



Water-Data Report 2009

**01400000 NORTH BRANCH RARITAN RIVER NEAR RARITAN, NJ**

RARITAN RIVER BASIN

LOCATION.--Lat 40°34'14", long 74°40'45" referenced to North American Datum of 1983, Branchburg Township, Somerset County, NJ, Hydrologic Unit 02030105, on right bank, 400 ft upstream from U.S. Route 202, 1.4 mi upstream from confluence with South Branch Raritan River, and 2.7 mi west of Raritan.

DRAINAGE AREA.--190 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--June 1923 to current year. Monthly discharge only for June 1923, published in WSP 1302. Prior to October 1943, published as "at Milltown".

REVISED RECORDS.--WSP 1552: 1924-26, 1928-35. WDR NJ-79-1: 1971-78(P).

GAGE.--Water-stage recorder. Concrete control since Sep 1, 1936. Datum of gage is 50.43 ft above NGVD of 1929. Prior to Oct 17, 1936, non-recording gage at site 30 ft downstream at same datum.

REMARKS.--Records good, except for estimated daily discharges, which are fair. Some releases from Round Valley Reservoir enter stream upstream from gage (see 01399669 and 01399670). Occasional regulation from gate operation at Ravine Lake, 13.8 mi upstream. Several measurements of water temperature were made during the year. National Weather Service telephone and USGS satellite telemetry at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 5,000 ft<sup>3</sup>/s and (or) maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec 12	0900	*10,300	*10.57
May 7	1200	5,750	8.41
Aug 3	0015	7,620	9.51

## 01400000 NORTH BRANCH RARITAN RIVER NEAR RARITAN, NJ—Continued

**DISCHARGE, CUBIC FEET PER SECOND**  
**WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**  
**DAILY MEAN VALUES**  
[*e*, estimated]

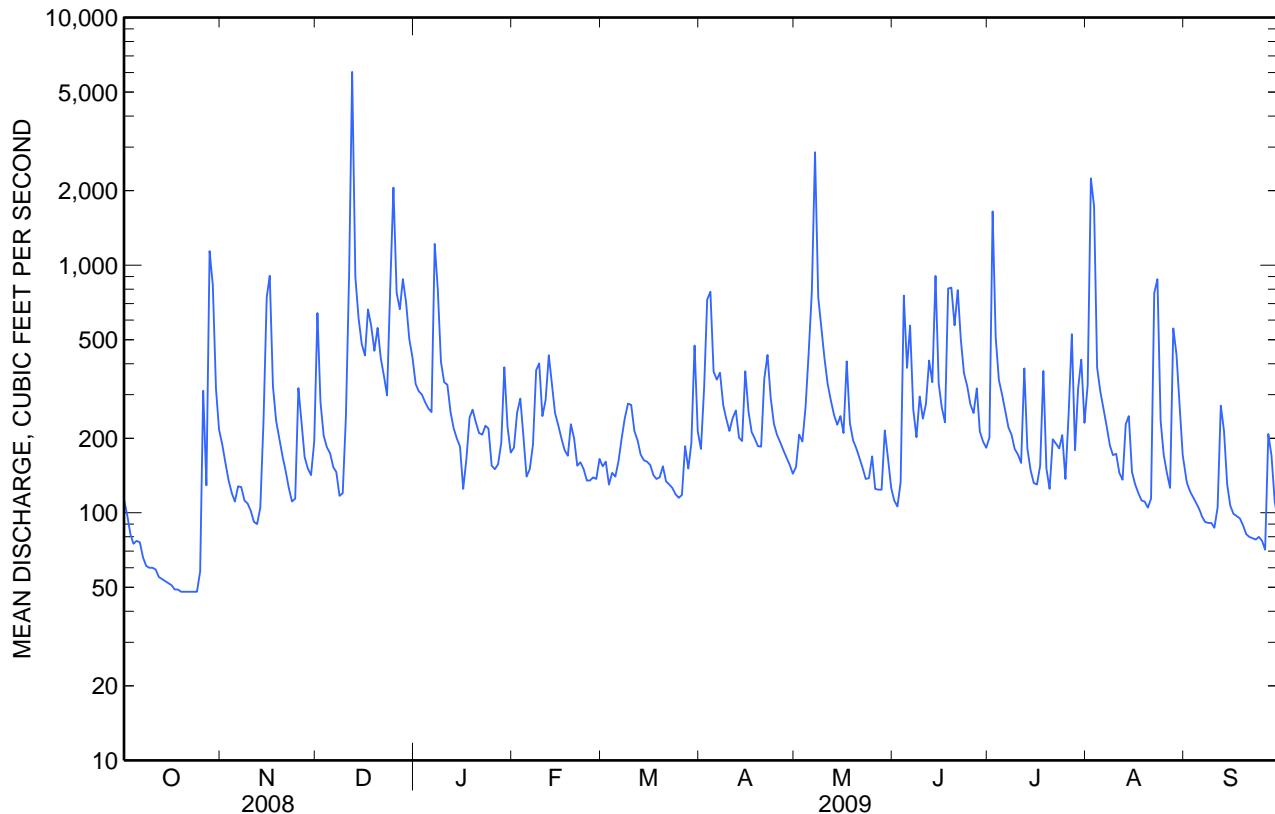
<b>Day</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>
<b>1</b>	e113	189	641	e331	183	154	181	153	112	201	329	140
<b>2</b>	98	159	280	e310	254	161	322	207	106	1,650	2,240	125
<b>3</b>	82	135	205	e300	289	e130	726	194	133	512	1,730	117
<b>4</b>	75	120	184	e280	205	e145	781	269	754	344	386	111
<b>5</b>	77	111	174	264	140	e140	372	440	385	300	309	105
<b>6</b>	76	128	153	255	150	162	345	780	571	258	263	97
<b>7</b>	66	127	146	1,220	188	199	368	2,860	261	221	223	92
<b>8</b>	61	112	117	804	377	241	273	743	202	207	187	91
<b>9</b>	60	109	e120	407	401	276	240	555	295	181	171	91
<b>10</b>	60	102	e245	337	246	273	214	421	240	172	173	87
<b>11</b>	59	92	e917	329	285	214	241	331	275	159	145	105
<b>12</b>	55	90	e6,040	e255	433	196	259	284	412	383	136	271
<b>13</b>	54	105	895	e220	329	172	201	248	337	182	228	214
<b>14</b>	53	236	612	e200	253	163	195	227	906	149	246	130
<b>15</b>	52	743	480	e185	226	161	373	246	332	132	146	107
<b>16</b>	51	907	432	e125	200	156	257	210	267	130	130	99
<b>17</b>	49	324	663	e165	179	142	212	409	232	155	120	97
<b>18</b>	49	235	569	243	170	137	199	230	805	374	112	95
<b>19</b>	48	199	451	261	228	139	186	196	812	151	111	89
<b>20</b>	48	169	558	232	e200	154	185	182	572	125	105	82
<b>21</b>	48	148	421	210	e155	134	349	167	793	198	114	80
<b>22</b>	48	126	356	207	e160	130	434	152	502	190	772	79
<b>23</b>	48	111	298	225	e150	126	291	137	366	182	877	78
<b>24</b>	48	114	813	219	e135	119	229	138	325	206	235	80
<b>25</b>	58	319	2,060	155	e135	115	207	169	274	137	172	77
<b>26</b>	311	234	773	150	139	118	193	125	253	251	145	71
<b>27</b>	129	168	664	157	137	186	179	124	318	527	126	208
<b>28</b>	1,140	151	879	192	165	151	167	124	213	179	556	170
<b>29</b>	833	142	707	387	---	191	156	215	194	316	436	111
<b>30</b>	316	194	504	223	---	474	144	166	183	416	269	93
<b>31</b>	217	---	424	175	---	213	---	126	---	231	171	---
<b>Total</b>	4,482	6,099	21,781	9,023	6,112	5,472	8,479	10,828	11,430	8,819	11,363	3,392
<b>Mean</b>	145	203	703	291	218	177	283	349	381	284	367	113
<b>Max</b>	1,140	907	6,040	1,220	433	474	781	2,860	906	1,650	2,240	271
<b>Min</b>	48	90	117	125	135	115	144	124	106	125	105	71
<b>Cfsm</b>	0.76	1.07	3.70	1.53	1.15	0.93	1.49	1.84	2.01	1.50	1.93	0.60
<b>In.</b>	0.88	1.19	4.26	1.77	1.20	1.07	1.66	2.12	2.24	1.73	2.22	0.66

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1924 - 2009, BY WATER YEAR (WY)**

	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>
<b>Mean</b>	188	284	365	395	427	516	472	336	232	192	189	174
<b>Max</b>	882	824	1,077	1,416	948	1,272	1,368	1,027	1,270	1,291	1,068	675
(WY)	(1997)	(1973)	(1997)	(1979)	(1925)	(1936)	(1983)	(1989)	(1972)	(1984)	(1942)	(1999)
<b>Min</b>	26.6	46.1	73.1	79.4	87.5	163	117	84.1	46.4	25.5	22.3	14.8
(WY)	(1931)	(1965)	(1966)	(1940)	(2002)	(1981)	(1985)	(1926)	(1965)	(1966)	(1932)	(1964)

**01400000 NORTH BRANCH RARITAN RIVER NEAR RARITAN, NJ—Continued****SUMMARY STATISTICS**

	<b>Calendar Year 2008</b>	<b>Water Year 2009</b>		<b>Water Years 1924 - 2009</b>	
<b>Annual total</b>	138,122		107,280		
<b>Annual mean</b>	377		294		314
<b>Highest annual mean</b>				605	1984
<b>Lowest annual mean</b>				120	1965
<b>Highest daily mean</b>	6,040	Dec 12	<sup>a</sup> 6,040	Dec 12	15,300 Jul 7, 1984
<b>Lowest daily mean</b>	45	Aug 19	48	Oct 19	7.5 Sep 26, 1964
<b>Annual seven-day minimum</b>	48	Oct 18	48	Oct 18	8.9 Sep 22, 1964
<b>Maximum peak flow</b>			10,300	Dec 12	29,100 Oct 19, 1996
<b>Maximum peak stage</b>			10.57	Dec 12	<sup>b</sup> 18.98 Sep 16, 1999
<b>Instantaneous low flow</b>			48	Oct 17	<sup>c</sup> 3.0 Nov 28, 1930
<b>Annual runoff (cfsm)</b>	1.99		1.55		1.65
<b>Annual runoff (inches)</b>	27.04		21.00		22.43
<b>10 percent exceeds</b>	743		562		625
<b>50 percent exceeds</b>	222		195		188
<b>90 percent exceeds</b>	78		92		58

<sup>a</sup> Estimated.<sup>b</sup> Affected by backwater from South Branch Raritan River.<sup>c</sup> Probably result of temporary regulation.

**01400000 NORTH BRANCH RARITAN RIVER NEAR RARITAN, NJ—Continued****WATER-QUALITY RECORDS**

PERIOD OF RECORD.--Water years 1923-25, 1960-76, 1978-80, 1997 to current year.

PERIOD OF DAILY RECORD.--

DISSOLVED OXYGEN: September 2009.

DISSOLVED OXYGEN, PERCENT SATURATION: September 2009.

pH: September 2009.

SPECIFIC CONDUCTANCE: September 2009.

WATER TEMPERATURE: September 2009.

REMARKS.--Cooperative Network Site Descriptor: Watershed Integrator and Watershed Reconnaissance, NJ Department of Environmental Protection Watershed Management Area 8. The accuracy of continuous water-quality data is routinely verified through inspections for fouling and calibration drift. The New Jersey Water Science Center requires that either constant or prorated adjustments be made to the continuous water-quality record when the difference between a sensor's response and a known value exceeds the following criteria: Water Temperature, 0.2 degrees Celsius (+ or -); Specific Conductance, the greater of 5 microsiemens/cm or 3% (+ or -) of the measured value; Dissolved Oxygen, the greater of 0.3 mg/L or 5% (+ or -) of the measured value; pH, 0.3 units (+ or -). If the difference between a sensor's response and a known value is within specified criteria, the data are considered to be reliable and are not adjusted. Data from the following period(s) were adjusted - none.

COOPERATION.--Physical measurements and samples for laboratory analyses on Nov 17, Feb 25, and May 20 were provided by personnel of the NJ Department of Environmental Protection; those on Aug 12 and Sep 22 were collected in cooperation with the NJ Water Supply Authority and the NJ Department of Environmental Protection, respectively. Determinations of dissolved ammonia, dissolved orthophosphate, and suspended residue were performed by the NJ Department of Health and Senior Services, Environmental and Chemical Laboratory. Determination of chlorophyll a was performed by the NJ Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

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

Part 1 of 5

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

Date	Time			UV absorb-		UV absorb-		Instan-	Dis-	pH,	Specif-		Turbdty	Dis-
		Baro-	Temper-	254 nm,	280 nm,	taneous	dis-				ic conduc-	white light,		
		metric pres-	ture, air,	wat flt	/cm	wat flt	dis-	charge,	oxygen,	unfltrd	conductance,	Temper-	det ang	dried @
		(00025)	(00020)	(50624)	(61726)	(00061)	(00300)	(00301)	(00400)	(00095)	(00010)	(63676)	(70300)	180degC
Nov 17...	1030	762	8.0	.269	.213	320	11.3	94	7.6	253	7.6	8.9	146	
Feb 25...	1015	774	1.0	.051	.039	E135	14.4	100	8.4	445	.5	1.4	240	
May 20...	1015	770	21.0	.100	.077	180	10.4	103	8.1	334	14.6	3.2	213	
Aug 12...	1010	760	27.0	.125	.096	136	8.6	103	7.7	332	24.3	4.2	216	
Sep 22...	0900	768	20.0	--	--	82	8.8	90	7.7	368	17.0	2.2	--	

## 01400000 NORTH BRANCH RARITAN RIVER NEAR RARITAN, NJ—Continued

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

Part 2 of 5

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

Date	Dissolved solids, sum of constituents, water, mg/L (70301)	Hardness, water, CaCO <sub>3</sub> (00900)	Sus- pended solids, water, unfltrd (00530)	Cal- cium water, fltrd, (00915)	Magnes- ium, water, fltrd, (00925)	Potas- sium, water, fltrd, (00935)	Sodium, water, fltrd, (00930)	ANC, wat unf fixed end pt, CaCO <sub>3</sub> (90410)	Total carbon, suspnd sedimnt total, mg/L (00694)	Chlor- ide, water, fltrd, (00940)	Fluor- ide, water, fltrd, (00950)	Inor- ganic carbon, suspnd sedimnt total, mg/L (00688)	Silica, water, fltrd, SiO <sub>2</sub> (00955)
	mg/L (70301)	mg/L (00900)	mg/L (00530)	mg/L (00915)	mg/L (00925)	mg/L (00935)	mg/L (00930)	mg/L (00940)	mg/L (00694)	mg/L (00940)	mg/L (00950)	mg/L (00688)	mg/L (00955)
Nov 17...	E144	76	4	19.4	6.66	2.71	18.5	.51	.5	32.8	E.08	<.04	12.6
Feb 25...	E230	100	4	24.7	9.31	1.87	40.4	.58	.5	82.4	E.07	<.04	9.9
May 20...	E181	99	2	25.6	8.63	1.66	24.5	.62	.3	52.5	E.07	<.04	10.0
Aug 12...	E179	96	3	24.7	8.44	2.15	22.7	.66	E.2	44.9	E.07	<.04	14.2
Sep 22...	--	--	1	--	--	--	--	.74	--	--	--	--	--

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

Part 3 of 5

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

Date	Ammonia + org-N, water, fltrd, mg/L as N (00945)		Nitrate Ammonia water, fltrd, mg/L as N (00623)	Ortho- phosphate, nitrite water, fltrd, mg/L as N (00608)	Partic- ulate nitro- gen, water, susp, mg/L as P (00631)	Phos- phorus, water, fltrd, mg/L as P (00671)	Phos- phorus, water, unfltrd, mg/L as P (49570)	Total nitro- gen, water, fltrd, mg/L as P (00666)	Total nitro- gen, water, unfltrd, mg/L as P (00602)	Chloro- phyll a fluoro- metric method, uncorr, -able, µg/L (32217)	Barium, water, unfltrd recover, -able, µg/L (01007)	Beryll- ium, water, unfltrd recover, -able, µg/L (01012)	
	mg/L (00945)	mg/L (00623)	mg/L (00608)	mg/L (00631)	mg/L (00671)	mg/L (49570)	mg/L (00666)	mg/L (00602)	mg/L (00600)	mg/L (32217)	µg/L (01007)	µg/L (01012)	
Nov 17...	17.4	.42	.012	.65	.051	.07	.065	.092	1.1	1.1	--	--	--
Feb 25...	20.2	.20	E.006	1.31	E.010	.06	.010	.017	1.5	1.6	--	37.5	<.02
May 20...	17.7	.24	E.011	.74	.014	.04	.021	.029	.98	1.0	--	--	--
Aug 12...	17.7	.22	.015	.99	.050	E.01	.054	.060	1.2	E1.2	--	35.6	<.02
Sep 22...	--	--	--	1.10	--	--	--	.045	--	--	2.3	--	--

## 01400000 NORTH BRANCH RARITAN RIVER NEAR RARITAN, NJ—Continued

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

Part 4 of 5

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

Date	Cadmium	Chrom- ium, water, unfltrd	Copper, water, unfltrd	Iron, water, unfltrd	Lead, water, unfltrd	Mangan- ese, water, unfltrd	Mercury water, unfltrd	Nickel, water, unfltrd	Silver, water, unfltrd	Zinc, water, unfltrd	Arsenic	Arsenic	Boron,
	water, unfltrd	recover -able,	recover -able,	recover -able,	recover -able,	recover -able,	recover -able,	recover -able,	recover -able,	recover -able,	water, fltrd,	water, unfltrd	water, fltrd,
		µg/L (01027)	µg/L (01034)	µg/L (01042)	µg/L (01045)	µg/L (01051)	µg/L (01055)	µg/L (71900)	µg/L (01067)	µg/L (01077)	µg/L (01092)	µg/L (01000)	µg/L (01002)
Nov													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
Feb													
25...	<.06	<.40	E2.5	134	.16	33.0	<.010	.49	<.06	2.3	.24	E.20	--
May													
20...	--	--	--	--	--	--	--	--	--	--	--	--	42
Aug													
12...	<.06	<.40	<4.0	206	.11	17.9	<.010	.42	<.06	E1.4	.52	.64	--
Sep													
22...	--	--	--	--	--	--	--	--	--	--	--	--	--

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

Part 5 of 5

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

Date	Boron, water, unfltrd	Selen- ium, water, unfltrd	Organic carbon, suspd	Organic carbon, sedimnt
	recover -able,	µg/L (01147)	mg/L (00689)	mg/L (00681)
	µg/L (01022)			
Nov				
17...	--	--	.52	6.7
Feb				
25...	34	E.12	.45	1.9
May				
20...	--	--	.26	2.6
Aug				
12...	47	.13	.20	3.1
Sep				
22...	--	--	--	2.4

## 01400000 NORTH BRANCH RARITAN RIVER NEAR RARITAN, NJ—Continued

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

Part 1 of 7

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

Date	1-Naph-thol, water, 0.7µ GF	ethyl-aniline water, filtrd 0.7µ GF	2,6-Di-ethyl-aniline water, acetanilide wat flt	2-Chloro-diethyl water, acetanilide wat flt	CIAT, water, filtrd, 0.7µ GF	2'-6'-diethyl water, aniline wat flt	Ethyl-methyl chloro-aniline water, filtrd, 0.7µ GF	3,4-Di-chloro-aniline water, filtrd, 0.7µ GF	3,5-Di-chloro-aniline water, filtrd, 0.7µ GF	4-Chloro-phenol, water, filtrd, 0.7µ GF	Aceto-chlor, water, filtrd, 0.7µ GF	Ala-chlor, water, filtrd, 0.7µ GF	alpha-chloran, water, filtrd, 0.7µ GF	Endo-sulfan, water, filtrd, 0.7µ GF	Atra-zine, water, filtrd, 0.7µ GF	Azin-phos-methyl oxon, water, filtrd, 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 20...	<.04	<.006	<.010	E.024	<.010	E.004	<.004	E.004	E.008	<.008	<.006	.080	<.04			

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

Part 2 of 7

[Remark codes: &lt;, 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 20...	<.120	<.014	E.007	<.060	<.05	<.010	<.014	<.006	<.040	<.016	<.020	<.006	E.003	

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

Part 3 of 7

[Remark codes: &lt;, 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 20...	E.005	<.005	<.02	<.08	<.009	<.006	<.01	<.04	<.022	<.002	<.02	<.012	<.016

## 01400000 NORTH BRANCH RARITAN RIVER NEAR RARITAN, NJ—Continued

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

Part 4 of 7

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

Date	Fenami-															
	Fenami-phos	sulfone	oxide,	Fenami-phos,	nil	Fipro-sulfide	nil	Fipro-sulfone	nil	Fonofos	Hexazinone,	Ipro-dione,	Isofen-phos,	Cyhalothrin,	Mala-thrin,	Mala-oxon,
Date	Fenami-phos sulfone water, fltrd, μg/L (61645)	sulfone oxide, water, fltrd, μg/L (61646)	oxide, water, fltrd, μg/L (61591)	Fenami-phos, water, fltrd, μg/L (62167)	nil water, fltrd, μg/L (62168)	nil water, fltrd, μg/L (62166)	nil water, fltrd, μg/L (04095)	nil water, fltrd, μg/L (04025)	Fonofos water, fltrd, μg/L (61593)	Hexazinone, water, fltrd, μg/L (61594)	Ipro-dione, water, fltrd, μg/L (61595)	Isofen-phos, water, fltrd, μg/L (61652)	Cyhalothrin, water, fltrd, μg/L (39532)	Mala-thrin, water, fltrd, μg/L (61652)	Mala-oxon, water, fltrd, μg/L (61652)	Mala-thion, water, fltrd, μg/L (39532)
May 20...	<.053	<.08	<.03	E.004	E.006	E.006	<.010	<.008	<.014	<.006	<.010	<.080	<.020			

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

Part 5 of 7

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

Date	Methyl												
	Meta-laxyl, water, fltrd, μg/L (61596)	Methid-athion, water, fltrd, μg/L (61598)	Methyl para-thion, water, fltrd, μg/L (61664)	Methyl para-thion, water, fltrd, 0.7μ GF (82667)	Metola-chlor, water, fltrd, 0.7μ GF (39415)	Metri-buzin, water, fltrd, μg/L (82630)	Moli-nate, water, fltrd, 0.7μ GF (82671)	Myclo-butanol water, fltrd, μg/L (61599)	Oxy-fluor-fen, water, fltrd, μg/L (61600)	Pendi-meth-alin, water, fltrd, 0.7μ GF (82683)	Phorate oxon, water, fltrd, μg/L (61666)	Phorate water, fltrd, 0.7μ GF (82664)	Phosmet oxon, water, fltrd, μg/L (61668)
May 20...	<.008	<.006	<.01	<.008	.015	<.016	<.002	<.010	<.006	<.012	<.03	<.020	<.05

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

Part 6 of 7

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

Date	Ter-												
	Phosmet water, fltrd, μg/L (61601)	Promo-ton, water, fltrd, μg/L (04037)	Promo-tryn, water, fltrd, μg/L (04036)	Propanil, water, fltrd, 0.7μ GF (82679)	Propar-gite, water, fltrd, 0.7μ GF (82685)	Propyzamide, water, fltrd, 0.7μ GF (82676)	Tebu-zamine, water, fltrd, 0.7μ GF (04035)	Tebu-thiuron, water, fltrd, 0.7μ GF (82670)	Teflu-thrin, water, fltrd, μg/L (61606)	Terbufos oxon sulfone, water, fltrd, 0.7μ GF (61674)	Terbu-fos, water, fltrd, 0.7μ GF (82675)	Terbutyl-azine, water, fltrd, μg/L (04022)	Thiocarbencarb, water, fltrd, 0.7μ GF (82681)
May 20...	<.200	.03	<.006	<.014	<.02	<.004	E.008	<.02	<.010	<.04	<.02	<.01	<.016

Water-Data Report 2009

**01400000 NORTH BRANCH RARITAN RIVER NEAR RARITAN, NJ—Continued**

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

Part 7 of 7

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

	trans-	Tri-
Date	Propi-	flur-
	cona-	alin,
	zole, water, filtrd,	Tribu- phos, water, filtrd
		0.7 $\mu$ GF
<b>May</b>	<b>µg/L</b>	<b>µg/L</b>
<b>20...</b>	<b>&lt;.02</b>	<b>&lt;.035</b>
	(79847)	(61610)
		(82661)

WATER-QUALITY DATA  
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 1 of 4

[Remark codes: <, less than; E, estimated; M, presence verified but not quantified.]

	Mois-ture, bed sed <2 mm, wsv nat fld dry	pH bed	Total carbon, bed	Inor-ganic carbon, bed	Phos-phorus, bed sediment	Cadmium bed sediment	Chrom-ium, bed sediment	Cobalt bed sediment	Copper, bed sediment	Iron, bed sediment	Lead, bed sediment	Mangan-ese, bed sediment	Mercury bed sediment
Date	percent (49282)	units (70310)	g/kg (00693)	g/kg (00686)	mg/kg as P (00668)	µg/g (01028)	µg/g (01029)	µg/g (01038)	µg/g (01043)	µg/g (01170)	µg/g (01052)	µg/g (01053)	µg/g (71921)
Aug 12...	26	7.32	1.1	<.2	E220	.110	23	8.1	14	20.000	11	410	<.007

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

Part 2 of 4

[Remark codes: <, less than; E, estimated; M, presence verified but not quantified.]

	Nickel, bed sediment	Zinc, bed sediment	Arsenic, bed sediment	Selenium, bed sediment	p-Cresol, <2 mm, wsv nat	1,2-Dimethyl-naphthalene, PCBs, bed	1,6-Dimethyl-naphthalene, bed sed	1Methyl-9H-fluorophenanthrene, bed sed	1-Methylpyrene, bed sed	236Tri-methyl-naphthalene, bed sed	2,6-Dimethyl-naphthalene, bed sed	
Date	recoverable, µg/g (01068)	recoverable, µg/g (01093)	recoverable, µg/g (64847)	recoverable, µg/g (64848)	recoverable, µg/kg (49451)	recoverable, µg/kg (39519)	recoverable, µg/kg (49403)	recoverable, µg/kg (49404)	recoverable, µg/kg (49398)	recoverable, µg/kg (49410)	recoverable, µg/kg (49388)	recoverable, µg/kg (49405)
Aug 12...	15.2	69	3.1	.2	<55	<5.00	<55	<55	<55	E2	M	<55

## 01400000 NORTH BRANCH RARITAN RIVER NEAR RARITAN, NJ—Continued

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

Part 3 of 4

[Remark codes: &lt;, less than; E, estimated; M, presence verified but not quantified.]

Date	2-Ethyl naphth- alene <2 mm wsv nat	2-Methyl- anthra- cene, bed sed <2 mm bs <2mm	4H-Cyc- lopenta phenan- threne, bed sed <2 mm,	9H- -[def]- Fluor- bed sed	Ace- ne, bed sed <2 mm,	Ace- naphth- ylene, bed sed <2 mm,	Anthra- cene, bed sed <2 mm, wsv nat	Benzo- [a]- anthra- cene, bed sed <2 mm, field,	Benzo- [a]- pyrene, bed sed <2 mm, wsv nat	Benzo- [b]- fluor- anthene, bed sed <2 mm, bed sed	Benzo- [ghi]- peryl- ene, bed sed <2 mm, bed sed	Benzo- [k]- fluor- anthene, bed sed <2 mm, wsv nat	
	μg/kg (49948)	μg/kg (49435)	μg/kg (49411)	μg/kg (49399)	μg/kg (49429)	μg/kg (49428)	μg/kg (49434)	μg/kg (49436)	μg/kg (49389)	μg/kg (49458)	μg/kg (49408)	μg/kg (49397)	μg/kg (49450)

Aug 12...	<55	<55	E5	<55	<55	E3	E6	E23	E26	E43	E11	E15	E21
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**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Part 4 of 4

[Remark codes: &lt;, less than; E, estimated; M, presence verified but not quantified.]

Date	Dibenzo- - [a,h]- anthra- cene, bed sed <2 mm, wsv nat	Fluor- anthene bed sed	Indeno- [1,2,- 3-cd]- pyrene, bed sed	Iso- phorone bed sed	Naphth- alene, bed sed <2 mm, wsv nat	Phenan- threne, bed sed <2 mm, wsv nat	Phenan- threne, bed sed <2 mm, wsv nat	Pyrene, bed sed <2 mm, wsv nat	Bed sediment dry svd sve dia percent <0.0625
	μg/kg (49461)	μg/kg (49466)	μg/kg (49390)	μg/kg (49400)	μg/kg (49402)	μg/kg (49409)	μg/kg (49393)	μg/kg (49387)	mm (80164)

Aug 12...	<55	71	E12	<55	<55	E17	<55	60	2.0
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## 01400000 NORTH BRANCH RARITAN RIVER NEAR RARITAN, NJ—Continued

HOURLY WATER-QUALITY-MONITOR VALUES  
SEPTEMBER 18, 2009 TO SEPTEMBER 22, 2009