

01407760 JUMPING BROOK NEAR NEPTUNE CITY, NJ

LOCATION.--Lat 40°12'13", long 74°03'56", Monmouth County, Hydrologic Unit 02030104, 60 ft downstream from dam on Jumping Brook Reservoir, 0.8 mi upstream from mouth, and 1.4 mi west of Neptune City.

DRAINAGE AREA.--6.46 mi².

PERIOD OF RECORD.--Water year 2001 to August 2002.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Urban Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 12.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity, water, unfltrd field, NTU (61028)	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 unfltrd uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)
NOV 21...	1000	7.1	15	0.209	0.163	764	10.6	88	6.7	172	10.0	7.5	37
FEB 10...	1015	4.7	3.3	0.060	0.048	759	12.9	93	6.5	663	5.0	1.7	54
MAY 14...	1115	4.7	6.5	0.117	0.091	759	9.9	93	6.7	314	17.5	12.5	45
AUG 21...	0845	3.1	15	0.223	0.172	765	7.0	78	6.6	233	25.5	20.4	37

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

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 unfltrd 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 21...	10.4	2.57	2.75	12.8	E8	22.6	<0.17	7.1	26.5	--	105	15	0.31
FEB 10...	15.8	3.41	3.99	93.9	9	161	<0.17	8.3	28.7	323	343	4	0.35
MAY 14...	13.1	2.93	2.90	38.9	11	64.9	<0.17	7.8	25.4	165	184	5	0.27
AUG 21...	10.7	2.62	3.52	26.1	13	43.9	<0.17	8.6	22.3	127	144	7	0.32

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	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)	Orthophosphate, water, fltrd, mg/L as P (00671)	Particulate nitrogen, susp, water, mg/L (49570)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, fltrd, mg/L (00602)	Total nitrogen, water, unfltrd mg/L (00600)	Total carbon, suspnd total, mg/L (00694)	Inorganic carbon, suspnd total, mg/L (00688)	Organic carbon, suspnd total, mg/L (00689)
NOV 21...	0.106	0.112	0.47	0.005	<0.020	0.09	0.008	0.043	0.79	0.87	1.6	<0.1	1.6
FEB 10...	0.233	0.248	0.54	<0.003	<0.020	0.03	<0.004	0.011	0.89	0.92	0.4	<0.1	0.4
MAY 14...	0.056	0.093	0.45	<0.003	<0.020	0.06	<0.004	0.019	0.72	0.78	0.9	<0.1	0.9
AUG 21...	0.098	0.089	0.42	0.006	<0.020	0.07	0.004	0.028	0.74	0.81	1.0	<0.1	1.0

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WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Organic carbon, water, fltrd, mg/L (00681)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	Chlorophyll a fluorometric method, corrcd ug/L (32209)	Boron, water, fltrd, ug/L (01020)
NOV 21...	4.9	<1.0	--	23
FEB 10...	1.7	E1.4	--	25
MAY 14...	3.2	E1.0	3.00	26
AUG 21...	5.2	E1.2	1.40	36

Remark codes used in this table:

< -- Less than

E -- Estimated value

WATER-COLUMN BACTERIA ANALYSES

Samples were collected synoptically over a 30-day period during the summer.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Enterococci, m-E MF, water, col/ 100 mL (31649)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coliform, ECbroth water, MPN/ 100 mL (31615)	Date	Time	Enterococci, m-E MF, water, col/ 100 mL (31649)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coliform, ECbroth water, MPN/ 100 mL (31615)
JUL 02...	0950	240	100	500	JUL 17...	1015	260	200	500
10...	1035	560	700	9,000	24...	1030	560	300	300
					31...	1055	140	200	300