...	--	--
<b>Feb</b>		
06...	<.02	2
<b>May</b>		
08...	--	--
<b>Aug</b>		
08...	.02	28.3

## 01399820 CHAMBERS BROOK NEAR NORTH BRANCH, NJ—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 1 of 7

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

Date	1-Naph-thol, water, fltrd 0.7u GF	2,6-Di-ethyl-aniline, water, fltrd 0.7u GF	2Chloro- -2',6'-diethyl acetanilide wat flt	CIAT, water, fltrd, 0.7u GF	2-Ethyl- -6-methyl-chloro-aniline water, fltrd, 0.7u GF	3,4-Di-chloro-aniline water, fltrd, 0.7u GF	3,5-Di-chloro-aniline water, fltrd, 0.7u GF	4-Chloro- 2methyl-phenol, water, fltrd, 0.7u GF	Aceto-chlor, water, fltrd, 0.7u GF	Ala-chlor, water, fltrd, 0.7u GF	alpha-Endosulfan, water, fltrd, 0.7u GF	Atra-zine, water, fltrd, 0.7u GF	Azin-phos-methyl oxon, water, fltrd, 0.7u GF
	µg/L (49295)	µg/L (82660)	µg/L (61618)	µg/L (04040)	µg/L (61620)	µg/L (61625)	µg/L (61627)	µg/L (61633)	µg/L (49260)	µg/L (46342)	µg/L (34362)	µg/L (39632)	µg/L (61635)
May 08...	<.09	<.006	<.006	E.015	<.010	<.004	<.012	E.011	<.006	<.005	<.011	.017	<.04

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 2 of 7

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

Date	Azin-phos-methyl, water, fltrd 0.7u GF	Ben-flur-alin, water, fltrd 0.7u GF	Car-baryl, water, fltrd 0.7u GF	Carbo-furan, water, fltrd 0.7u GF	Chlor-pyrifos oxon, water, fltrd 0.7u GF	Chlor-pyrifos water, fltrd, 0.7u GF	Per-methrin water, fltrd, 0.7u GF	cis-Permethrin water, fltrd, 0.7u GF	Propi-conazole, water, fltrd, 0.7u GF	Cyana-zine, water, fltrd, 0.7u GF	Cyflu-thrin, water, fltrd, 0.7u GF	Lambda-Cyhalothrin, water, fltrd, 0.7u GF	Cyper-methrin water, fltrd, 0.7u GF	DCPA, water, fltrd 0.7u GF
	µg/L (82686)	µg/L (82673)	µg/L (82680)	µg/L (82674)	µg/L (61636)	µg/L (38933)	µg/L (82687)	µg/L (79846)	µg/L (04041)	µg/L (61585)	µg/L (61595)	µg/L (61586)	µg/L (82682)	
May 08...	<.080	<.010	<.060	<.020	<.06	<.005	<.010	<.013	<.018	<.053	<.014	<.046	<.003	

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 3 of 7

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

Date	Desulf-inyl-fipro-nil, water, fltrd 0.7u GF	Diazi-non, water, fltrd 0.7u GF	Dicro-tophos, water, fltrd 0.7u GF	Diel-drin, water, fltrd 0.7u GF	Dimeth-oate, water, fltrd 0.7u GF	Disulf-ton, sulfone water, fltrd 0.7u GF	Disul-foton, water, fltrd 0.7u GF	Endo-sulfan, sulfate water, fltrd 0.7u GF	EPTC, water, fltrd 0.7u GF	Ethion, monoxon water, fltrd 0.7u GF	Ethion, water, fltrd 0.7u GF	Etho-prop, water, fltrd 0.7u GF	Fenami-phos sulfone water, fltrd 0.7u GF
	µg/L (62170)	µg/L (39572)	µg/L (38454)	µg/L (39381)	µg/L (82662)	µg/L (61640)	µg/L (82677)	µg/L (61590)	µg/L (82668)	µg/L (61644)	µg/L (82346)	µg/L (82672)	µg/L (61645)
May 08...	E.006	<.005	<.08	<.009	<.006	<.01	<.02	<.022	<.002	<.02	<.016	<.012	<.053

## 01399820 CHAMBERS BROOK NEAR NORTH BRANCH, NJ—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 4 of 7

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

Date	Fenami-phos sulf-oxide, water, fltrd, µg/L (61646)	Fenami-phos, water, fltrd, µg/L (61591)	Desulf-inyl-amide, wat flt µg/L (62169)	Fipro-nil sulfide µg/L (62167)	Fipro-nil sulfone µg/L (62168)	Fipro-nil, water, fltrd, µg/L (62166)	Fonofos water, fltrd, µg/L (04095)	Hexa-zinone, water, fltrd, µg/L (04025)	Ipro-dione, water, fltrd, µg/L (61593)	Isofen-phos, water, fltrd, µg/L (61594)	Mala-oxon, water, fltrd, µg/L (61652)	Mala-thion, water, fltrd, µg/L (39532)	Meta-laxyl, water, fltrd, µg/L (61596)
May 08...	<.04	<.03	E.005	E.008	E.005	E.008	<.006	<.026	<.026	<.011	<.039	<.016	E.006

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 5 of 7

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

Date	Methi-althion water, fltrd, µg/L (61598)	Methyl para-thion, water, fltrd, 0.7u GF µg/L (61664)	Methyl para-chlor, water, fltrd, 0.7u GF µg/L (82667)	Metola-chlor, water, fltrd, µg/L (39415)	Metribuzin, water, fltrd, µg/L (82630)	Moli-nate, water, fltrd, 0.7u GF µg/L (82671)	Myclo-butanol water, fltrd, µg/L (61599)	Oxy-fluor-fen, water, fltrd, 0.7u GF µg/L (61600)	Pendi-methalin, water, fltrd, 0.7u GF µg/L (82683)	Phorate oxon, water, fltrd, 0.7u GF µg/L (61666)	Phorate oxon, water, fltrd, 0.7u GF µg/L (82664)	Phosmet oxon, water, fltrd, µg/L (61668)	Phosmet oxon, water, fltrd, µg/L (61601)
May 08...	<.009	<.02	<.008	E.008	<.012	<.003	<.033	<.017	<.020	<.03	<.020	<.05	<.008

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 6 of 7

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

Date	Prome-ton, water, fltrd, µg/L (04037)	Prome-tryn, water, fltrd, 0.7u GF µg/L (04036)	Propy-zamide, water, fltrd, 0.7u GF µg/L (82676)	Propanil, water, fltrd, 0.7u GF µg/L (82679)	Propar-gite, water, fltrd, 0.7u GF µg/L (82685)	Tebu-simazine, water, fltrd, 0.7u GF µg/L (04035)	Tebu-thiuron, water, fltrd, 0.7u GF µg/L (82670)	Ter-bufos, Teflu-thrin, oxon sulfone water, water, fltrd, fltrd, µg/L µg/L (61606)	Terbu-fos, Terbu-thiazine, water, water, fltrd, fltrd, µg/L µg/L (61674) (82675)	Ter-butyl-azine, water, water, fltrd, fltrd, µg/L µg/L (04022) (04022)	Thio-bencarb, water, water, fltrd, fltrd, µg/L µg/L (82681) (79847)	trans-Propi-conazole, water, water, fltrd, fltrd, µg/L µg/L (82681) (79847)	
May 08...	.01	<.006	<.004	<.011	<.02	E.007	<.02	<.003	<.04	<.01	<.01	<.010	<.03

## 01399820 CHAMBERS BROOK NEAR NORTH BRANCH, NJ—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2006 TO**  
**SEPTEMBER 2007**

Part 7 of 7

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

Date	Tri-	flu-	Di-
	Tribu-	alin,	chlor-
	phos,	water,	vos,
	water,	filtrd	water,
	filtrd,	0.7u GF	filtrd,
	µg/L	µg/L	µg/L
	(61610)	(82661)	(38775)
May 08...	<.035	<.009	<.01

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 1 of 4

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

Date	Time	Ammonia		Inor-		Chrom-		Lead,					
		pH	+ org-N, bed sed	Phos- phorus, bed	Total carbon, bed	Inorg- anic carbon, bed	Arsenic bed	Cadmium bed	Ium, bed	Cobalt bed	Copper, bed	Iron, bed	Lead, sediment
sedimnt	std	total, mg/kg	total, mg/kg	total, mg/kg	total, mg/kg	recover -able,	recover -able,	recover -able,	recover -able,	sedimnt	recover -able,	sedimnt	recover -able,
Date	Time	units (70310)	as N (00626)	mg/kg (00668)	mg/kg (00693)	g/kg (00686)	ug/g (64847)	ug/g (01028)	ug/g (01029)	ug/g (01038)	ug/g (01043)	ug/g (01170)	ug/g (01052)
Aug 09...	1500	7.30	420	3,300	2.8	<.2	3.7	.110	33	18.3	11	37,000	23

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 2 of 4

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

Date	Mangan-		Sele-		1,2-Di-		1,6-Di-		1Methyl		1-		236Tri-		2,6-Di-		2-Ethy	
	ese,	Mercury	Nickel,	rium,	Zinc,	methyl-	methyl-	-9H-	Methyl-	Methyl-	1-	Methyl-	methyl-	naphth-	naphth-	naphth-	naphth-	
bed	bed	bed	bed	bed	bed	naphth-	naphth-	fluor-	phenan-	pyrene,	Methyl-	naphth-	methyl-	naphth-	naphth-	naphth-		
sedimnt	sedimnt	sedimnt	sedimnt	sedimnt	sedimnt	alene,	alene,	ene,	ene,	threne,	bed sed	bed sed	alene,	alene,	alene,	alene,		
recover	recover	recover	recover	recover	recover	bed sed												
-able,	-able,	-able,	-able,	-able,	-able,	<2 mm,												
ug/g	ug/g	ug/g	ug/g	ug/g	ug/g	ug/kg												
Aug 09...	560	<.007	31.4	.2	80	E3	E18	E7	E47	E39	E19	E19	E19	E16				

## 01399820 CHAMBERS BROOK NEAR NORTH BRANCH, NJ—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 3 of 4

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

Date	2-Methyl-anthra-cene, bed sed <2 mm, bs ug/kg (49435)	4H-Cyclo-penta-fluor-ene, bed sed <2 mm, wsv nat ug/kg (49411)	9H-Fluor-ene, bed sed <2 mm, wsv nat ug/kg (49399)	Ace-naphth-ylene, bed sed <2 mm, wsv nat ug/kg (49429)	Ace-naphth-ylene, bed sed <2 mm, wsv nat ug/kg (49428)	Antha-cene, bed sed <2 mm, wsv nat field, <2 mm, wsv nat ug/kg (49434)	Benz-o-[a]-anthra-cene, bed sed <2 mm, wsv nat ug/kg (49436)	Benz-o-[a]-pyrene, bed sed <2 mm, wsv nat ug/kg (49389)	Benz-o-[b]-fluor-anthene, bed sed <2 mm, wsv nat ug/kg (49458)	Benz-o-[b]-peryl-anthene, bed sed <2 mm, wsv nat ug/kg (49408)	Benz-o-[g,h]-anthene, bed sed <2 mm, wsv nat ug/kg (49397)	Benz-o-[k]-fluor-anthene, bed sed <2 mm, wsv nat ug/kg (49450)	Chry-sene, bed sed <2 mm, field, <2 mm, wsv nat ug/kg (49461)
Aug 09...	E34	72	E45	E47	E14	E88	230	230	310	E100	E120	250	<44

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 4 of 4

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

Date	Fluor-anthene, bed sed <2 mm, wsv nat field, <2 mm, wsv nat ug/kg (49466)	Indeno-[1,2,-3-cd]-pyrene, bed sed bed sed wsv nat bed sed ug/kg (49390)	Iso-phorone, bed sed <2 mm, wsv nat field, <2 mm, wsv nat ug/kg (49400)	Naphth-alene, bed sed bed sed wsv nat wsv nat sedimnt ug/kg (49402)	p-PCBs, bed bed wsv nat wsv nat ug/kg (39519)	Phenan-Cresol, bed sed <2 mm, wsv nat field, ug/kg (49451)	Phenan-threne, bed sed <2 mm, wsv nat field, ug/kg (49409)	Phenan-thri-dine, bed sed <2 mm, wsv nat field, ug/kg (49393)	Pyrene, bed sed <2 mm, wsv nat field, ug/kg (49387)	Bed sediment, dry svd bed sed wsv nat percent ug/kg (80164)	Bed sediment, svedia bed sed wsv nat percent ug/kg (80157)	
Aug 09...	630	<100	<52	<52	40.8	<52	410	E25	520	6	2	