



Water-Data Report 2006

01410150 EAST BRANCH BASS RIVER NEAR NEW GREтна, NJ

MULLICA RIVER BASIN

LOCATION.--Lat 39°37'23", long 74°26'29" referenced to North American Datum of 1983, Bass River Township, Burlington County, NJ, Hydrologic Unit 02040301, on left bank upstream from bridge on Stage Road, 0.7 mi west of Lake Absegami, 2.2 mi north of New Greтна, and 5.3 mi upstream from mouth.

DRAINAGE AREA.--8.11 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1969 to 1974. January 1978 to current year.

REVISED RECORDS.--WDR NJ-81-1:1978-80(P). WDR NJ-92-1:1978, 1979, 1989, 1991(P).

GAGE.--Water-stage recorder. Datum of gage is 1.10 ft above NGVD of 1929.

REMARKS.--Records good, except for estimated daily discharges and discharges above 200 ft³/s which are fair. Occasional regulation by Lake Absegami. Satellite gage-height telemetry at station. Several measurements of water temperature were made during the year.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 65 ft³/s and (or) maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Sep 02	1945	*63	*5.16

01410150 EAST BRANCH BASS RIVER NEAR NEW GRETN, NJ—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006
DAILY MEAN VALUES

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	8.9	14	18	17	18	15	12	12	11	13	11	12
2	8.9	14	15	16	18	16	12	11	11	11	11	47
3	8.9	14	14	33	20	16	12	11	12	11	11	48
4	8.9	14	15	33	21	16	12	11	14	11	10	28
5	9.0	14	16	24	22	15	12	11	13	11	10	21
6	9.0	14	15	20	20	15	12	11	13	40	10	21
7	9.0	14	15	18	18	15	11	11	12	38	10	19
8	9.3	14	14	18	17	15	12	11	13	22	10	17
9	10	14	17	17	17	15	14	11	12	16	10	16
10	9.6	14	18	17	17	15	13	11	12	14	10	16
11	10	14	16	17	17	14	12	11	11	13	10	15
12	e12	14	15	16	26	14	11	17	11	13	10	15
13	e21	14	14	16	24	14	11	17	11	13	10	15
14	e35	13	14	21	20	14	11	13	11	13	10	16
15	26	13	14	28	19	13	11	14	11	13	10	33
16	17	14	19	23	19	13	11	17	11	12	10	47
17	14	14	19	19	19	13	11	16	10	12	10	30
18	14	14	16	24	18	13	11	14	10	11	10	22
19	14	13	15	30	17	13	11	15	10	11	10	19
20	13	13	15	25	17	13	10	15	10	11	10	18
21	13	13	14	21	17	13	10	13	10	11	9.9	17
22	15	22	14	19	16	13	12	13	9.9	12	9.9	17
23	17	23	14	29	17	13	26	12	10	14	9.8	17
24	15	18	14	34	17	13	28	12	10	13	9.8	17
25	e22	15	15	27	16	13	20	12	20	12	9.8	17
26	24	14	19	22	16	13	16	12	20	11	12	16
27	19	14	17	20	16	12	14	12	13	11	12	16
28	16	14	15	19	16	12	13	12	11	14	17	16
29	15	14	18	19	---	12	12	12	13	15	18	16
30	15	18	22	19	---	12	12	11	19	12	16	16
31	15	---	19	e19	---	12	---	11	---	11	13	---
Total	453.5	441	495	680	515	425	395	392	364.9	445	340.2	640
Mean	14.6	14.7	16.0	21.9	18.4	13.7	13.2	12.6	12.2	14.4	11.0	21.3
Max	35	23	22	34	26	16	28	17	20	40	18	48
Min	8.9	13	14	16	16	12	10	11	9.9	11	9.8	12
Cfsm	1.80	1.81	1.97	2.70	2.27	1.69	1.62	1.56	1.50	1.77	1.35	2.63
In.	2.08	2.02	2.27	3.12	2.36	1.95	1.81	1.80	1.67	2.04	1.56	2.94

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 2006, BY WATER YEAR (WY)

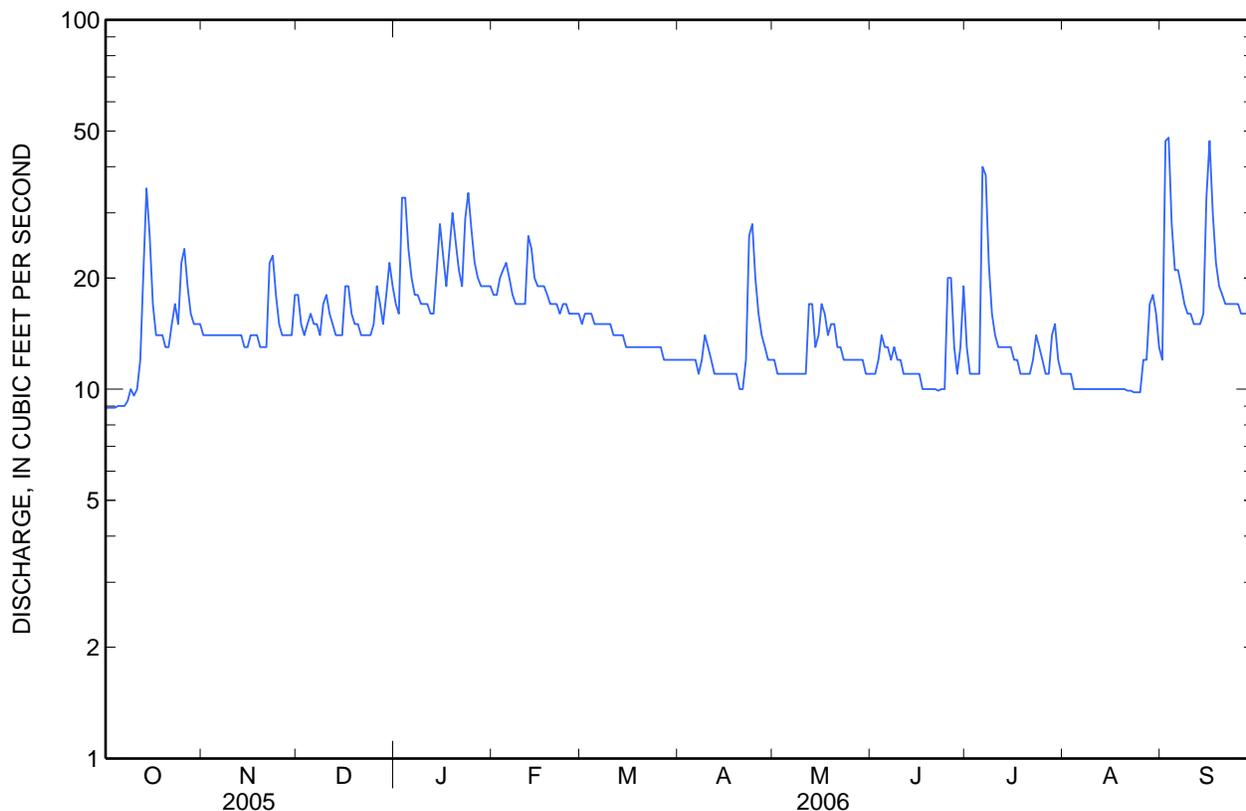
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	12.7	14.1	15.8	18.3	18.1	20.5	20.7	18.5	15.6	13.6	14.8	12.9
Max	24.2	23.1	28.3	35.0	34.3	40.8	38.6	41.5	35.2	25.8	43.7	23.2
(WY)	(1990)	(1990)	(1997)	(1978)	(1998)	(1998)	(1984)	(1998)	(1998)	(1978)	(1997)	(2000)
Min	8.13	8.75	9.78	9.28	9.19	10.4	9.06	8.95	8.11	7.80	6.54	6.77
(WY)	(1983)	(1982)	(1986)	(1981)	(2002)	(2002)	(1985)	(1985)	(1986)	(1985)	(1995)	(1995)

01410150 EAST BRANCH BASS RIVER NEAR NEW GRETN, NJ—Continued

SUMMARY STATISTICS

	Calendar Year 2005		Water Year 2006		Water Years 1978 - 2006	
Annual total	5,308.6		5,586.6			
Annual mean	14.5		15.3		16.1	
Highest annual mean					25.3	1998
Lowest annual mean					9.60	1985
Highest daily mean	39	Apr 9	48	Sep 3	533	Aug 21, 1997
Lowest daily mean	8.9	Sep 26	8.9	Oct 1 - 4	4.8	Sep 15, 1995
Annual seven-day minimum	8.9	Sep 28	8.9	Oct 1	5.0	Sep 10, 1995
Maximum peak flow			63	Sep 2	^a 1,130	Aug 21, 1997
Maximum peak stage			5.16	Sep 2	7.28	Aug 21, 1997
Instantaneous low flow			8.9	Oct 1 - 6	4.7	Sep 15, 1995
Annual runoff (cfsm)	1.79		1.89		1.98	
Annual runoff (inches)	24.35		25.63		26.94	
10 percent exceeds	19		21		26	
50 percent exceeds	14		14		14	
90 percent exceeds	9.5		10		9.0	

^a From rating curve extended above 200 ft³/s extended by logarithmic extrapolation.



01410150 EAST BRANCH BASS RIVER NEAR NEW GREYNA, NJ—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 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: Undeveloped Land Use Indicator and Trace Element Assessment (303d) special study site, New Jersey Department of Environmental Protection (NJDEP) Management Area 14. The sample on June 26 was for the trace element assessment (303d).

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, ammonia+organic nitrogen in bed sediment, phosphorous in bed sediment, 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	Sample type	Instan- taneous dis- charge, cfs (00061)	Turbdty white light, det ang 90+/-30 corrctd NTRU (63676)	UV absorb- ance, 254 nm, wat flt units /cm (50624)	UV absorb- ance, 280 nm, wat flt units /cm (61726)	Baro- metric pres- sure, mm Hg (00025)	Dis- solved oxygen, mg/L (00300)	Dis- solved oxygen, percent of sat- uration (00301)	pH, water, unfltrd field, std units (00400)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Temper- ature, air, deg C (00020)
Nov												
17...	1030	Environmental	14	.7	.134	.106	768	8.3	74	4.4	44	8.0
Feb												
15...	1100	Environmental	19	.5	.240	.187	770	10.7	81	4.3	54	8.0
May												
24...	1000	Environmental	12	.5	.172	.134	765	8.0	76	4.3	45	19.0
Jun												
26...	0845	Trip Blank	--	--	--	--	--	--	--	--	--	--
26...	0900	Field Blank	--	--	--	--	--	--	--	--	--	--
26...	0930	Environmental	21	.9	--	--	764	5.7	61	4.1	54	23.0
Aug												
14...	1030	Environmental	10	.6	.090	.072	765	7.0	72	4.4	34	30.0

01410150 EAST BRANCH BASS RIVER NEAR NEW GRETN, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Part 2 of 5

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

Date	Temperature, water, deg C (00010)	Hard- ness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnes- ium, water, fltrd, mg/L (00925)	Potas- sium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	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)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, sus- pended, mg/L (00530)
Nov 17...	10.7	3	.44	.521	.57	3.07	--	5.36	<.10	8.5	4.93	24	1
Feb 15...	4.1	3	.48	.554	.46	4.36	--	6.79	<.10	6.4	7.42	36	1
May 24...	13.2	3	.43	.482	.44	4.00	--	6.56	<.10	5.4	5.59	27	3
Jun 26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	<.02	<.008	--	--	--	--	--	--	--	--	--
26...	19.5	3	.48	.529	--	--	--	--	--	--	--	--	--
Aug 14...	16.4	2	.34	.378	.50	2.76	<5	4.96	<.10	9.0	3.11	30	<1

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Part 3 of 5

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

Date	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Partic- ulate nitro- gen, susp, water, mg/L (49570)	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)	Arsenic water, fltrd, ug/L (01000)
Nov 17...	.10	.022	<.06	<.02	E.004	<.004	E.003	.3	<.1	.3	2.7	<1.0	--
Feb 15...	.13	.035	<.06	<.02	E.005	<.004	<.004	.2	<.1	.2	4.6	<1.0	--
May 24...	.12	.015	<.06	.02	.073	E.003	E.003	.3	<.1	.3	3.6	<1.0	--
Jun 26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	<.12
26...	--	--	--	--	--	--	--	--	--	--	--	--	.31
Aug 14...	E.08	.024	<.06	<.02	E.007	<.004	.012	.1	<.1	.1	1.6	<1.0	--

01410150 EAST BRANCH BASS RIVER NEAR NEW GRETN, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Part 4 of 5

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

Date	Arsenic water, unfltrd ug/L (01002)	Boron, water, fltrd, ug/L (01020)	Cadmium water, fltrd, ug/L (01025)	Cadmium water, unfltrd ug/L (01027)	Chrom- ium, water, fltrd, ug/L (01030)	Chrom- ium, water, unfltrd	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd	Lead, water, fltrd, ug/L (01049)	Lead, water, unfltrd	Mercury water, fltrd, ug/L (71890)	Mercury water, unfltrd	Nickel, water, fltrd, ug/L (01065)
						recover- able, ug/L (01034)		recover- able, ug/L (01042)		recover- able, ug/L (01051)		recover- able, ug/L (71900)	
Nov 17...	--	9.0	--	--	--	--	--	--	--	--	--	--	--
Feb 15...	--	8.0	--	--	--	--	--	--	--	--	--	--	--
May 24...	--	9.0	--	--	--	--	--	--	--	--	--	--	--
Jun 26...	<.12	--	--	<.04	--	.09	--	<.6	--	<.06	--	<.010	--
26...	--	--	<.04	--	E.03	--	<.4	--	<.08	--	<.010	--	<.06
26...	.37	--	.06	.04	.21	E.25	.7	E.6	1.33	1.39	<.010	E.005	1.23
Aug 14...	--	8.2	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Part 5 of 5

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

Date	Nickel, water, unfltrd recover- able, ug/L (01067)	Selen- ium, water, fltrd, ug/L (01145)	Selen- ium, water, unfltrd ug/L (01147)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd
					recover- able, ug/L (01092)
Nov 17...	--	--	--	--	--
Feb 15...	--	--	--	--	--
May 24...	--	--	--	--	--
Jun 26...	<.16	--	<.08	--	<2
26...	--	<.08	--	<.6	--
26...	1.10	.15	.18	6.8	5
Aug 14...	--	--	--	--	--

01410150 EAST BRANCH BASS RIVER NEAR NEW GRETN, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Part 1 of 4

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

Date	Time	pH bed sedimnt std units (70310)	Ammonia + org-N, bed sed total, mg/kg as N (00626)	Phos- phorus, bed sedimnt total, mg/kg (00668)	Total carbon, bed sedimnt total, g/kg (00693)	Inor- ganic carbon, bed sedimnt total, g/kg (00686)	Arsenic bed sedimnt recover- able, ug/g (64847)	Cadmium bed sedimnt recover- able, ug/g (01028)	Chrom- ium, bed sedimnt recover- able, ug/g (01029)	Cobalt bed sedimnt recover- able, ug/g (01038)	Copper, bed sedimnt recover- able, ug/g (01043)	Iron, bed sedimnt total, ug/g (01170)	Lead, bed sedimnt recover- able, ug/g (01052)
Aug 14...	1030	4.87	80	430	1.2	.6	<.1	<.001	1.3	.080	<2	280	2.6

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Part 2 of 4

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

Date	Mangan- ese, bed sedimnt recover- able, ug/g (01053)	Mercury bed sedimnt recover- able, ug/g (71921)	Nickel, bed sedimnt recover- able, ug/g (01068)	Sele- nium, bed sedimnt recover- able, ug/g (64848)	Zinc, bed sedimnt recover- able, ug/g (01093)	1,2-Di- methyl- naphth- alene, bed sed <2 mm, ug/kg (49403)	1,6-Di- methyl- naphth- alene, bed sed <2 mm, ug/kg (49404)	1Methyl -9H- fluor- ene, bed sed <2 mm, ug/kg (49398)	1- Methyl- phenan- threne, bed sed <2 mm, ug/kg (49410)	1- Methyl- pyrene, bed sed <2 mm, wsv nat ug/kg (49388)	236Tri- methyl- naphth- alene, bed sed <2 mm, ug/kg (49405)	2,6-Di- methyl- naphth- alene, bed sed <2 mm, ug/kg (49406)	2-Ethyl naphth- alene bed sed <2 mm wsv nat ug/kg (49948)
Aug 14...	1.5	.012	.310	<.1	<3.1	<51	<51	E11	E26	E25	E9	<51	<51

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Part 3 of 4

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

Date	2- Methyl- anthra- cene, bed sed <2 mm, ug/kg (49435)	4H-Cyc- lopenta- -[def]- phenan- threne, bs <2mm ug/kg (49411)	9H- Fluor- ene, bed sed <2 mm, wsv nat ug/kg (49399)	Ace- naphth- ene, bed sed <2 mm, wsv nat ug/kg (49429)	Ace- naphth- ylene, bed sed <2 mm, wsv nat ug/kg (49428)	Anthra- cene, bed sed <2 mm, wsv nat field, ug/kg (49434)	Benzo- [a]- anthra- cene, bed sed <2 mm, ug/kg (49436)	Benzo- [a]- pyrene, bed sed <2 mm, wsv nat ug/kg (49389)	Benzo- [b]- fluor- anthene bed sed <2 mm ug/kg (49458)	Benzo- [ghi]- peryl- ene, bed sed <2 mm, ug/kg (49408)	Benzo- [k]- fluor- anthene bed sed <2 mm ug/kg (49397)	Chry- sene, bed sed <2 mm, wsv nat field, ug/kg (49450)	Dibenzo -[a,h]- anthra- cene, bed sed <2 mm, ug/kg (49461)
Aug 14...	E25	E29	E13	E5	E27	55	110	100	160	E63	55	120	E28

01410150 EAST BRANCH BASS RIVER NEAR NEW GREYNA, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Part 4 of 4

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

Date	Fluor- anthene bed sed <2 mm wsv nat field, ug/kg (49466)	Indeno- [1,2- 3-cd]- pyrene, bed sed <2 mm ug/kg (49390)	Iso- phorone bed sed <2 mm, wsv nat field, ug/kg (49400)	Naphth- alene, bed sed <2 mm wsv nat ug/kg (49402)	PCBs, bed sedimnt ug/kg (39519)	p- Cresol, bed sed <2 mm, wsv nat field, ug/kg (49451)	Phenan- threne, bed sed <2 mm, wsv nat field, ug/kg (49409)	Phenan- thri- dine, bed sed <2 mm, wsv nat field, ug/kg (49393)	Pyrene, bed sed <2 mm, wsv nat field, ug/kg (49387)	Bed sedi- ment, dry svd sve dia percent <.063mm (80164)	Bed sedi- ment, falidia dst wat percent <.004mm (80157)
Aug 14...	310	E68	<51	E3	<5.00	<51	87	<51	290	.2	.1

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

[Remark codes: <, less than.]

Date	Time	Instan- taneous dis- charge, cfs (00061)	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...	1140	11	12.5	<10	<10	<20
10...	1130	11	14.2	<10	<10	<20
17...	1105	16	14.3	<10	10	<20
24...	1145	12	14.2	<10	<10	<20
31...	1045	11	18.6	<10	<10	<20