

## Water-Data Report 2006

**01404400 OAKEYS BROOK NEAR PATRICKS CORNER, NJ**

RARITAN RIVER BASIN

LOCATION.--Lat 40°25'06.1", long 74°29'52.0" referenced to North American Datum of 1983, North Brunswick Township, Middlesex County, NJ, Hydrologic Unit 02030105, at bridge on Davidson Mill Road, 600 ft southeast of State Route 130, 0.4 mi north of Davidsons Millpond, and 0.6 mi upstream of Farrington Lake.

DRAINAGE AREA.--4.75 mi<sup>2</sup>.

**WATER-QUALITY RECORDS**

PERIOD OF RECORD.--Water years 2005 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: Statewide Status, New Jersey Department of Environmental Protection (NJDEP) Watershed ManagementArea 9.

COOPERATION.--Physical measurements and samples for laboratory analyses were provided by personnel of 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	Turbidity white light, det ang 90+/-30 corrctd	UV absorb- ance, 254 nm, wat flt	UV absorb- ance, 280 nm, wat flt	Baro- metric pressure, mm Hg	Dissolved oxygen, mg/L	Dissolved oxygen, percent of saturation	pH, water, unfltrd field, std units	Specif. conduct- tance, wat unf uS/cm	Temper- ature, air, deg C	Temper- ature, water, deg C	Temper- ature, water, deg C	Hard- ness, water, mg/L as CaCO <sub>3</sub>	Calcium water, fltrd, mg/L
		NTRU (63676)	/cm (50624)	/cm (61726)	mm Hg (00025)	mg/L (00300)	(00301)	(00400)	25 degC (00095)	(00020)	(00010)	(00090)	(00900)	(00915)
Nov 14...	1000	1.5	.260	.208	765	7.0	62	7.0	451	14.1	9.9	96	25.0	
Feb 23...	0900	2.8	.118	.089	756	12.9	97	7.1	539	3.9	2.9	81	20.8	
May 31...	0930	3.4	.192	.149	764	5.7	62	7.1	491	23.0	19.3	98	25.3	
Aug 16...	0930	2.9	.132	.101	763	6.4	70	7.2	481	26.5	19.8	85	21.6	

## 01404400 OKEYS BROOK NEAR PATRICKS CORNER, NJ—Continued

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

Part 2 of 5

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

Date	ANC, wat unf						Residue water, fltrd,		Residue on evap.		Residue total		Ammonia + org-N, water, fltrd, mg/L as N (00623)	
	Magnes- ium, water, fltrd, mg/L (00925)	Potas- sium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	fixed end pt, lab, mg/L as CaCO <sub>3</sub>	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)	consti- tuents (70301)	180degC wat flt (70300)	sus- pended, (00530)	at 105 deg. C, mg/L (00623)	Ammonia water, fltrd, mg/L (00608)	
Nov 14...	8.21	3.85	46.1	57	87.0	.15	15.0	18.5	239	258	2	2.0	.033	
Feb 23...	7.13	2.58	68.6	37	123	.13	10.0	17.3	273	283	<1	.26	.032	
May 31...	8.47	3.37	48.8	69	95.9	.19	15.2	14.2	254	286	2	1.2	.131	
Aug 16...	7.52	3.45	51.8	59	101	.13	11.6	10.4	244	--	<1	.49	.029	

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

Part 3 of 5

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

Date	Nitrite + nitrate 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- 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, susnd sediment mg/L (00694)	Inor- ganic carbon, susnd sediment mg/L (00688)	Organic carbon, susnd sediment mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	Arsenic water, fltrd, ug/L (01000)
Nov 14...	.07	.07	2.0	2.1	.014	.020	.044	.5	<.1	.5	8.7	2.9	--
Feb 23...	.43	.03	.69	.72	E.004	.010	.015	.4	<.1	.4	3.2	<1.0	.37
May 31...	.36	.06	1.5	1.6	.014	.020	.075	.3	<.1	.3	4.5	E1.6	--
Aug 16...	.23	<.02	.72	--	.011	.012	.031	.1	<.1	<.1	3.3	E1.1	.44

## 01404400 OKEYS BROOK NEAR PATRICKS CORNER, NJ—Continued

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

Part 4 of 5

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

Date	Beryll-		Chrom-		Mangan-						
	Arsenic water unfltrd ug/L (01002)	Barium, water, unfltrd ug/L (01007)	ium, water, unfltrd ug/L (01012)	Boron, water, unfltrd ug/L (01020)	Cadmium water, unfltrd ug/L (01022)	Copper, water, unfltrd ug/L (01027)	Iron, water, unfltrd ug/L (01034)	Lead, water, unfltrd ug/L (01042)	ese, water, unfltrd ug/L (01045)	Mercury water, unfltrd ug/L (01055)	Nickel, water, unfltrd ug/L (01067)
Nov 14...	--	--	--	50	--	--	--	--	--	--	--
Feb 23...	.42	67.5	<.06	33	32	.08	.74	2.4	400	.36	130
May 31...	--	--	--	50	--	--	--	--	--	--	--
Aug 16...	.48	55.9	<.06	44	42	<.04	.13	1.2	400	.11	90.0

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

Part 5 of 5

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

Date	Silver, Zinc,		
	Selen- ium, water, unfltrd ug/L (01147)	water, unfltrd ug/L (01077)	water, unfltrd ug/L (01092)
Nov 14...	--	--	--
Feb 23...	.13	<.16	17
May 31...	--	--	--
Aug 16...	.08	<.16	2

## 01404400 OKEYS BROOK NEAR PATRICKS CORNER, 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-DB water, water, fltrd, ug/L (39732)	CIAT, 0.7u GF	CEAT, water, fltrd, ug/L (04040)	OIET, water, fltrd, ug/L (04038)	Hydroxy carbo-furan, wat flt	fluor-fen, water, fltrd	Aci-carb sulfone, water, fltrd	Aldi-carb sulf-oxide, wat flt	Aldi-carb sulf-oxide, water, fltrd	Atri-zine, water, fltrd, ug/L (39632)	
May 31...	0930	<.190	<.04	<.02	<.03	<.08	E.018	<.008	<.028	<.02	<.100	<.15	<.008

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

Part 2 of 5

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

Date	Bendio-carb, water, fltrd, ug/L (50299)	Benomyl, water, fltrd, ug/L (50300)	Bensulfuron-methyl, water, fltrd, ug/L (61693)	Ben-tazon, water, fltrd, 0.7u GF	Bromo-oxynil, cil, water, fltrd, ug/L (38711)	Caf-eine, water, fltrd, 0.7u GF	Car-baryl, water, fltrd, ug/L (49311)	Carbo-furan, water, fltrd, ug/L (50305)	Chlor-amben methyl, water, fltrd, ug/L (49310)	Chlori-muron, water, fltrd, ug/L (61188)	Chloro-di-amino-s-triazine, water, fltrd, ug/L (50306)	Clopyralid, water, fltrd, ug/L (04039)	
May 31...	<.08	<.022	<.02	<.02	<.02	<.04	E.008	<.02	<.016	<.02	<.032	<.04	<.07

**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	Dicamba water, fltrd, 0.7u GF	Di-chlor-prop, water, fltrd, 0.7u GF	Dinoseb water, fltrd, 0.7u GF	Diphen-amid, water, fltrd, ug/L (49301)	Diuron, water, fltrd, 0.7u GF	Fenuron, water, fltrd, ug/L (49300)	Flumet-sulam, water, fltrd, ug/L (49297)	Fluo-meturon, water, fltrd, ug/L (61694)	Imaza-quin, water, fltrd, ug/L (38811)	Imaze-thapyr, water, fltrd, ug/L (50356)	Imida-cloprid, water, fltrd, ug/L (61695)	
May 31...	<.01	<.03	<.04	E.02	<.04	<.01	.04	<.10	<.04	<.02	<.04	<.04	<.020

## 01404400 OKEYS BROOK NEAR PATRICKS CORNER, NJ—Continued

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

Part 4 of 5

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

Date	Linuron water, fltrd 0.7u GF ug/L (38478)	MCPA, water, fltrd 0.7u GF ug/L (38482)	MCPB, water, fltrd 0.7u GF ug/L (38487)	Meta- laxyl, water, fltrd, 0.7u GF 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, 0.7u GF ug/L (61697)	Chloro- phenyl) methyl- urea, water, fltrd 0.7u GF ug/L (61692)	Neburon water, fltrd 0.7u GF ug/L (49294)	Nico- sul- furon, water, fltrd 0.7u GF 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)
									N-(4-				
May 31...	<.01	<.07	<.10	<.03	<.034	<.070	<.07	<.04	<.01	<.04	<.02	<.02	<.05

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

Part 5 of 5

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

Date	Pic- loram, water, fltrd 0.7u GF ug/L (49291)	Propham water, fltrd 0.7u GF ug/L (49236)	Propi- conazole, water, fltrd, 0.7u GF ug/L (50471)	Pro- poxur, water, fltrd 0.7u GF ug/L (38538)	Siduron water, fltrd, 0.7u GF ug/L (38548)	Sulfo- ruron, water, fltrd, 0.7u GF ug/L (50337)	Tebu- thiuron water, fltrd 0.7u GF ug/L (82670)	Teba- cil, water, fltrd 0.7u GF ug/L (04032)	Tri- clopyr, water, fltrd 0.7u GF ug/L (49235)		
					Sulfo- ruron, water, fltrd, 0.7u GF ug/L (50337)						
May 31...	<.03	<.030	<.01	<.008	E.01	<.090	<.026	<.026	<.03		

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

[Remark codes: &lt;, less than; &gt;, greater than.]

Date	Time	Enter- occi, m-E Temp- erature, water, deg C (00010)	E coli, m-TEC MF, water, col/ 100 mL (31649)	Fecal coli- form, MF, water, col/ 100 mL (31633)	ECbroth MPN/ 100 mL (31615)
<b>Jun</b>					
07...	0937	16.8	800	<10	300
14...	1005	18.3	410	230	260
21...	0940	20.8	180	<10	300
28...	0910	21.8	8,500	35,000	>16,000
<b>Jul</b>					
12...	0940	23.2	70	40	20