

Water-Data Report 2006

01367625 WALKKILL RIVER AT SPARTA, NJ

HUDSON RIVER BASIN

LOCATION.--Lat 41°02'25", long 74°37'47" referenced to North American Datum of 1983, Sparta Township, Sussex County, NJ, Hydrologic Unit 02020007, 0.4 mi northeast of Sparta, 1.2 mi downstream of outlet of Lake Mohawk, and 1.8 mi east of Fox Hollow Lake.

DRAINAGE AREA.--5.88 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 17, 2005	20.9
Feb 1, 2006	25.2
May 3, 2006	10.8
Aug 1, 2006	5.15

01367625 WALKILL RIVER AT SPARTA, 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, New Jersey Department of Environmental Protection (NJDEP) Watershed Management Area 2.

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 4

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

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity white light, det ang 90+/-30 corrctd NTRU (63676)	UV absorbance, 254 nm, wat flt units /cm (50624)	UV absorbance, 280 nm, wat flt units /cm (61726)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)
Nov 17...	1020	21	2.6	.114	.087	746	11.1	99	8.0	578	5.0	9.3	140
Feb 01...	0930	25	2.1	.048	.032	746	13.1	99	7.7	635	4.0	2.9	160
May 03...	1130	11	3.0	.059	.044	743	10.5	105	8.2	687	21.5	14.2	180
Aug 01...	1020	5.2	2.5	.071	.053	739	7.8	97	7.8	691	29.6	24.7	190

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Part 2 of 4

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

Date	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, 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 at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, fltrd, mg/L as N (00623)
Nov 17...	32.2	13.5	1.51	55.8	92	105	E.08	5.8	18.2	288	308	3	.35
Feb 01...	38.6	15.3	1.36	55.7	120	106	E.07	2.9	18.0	312	322	1	.23
May 03...	44.5	17.9	1.28	58.5	131	120	E.10	3.3	19.6	346	365	8	.40
Aug 01...	44.4	18.8	1.53	55.4	154	115	E.10	5.2	16.0	351	357	10	.34

01367625 WALLKILL RIVER AT SPARTA, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Part 3 of 4

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

Date	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Particulate 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)	Organic carbon, water, fltrd, mg/L (00681)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)
Nov 17...	.037	.27	.13	.62	.75	E.008	.010	.031	.8	<.1	.8	3.5	E2.1
Feb 01...	.019	.39	.06	.62	.68	E.005	.008	.023	.7	<.1	.6	2.4	<1.0
May 03...	.045	.46	.08	.86	.94	.017	.024	.054	.6	<.1	.6	2.5	E1.7
Aug 01...	.012	.66	.05	1.0	1.1	.032	.040	.069	.3	<.1	.3	2.8	<1.0

**WATER-QUALITY
DATA**

**WATER YEAR
OCTOBER 2005 TO
SEPTEMBER 2006**

Part 4 of 4

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

Date	Boron, water, fltrd, ug/L (01020)
Nov 17...	20
Feb 01...	19
May 03...	19
Aug 01...	25

01367625 WALKILL RIVER AT SPARTA, NJ—Continued

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)
May					
03...	0905	10.5	70	560	3,000
10...	0930	13.5	40	110	<20
17...	0915	14.8	110	270	500
24...	0915	13.8	20	50	110
31...	0915	20.4	70	260	500