



Water-Data Report 2009

01400860 STONY BROOK TRIBUTARY 3 AT RILEYVILLE, NJ

RARITAN RIVER BASIN

LOCATION.--Lat 40°25'06", long 74°47'14" referenced to North American Datum of 1983, Hopewell Township, Mercer County, NJ, Hydrologic Unit 02030105, at bridge on Rileyville Road, 0.5 mi southwest of Rileyville, 2.4 mi northeast of Hopewell, and 3.8 mi upstream of mouth.

DRAINAGE AREA.--1.28 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Miscellaneous measurements, water years 2005-09.

GAGE.--Reference point only.

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

Date	Discharge, in ft ³ /s
Nov 20, 2008	0.19
Feb 3, 2009	1.78
May 12, 2009	0.94
Aug 10, 2009	0.35

01400860 STONY BROOK TRIBUTARY 3 AT RILEYVILLE, NJ—Continued**WATER-QUALITY RECORDS**

PERIOD OF RECORD.--Water years 2005 to current year.

REMARKS.--Cooperative Network Site Descriptor: Background, NJ Department of Environmental Protection Watershed Management Area 10.

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 6

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

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)	UV absorb-ance, 280 nm, wat flt units /cm (61726)	Instan-taneous dis-charge, ft³/s (00061)
Nov 20...	1050	Surface water	Regular	748	2.5	.265	.203	.19
Feb 03...	0921	QC sample - Artificial	Field Blank	--	--	--	--	--
03...	1030	Surface water	Regular	746	2.0	.131	.100	1.8
May 12...	1100	Surface water	Regular	748	22.5	.274	.209	.94
Aug 10...	1145	QC sample - Artificial	Field Blank	--	--	--	--	--
10...	1215	Surface water	Regular	750	29.0	.228	.175	.35

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

Part 2 of 6

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

Date	Dissolved oxygen, mg/L (00300)	Dis-solved oxygen, percent of saturation (00301)	pH, unfltrd field, std units (00400)	Specif-ic conduc-tance, wat unf 25 degC (00095)	Turbdty white light, 90+/-30 degC (00010)	Dis-solved solids, det ang 180degC (NTRU (63676))	Dis-solved solids, sum of constituents, wat flt mg/L (70300)	Sus-pended solids, Hard-ness, water, mg/L as CaCO3 (00900)	Magnes-i um, water, mg/L (00530)	Magnes-i um, water, mg/L (00915)	Potas-sium, water, mg/L (00925)	Potas-sium, water, mg/L (00935)
Nov 20...	10.5	80	6.7	120	3.1	3.4	102	E84	42	<1	8.68	4.89
Feb 03...	--	--	--	--	--	--	--	--	--	--	--	--
03...	12.5	88	6.7	166	.1	6.1	103	E96	47	4	10.8	4.90
May 12...	8.5	81	7.0	133	12.7	5.1	123	E92	47	1	10.8	4.99
Aug 10...	--	--	--	--	--	--	--	--	--	--	--	--
10...	7.0	77	7.0	168	20.0	5.1	126	E113	61	4	13.9	6.44
												.94

01400860 STONY BROOK TRIBUTARY 3 AT RILEYVILLE, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 3 of 6

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

Date	ANC, wat unf fixed	Total carbon, susnd	Inor- ganic	Ammonia	Nitrate	Ortho- phosphate, water,	Partic- ulate nitro- gen,						
	Sodium, water, filtrd, mg/L (00930)	CaCO ₃ (90410)	Chlor- ide, water, filtrd, mg/L (00940)	Fluor- ide, water, filtrd, mg/L (00950)	Silica, water, susnd filtrd, mg/L (00688)	Sulfate water, filtrd, mg/L (00945)	+ org-N, water, filtrd, mg/L as N (00623)	Ammonia water, filtrd, mg/L as N (00608)	+ nitrite water, filtrd, mg/L as N (00631)	Ortho- phosphate, water, filtrd, mg/L (00671)	Partic- ulate nitro- gen, susp, water, mg/L (49570)		
Nov 20...	5.89	30	E.2	9.58	<.08	<.04	22.4	14.1	.30	.020	<.04	E.006	E.01
Feb 03...	--	--	--	--	--	--	--	--	--	--	--	--	--
03...	10.6	24	.2	22.3	<.08	<.04	17.6	13.6	.16	.013	.16	E.007	.03
May 12...	7.43	37	.5	12.6	<.08	<.04	22.9	9.95	.37	.017	.07	E.009	.04
Aug 10...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	7.51	54	.3	11.4	E.05	<.04	28.1	10.7	.28	<.010	.17	.011	.05

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 4 of 6

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

Date	Phos- phorus, water, filtrd, mg/L as P (00666)	Phos- phorus, water, unfiltrd mg/L (00665)	Total nitro- gen, water, filtrd, mg/L (00602)	Total nitro- gen, water, unfiltrd mg/L (00600)	Barium, water, unfiltrd recover -able, μg/L (01007)	Beryll- ium, water, unfiltrd recover -able, μg/L (01012)	Cadmium water, unfiltrd recover -able, μg/L (01027)	Chrom- ium, water, unfiltrd Copper, water, unfiltrd recover -able, μg/L (01034)	Copper, water, unfiltrd recover -able, μg/L (01040)	Iron, water, unfiltrd recover -able, μg/L (01042)	Lead, water, unfiltrd recover -able, μg/L (01049)	Lead, water, unfiltrd recover -able, μg/L (01051)
Nov 20...	.011	.017	--	--	--	--	--	--	--	--	--	--
Feb 03...	--	--	--	--	--	--	--	<1.0	--	--	<.06	--
03...	.008	.017	.32	.35	16.2	.02	<.06	.49	--	E2.0	208	--
May 12...	.016	.019	.43	.47	--	--	--	--	--	--	--	--
Aug 10...	--	--	--	--	--	--	--	<1.0	--	--	<.06	--
10...	.013	.022	.45	.50	16.6	.02	E.04	.53	--	E2.4	517	--

01400860 STONY BROOK TRIBUTARY 3 AT RILEYVILLE, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 5 of 6

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

Date	Manganese, water, unfltrd recover -able, μg/L (01055)		Mercury water, unfltrd recover -able, μg/L (71890)		Nickel, water, unfltrd recover -able, μg/L (01065)		Silver, water, unfltrd recover -able, μg/L (01067)		Zinc, water, unfltrd recover -able, μg/L (01090)		Arsenic, water, unfltrd recover -able, μg/L (01000)		Boron, water, unfltrd recover -able, μg/L (01022)		Selenium, water, unfltrd recover -able, μg/L (01147)		Organic carbon, susnd sedimt total, mg/L (00689)
	Mercury water, unfltrd recover -able, μg/L (71900)	Nickel, water, unfltrd recover -able, μg/L (01065)	Zinc, water, unfltrd recover -able, μg/L (01092)	Arsenic, water, unfltrd recover -able, μg/L (01002)	Boron, water, unfltrd recover -able, μg/L (01022)	Selenium, water, unfltrd recover -able, μg/L (01147)	Organic carbon, susnd sedimt total, mg/L (00689)										
Nov 20...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	.16	
Feb 03...	--	<.010	--	<.12	--	--	<2.0	--	<.06	--	--	--	--	--	--	--	
03...	16.7	--	<.010	--	.74	<.06	--	6.3	.18	E.19	E.11	E.11	--	--	--	.24	
May 12...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	.51	
Aug 10...	--	<.010	--	<.12	--	--	<2.0	--	<.06	--	--	--	--	--	--	--	
10...	28.6	--	<.010	--	1.2	<.06	--	3.3	.48	.79	30	.21	.33	--	--	--	

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

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

Date	Organic carbon, water, filtrd, mg/L (00681)
Nov 20...	7.0
Feb 03...	--
03...	3.1
May 12...	6.4
Aug 10...	--
10...	5.7

01400860 STONY BROOK TRIBUTARY 3 AT RILEYVILLE, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 1 of 7

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

Date	1-Naph-thol, water, 0.7µ GF	ethyl-aniline water, filtrd 0.7µ GF	2,6-Di-ethyl-aniline acetanilide water, fltrd 0.7µ GF	2-Chloro-diethyl water, fltrd 0.7µ GF	CIAT, water, filtrd 0.7µ GF	2-6-chloro-aniline water, fltrd 0.7µ GF	3,4-Di-chloro-aniline water, fltrd 0.7µ GF	3,5-Di-chloro-aniline water, fltrd 0.7µ GF	4-Chloro-phenol, water, fltrd 0.7µ GF	Aceto-chlor, water, fltrd 0.7µ GF	Ala-chlor, water, fltrd 0.7µ GF	alpha-sulfan, water, fltrd 0.7µ GF	Atra-zine, water, fltrd 0.7µ GF	Azin-phos-methyl oxon, water, 0.7µ 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 12...	<.04	<.006	<.010	E.005	<.010	<.004	<.004	<.005	<.010	<.008	<.006	<.007	<.04	

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 2 of 7

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

Date	Azin-phos-methyl, water, 0.7µ GF	Ben-flur-alin, water, filtrd 0.7µ GF	Car-baryl, water, filtrd 0.7µ GF	Carbo-furan, water, filtrd 0.7µ GF	Chlor-pyrifos oxon, water, filtrd 0.7µ GF	Chlor-pyrifos water, filtrd 0.7µ GF	Chlor-pyrifos water, filtrd 0.7µ GF	cis-Per-methrin water, filtrd 0.7µ GF	cis-Propi-conazole, water, filtrd 0.7µ GF	Cyana-zine, water, filtrd 0.7µ GF	Cyflu-thrin, water, filtrd 0.7µ GF	Cyper-methrin, water, filtrd 0.7µ GF	DCPA, water, filtrd 0.7µ GF	Desulf-inyl-fipro-nil, water, filtrd 0.7µ 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 (61586)	µg/L (82682)	µg/L (62169)	
May 12...	<.120	<.014	<.200	<.060	<.05	<.010	<.014	<.006	<.040	<.016	<.020	<.006	<.029	

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 3 of 7

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

Date	Desulf-inyl-fipro-nil, water, filtrd 0.7µ GF	Diazi-non, water, filtrd 0.7µ GF	Di-chlor-vos, water, filtrd 0.7µ GF	Dicro-tophos, water, filtrd 0.7µ GF	Diel-drin, water, filtrd 0.7µ GF	Dimeth-oate, water, filtrd 0.7µ GF	Disulf-oton, water, filtrd 0.7µ GF	Disul-foton, water, filtrd 0.7µ GF	Endo-sulfan, water, filtrd 0.7µ GF	EPTC, water, filtrd 0.7µ GF	Ethion-monoxon, water, filtrd 0.7µ GF	Ethion, water, filtrd 0.7µ GF	Etho-prop, water, filtrd 0.7µ GF	
	µg/L (62170)	µg/L (39572)	µg/L (38775)	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)	
May 12...	<.012	<.005	<.02	<.08	<.009	<.006	<.01	<.04	<.022	<.002	<.02	<.012	<.016	

01400860 STONY BROOK TRIBUTARY 3 AT RILEYVILLE, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 4 of 7

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

Date	Fenami-													
	Fenami-phos	sulf-	Fenami-phos	Fipro-nil	Fipro-nil	Fipro-	Fonofos	Hexa-	Ipro-	Isofen-	lambda-	Cyhalo-	Mala-	Mala-
water,	oxide,	water,	water,	water,	water,	water,	water,	zinone,	dione,	phos,	water,	thrin,	oxon,	thion,
fltrd,	fltrd,	fltrd,	fltrd,	fltrd,	fltrd,	fltrd,	fltrd,	fltrd,	fltrd,	fltrd,	fltrd,	fltrd,	fltrd,	fltrd,
µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	(62168)	(62166)	(04095)	(04025)	(61593)	(61594)	(61595)	(61652)
	(61645)	(61646)	(61591)	(62167)	(62168)	(62166)		(04095)	(04025)	(61593)	(61594)	(61595)	(61652)	(39532)
May 12...	<.053	<.08	<.03	<.013	<.024	<.040	<.010	<.008	<.014	<.006	<.010	<.080	<.020	

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 5 of 7

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

Date	Methyl												
	Meta-laxyl,	Methid-athion,	Methyl-oxon,	Methyl-para-thion,	Metola-chlor,	Metri-buzin,	Moli-nate,	Myclo-butanol	Oxy-fluor-fen,	Pendi-meth-alin,	Phorate	Phorate	Phosmet
water,	water,	water,	water,	water,	water,	water,	water,	water,	water,	water,	water,	water,	water,
fltrd,	fltrd,	fltrd,	fltrd,	0.7µ GF	fltrd,	fltrd,	0.7µ GF	fltrd,	fltrd,	0.7µ GF	fltrd,	0.7µ GF	fltrd,
µg/L	µg/L	µg/L	µg/L	µg/L	(82667)	(39415)	(82630)	(82671)	(61599)	(61600)	(82683)	(61666)	(82664)
	(61596)	(61598)	(61664)						(61600)				(61668)
May 12...	<.007	<.006	<.01	<.008	<.014	<.016	<.002	<.010	<.006	<.012	<.03	<.020	<.05

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 6 of 7

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

Date	Ter-												
	Phosmet	Prome-ton,	Prome-tryn,	Pro-panal,	Propar-gite,	Propy-zamide,	Tebu-simazine,	Terbufos	Terbu-	Ter-	Thio-		
water,	water,	water,	water,	water,	water,	water,	water,	oxon	fos,	buthyl-	bencarb		
fltrd,	fltrd,	fltrd,	0.7µ GF	0.7µ GF	0.7µ GF	0.7µ GF	0.7µ GF	fltrd,	water,	water,	water,		
µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	(61606)	(61674)	(82675)	(04022)	(82681)	
	(61601)	(04037)	(04036)	(82679)	(82685)	(82676)	(04035)	(82670)					
May 12...	<.200	<.01	<.006	<.014	<.02	<.004	<.010	<.02	<.010	<.04	<.02	<.01	<.016

01400860 STONY BROOK TRIBUTARY 3 AT RILEYVILLE, NJ—Continued**WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO
SEPTEMBER 2009**

Part 7 of 7

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

Date	trans- Propi- con-a- zole, water, filtrd, μg/L (79847)	Tribu- phos, water, filtrd, μg/L (61610)	Tri- flur- alin, water, filtrd 0.7μ GF μg/L (82661)
May 12...	<.02	<.035	<.012