

Water-Data Report 2012

0141145260 REED BRANCH NEAR FRANKLINVILLE, NJ

MAURICE RIVER BASIN

LOCATION.--Lat 39°37'13", long 75°06'16" referenced to North American Datum of 1983, Franklin Township, Gloucester County, NJ, Hydrologic Unit 02040206, at bridge on Monroeville Road (County Route 604), 0.9 mi from mouth, 1.1 mi west of Franklinville, and 1.4 mi downstream of Garrison Lake.

DRAINAGE AREA.--8.44 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Miscellaneous measurements, water years 2011-12.

GAGE.--Reference point only.

DISCHARGE MEASUREMENTS
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Date	Discharge, in ft³/s
May 31, 2012	7.02
Sep 4, 2012	5.76

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WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 2011, 2012.

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

REMARKS.--Cooperative Network Site Descriptor: HUC14, NJ Department of Environmental Protection Watershed Management Area 17.

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 1 of 6

[%, percent; ANC, acid neutralizing capacity; CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; cm, centimeter; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than]

Date	Sample start time	Barometric pressure, mm Hg (00025)	Temperature, air, °C (00020)	Absorbance, UV, 254 nm, 1 cm path length, water, filtered, units per cm (50624)	Absorbance, UV, organic constituents, 280 nm, 1 cm path length, water, filtered, units per cm (61726)	Discharge, instantaneous, ft ³ /s (00061)	Dissolved oxygen, water, unfiltered, mg/L (00300)	Dissolved oxygen, water, unfiltered, % saturation (00301)	pH, water, unfiltered, field, standard units (00400)
12-06-2011	0945	762	16.2	0.263	0.202	--	7.2	69	6.8
03-26-2012	1100	756	15.3	.202	.157	--	8.5	84	6.8
05-31-2012	0930	754	21.0	.210	.164	7.0	6.1	70	6.2
09-04-2012	1100	760	23.8	.112	.086	5.8	7.0	83	6.5

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 2 of 6

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Date	Sample start time	Specific conductance, water, unfiltered, µS/cm at 25°C (00095)	Temperature, water, °C (00010)	Turbidity, water, unfiltered, broad band light source (400-680 nm), detectors at multiple angles including 90 +/- 30 degrees, ratiometric correction, NTRU (63676)	Dissolved solids dried at 180°C, water, filtered, mg/L (70300)	Dissolved solids, water, filtered, sum of constituents, mg/L (70301)	Hardness, water, mg/L as CaCO ₃ (00900)	Suspended solids, water, unfiltered, mg/L (00530)	Calcium, water, filtered, mg/L (00915)
12-06-2011	0945	119	11.8	1.4	65	72	34.9	< 1.0	7.01
03-26-2012	1100	118	12.7	1.2	74	69	35.3	< 1.0	6.69
05-31-2012	0930	114	20.9	1.4	88	63	32.1	3.0	5.69
09-04-2012	1100	104	21.6	1.1	66	64	33.0	< 1.0	5.76

0141145260 REED BRANCH NEAR FRANKLINVILLE, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

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[%, percent; ANC, acid neutralizing capacity; CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; cm, centimeter; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than]

Date	Sample start time	Magnesium, water, filtered, mg/L (00925)	Potassium, water, filtered, mg/L (00935)	Sodium, water, filtered, mg/L (00930)	ANC, water, unfiltered, fixed endpoint titration, laboratory, mg/L as CaCO ₃ (90410) (pH 4.5)	Carbon (inorganic plus organic), suspended sediment, total, mg/L (00694)	Chloride, water, filtered, mg/L (00940)	Fluoride, water, filtered, mg/L (00950)	Inorganic carbon, suspended sediment, total, mg/L (00688)	Silica, water, filtered, mg/L as SiO ₂ (00955)
12-06-2011	0945	4.23	2.52	5.42	8.0	0.38	14.0	< .04	< .03	7.08
03-26-2012	1100	4.52	2.48	5.50	8.9	.48	13.9	.05	< .03	5.38
05-31-2012	0930	4.35	2.37	5.42	9.9	.99	13.7	< .04	< .03	5.37
09-04-2012	1100	4.52	2.81	5.65	14.9	.32	14.4	.05	< .03	4.84

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

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Date	Sample start time	Sulfate, water, filtered, mg/L (00945)	Ammonia plus organic nitrogen, water, filtered, mg/L as N (00623)	Ammonia, water, filtered, mg/L as N (00608)	Nitrate plus nitrite, water, filtered, mg/L as N (00631)	Particulate nitrogen, suspended in water, mg/L (49570)	Phosphorus, water, filtered, mg/L as P (00666)	Phosphorus, water, unfiltered, mg/L as P (00665)	Total nitrogen, water, filtered, mg/L (00602)	Total nitrogen, water, unfiltered, mg/L (00600)
12-06-2011	0945	10.4	0.35	0.037	3.65	0.059	0.008	0.012	4.0	4.1
03-26-2012	1100	9.80	.42	.076	3.50	.065	.007	.015	3.9	4.0
05-31-2012	0930	8.41	.41	.063	2.64	.093	.016	.025	3.0	3.1
09-04-2012	1100	6.81	.32	.019	2.32	.059	.007	.010	2.6	2.7

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

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[%, percent; ANC, acid neutralizing capacity; CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; cm, centimeter; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than]

Date	Sample start time	Barium, water, unfiltered, recoverable, µg/L (01007)	Beryllium, water, unfiltered, recoverable, µg/L (01012)	Cadmium, water, unfiltered, µg/L (01027)	Chromium, water, unfiltered, recoverable, µg/L (01034)	Copper, water, unfiltered, recoverable, µg/L (01042)	Iron, water, unfiltered, recoverable, µg/L (01045)	Lead, water, unfiltered, recoverable, µg/L (01051)	Manganese, water, unfiltered, recoverable, µg/L (01055)	Mercury, water, unfiltered, recoverable, µg/L (71900)
12-06-2011	0945	--	--	--	--	--	--	--	--	--
03-26-2012	1100	130	.11	.055	< .30	< .70	273	.45	33.1	< .005
05-31-2012	0930	--	--	--	--	--	--	--	--	--
09-04-2012	1100	122	.07	.047	< .30	1.5	239	.46	31.9	< .005

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

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Date	Sample start time	Nickel, water, unfiltered, recoverable, µg/L (01067)	Silver, water, unfiltered, recoverable, µg/L (01077)	Zinc, water, unfiltered, recoverable, µg/L (01092)	Arsenic, water, filtered, µg/L (01000)	Arsenic, water, unfiltered, µg/L (01002)	Boron, water, unfiltered, recoverable, micrograms per liter (01022)	Selenium, water, unfiltered, µg/L (01147)	Organic carbon, suspended sediment, total, mg/L (00689)	Organic carbon, water, filtered, mg/L (00681)
12-06-2011	0945	--	--	--	--	--	--	--	0.38	5.93
03-26-2012	1100	1.7	< .015	4.7	.83	.95	10	.268	.47	4.11
05-31-2012	0930	--	--	--	--	--	--	--	.99	4.68
09-04-2012	1100	1.5	< .015	< 3.0	1.1	1.3	10	.182	.32	2.96

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WATER-QUALITY DATA

WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

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[µg/L, micrograms per liter; <, less than; E, estimated]

Date	Sample start time	1-Naphthol, water, filtered (0.7 micron glass fiber filter), recoverable,	2,6-Diethyl-aniline, water, filtered (0.7 micron glass fiber filter), recoverable,	2-Chloro-2',6'-diethyl-acetanilide, water, filtered, recoverable,	2-Chloro-4-isopropyl-amino-6-amino-s-triazine, water, filtered, recoverable,	2-Ethyl-6-methyl-aniline, water, filtered, recoverable,	3,4-Dichloro-aniline, water, filtered, recoverable,	3,5-Di-chloro-aniline, water, filtered, recoverable,	4-Chloro-2-methyl-phenol, water, filtered, recoverable,	Aceto-chlor, water, filtered, recoverable,
		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)
05-31-2012	0930	< .0360	< .0060	< .010	E .013	< .010	< .0060	< .006	< .0080	< .010

WATER-QUALITY DATA

WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

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[µg/L, micrograms per liter; <, less than; E, estimated]

Date	Sample start time	Alachlor, water, filtered, recoverable,	alpha-Endo-sulfan, water, filtered, recoverable,	Atrazine, water, filtered, recoverable,	Azinphos-methyl oxygen analog, water, filtered, recoverable,	Azinphos-methyl, water, filtered (0.7 micron glass fiber filter), recoverable,	Benfluralin, water, filtered (0.7 micron glass fiber filter), recoverable,	Carbaryl, water, filtered (0.7 micron glass fiber filter), recoverable,	Carbofuran, water, filtered (0.7 micron glass fiber filter), recoverable,
		µg/L (46342)	µg/L (34362)	µg/L (39632)	µg/L (61635)	µg/L (82686)	µg/L (82673)	µg/L (82680)	µg/L (82674)
05-31-2012	0930	0.005	< .006	0.029	< .042	< .120	< .014	E .004	< .060

WATER-QUALITY DATA

WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

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[µg/L, micrograms per liter; <, less than; E, estimated]

Date	Sample start time	Chlorpyrifos oxygen analog, water, filtered, recoverable,	Chlorpyrifos, water, filtered, recoverable,	cis-Permethrin, water, filtered (0.7 micron glass fiber filter), recoverable,	cis-Propicon-azole, water, filtered, recoverable,	Cyanazine, water, filtered, recoverable,	Cyfluthrin, water, filtered, recoverable,	Cypermethrin, water, filtered, recoverable,	DCPA, water, filtered (0.7 micron glass fiber filter), recoverable,	Desulfanyl-fipronil amide, water, filtered, recoverable,
		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)
05-31-2012	0930	< .08	< .0036	< .010	< .008	< .022	< .016	< .020	< .0076	< .029

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

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[µg/L, micrograms per liter; <, less than; E, estimated]

Date	Sample start time	Desulfinyl-fipronil, water, filtered, recoverable, µg/L (62170)	Diazinon, water, filtered, recoverable, µg/L (39572)	Dichlorvos, water, filtered, recoverable, µg/L (38775)	Dicrotophos, water, filtered, recoverable, µg/L (38454)	Dieldrin, water, filtered, recoverable, µg/L (39381)	Dimethoate, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82662)	Disulfoton sulfone, water, filtered, recoverable, µg/L (61640)	Disulfoton, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82677)	Endosulfan sulfate, water, filtered, recoverable, µg/L (61590)
05-31-2012	0930	< .012	< .0060	< .04	< .08	< .008	< .0100	0.005	< .040	< .016

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

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[µg/L, micrograms per liter; <, less than; E, estimated]

Date	Sample start time	EPTC, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82668)	Ethion monoxon, water, filtered, recoverable, µg/L (61644)	Ethion, water, filtered, recoverable, µg/L (82346)	Ethoprop, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82672)	Fenamiphos sulfone, water, filtered, recoverable, µg/L (61645)	Fenamiphos sulfoxide, water, filtered, recoverable, µg/L (61646)	Fenamiphos, water, filtered, recoverable, µg/L (61591)	Fipronil sulfide, water, filtered, recoverable, µg/L (62167)	Fipronil sulfone, water, filtered, recoverable, µg/L (62168)
05-31-2012	0930	< .0056	< .021	< .010	< .016	< .054	< .08	< .030	< .012	< .024

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

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[µg/L, micrograms per liter; <, less than; E, estimated]

Date	Sample start time	Fipronil, water, filtered, recoverable, µg/L (62166)	Fonofos, water, filtered, recoverable, µg/L (04095)	Hexazinone, water, filtered, recoverable, µg/L (04025)	Iprodione, water, filtered, recoverable, µg/L (61593)	Isofenphos, water, filtered, recoverable, µg/L (61594)	lambda-Cyhalothrin, water, filtered, recoverable, µg/L (61595)	Malaoxon, water, filtered, recoverable, µg/L (61652)	Malathion, water, filtered, recoverable, µg/L (39532)	Metalaxyl, water, filtered, recoverable, µg/L (61596)
05-31-2012	0930	< .018	< .0048	< .012	< .014	< .008	< .010	< .022	< .016	0.012

0141145260 REED BRANCH NEAR FRANKLINVILLE, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

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[µg/L, micrograms per liter; <, less than; E, estimated]

Date	Sample start time	Methidathion, water, filtered, recoverable, µg/L (61598)	Methyl paraoxon, water, filtered, recoverable, µg/L (61664)	Methyl parathion, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82667)	Metolachlor, water, filtered, recoverable, µg/L (39415)	Metribuzin, water, filtered, recoverable, µg/L (82630)	Molinate, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82671)	Myclobutanol, water, filtered, recoverable, µg/L (61599)	Oxyfluorfen, water, filtered, recoverable, µg/L (61600)	Pendimethalin, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82683)
05-31-2012	0930	< .012	< .014	< .008	0.098	< .012	< .0040	< .010	< .010	< .012

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

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[µg/L, micrograms per liter; <, less than; E, estimated]

Date	Sample start time	Phorate oxygen analog, water, filtered, recoverable, µg/L (61666)	Phorate, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82664)	Phosmet oxygen analog, water, filtered, recoverable, µg/L (61668)	Phosmet, water, filtered, recoverable, µg/L (61601)	Prometon, water, filtered, recoverable, µg/L (04037)	Prometryn, water, filtered, recoverable, µg/L (04036)	Propanil, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82679)	Propargite, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82685)	Propyzamide, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82676)
05-31-2012	0930	< .027	< .020	< .0511	< .080	< .012	< .010	< .010	< .020	< .0036

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

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[µg/L, micrograms per liter; <, less than; E, estimated]

Date	Sample start time	Simazine, water, filtered, recoverable, µg/L (04035)	Tebu-thiuron, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82670)	Tefluthrin, water, filtered, recoverable, µg/L (61606)	Terbufos oxygen sulfone, water, filtered, recoverable, µg/L (61674)	Terbufos, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82675)	Terbutyl-azine, water, filtered, recoverable, µg/L (04022)	Thioben-carb, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82681)	trans-Propicon-azole, water, filtered, recoverable, µg/L (79847)	Tribuphos, water, filtered, recoverable, µg/L (61610)
05-31-2012	0930	0.386	< .028	< .014	< .045	< .018	< .008	< .016	< .018	< .018

0141145260 REED BRANCH NEAR FRANKLINVILLE, NJ—Continued

**WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO
SEPTEMBER 2012**

Part 10 of 10

[µg/L, micrograms per liter; <, less than;
E, estimated]

Date	Sample start time	Trifluralin, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82661)
05-31-2012	0930	< .018