Water-Data Report 2012

01466900 GREENWOOD BRANCH AT NEW LISBON, NJ

DELAWARE RIVER BASIN

LOCATION.--Lat 39°57′22″, long 74°37′40″ referenced to North American Datum of 1983, Pemberton Township, Burlington County, NJ, Hydrologic Unit 02040202, on right bank, 50 ft upstream of bridge on Fourmile Road (County Route 646), 0.1 mi south of New Lisbon, 0.7 mi upstream from mouth, and 3.1 mi east of Pemberton.

DRAINAGE AREA.--77.9 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Occasional miscellaneous discharge measurements, water years 1954, 1973. May 1998 to current year.

REVISED RECORDS.--WDR NJ-03-1: 1998 (M), 2003. WDR NJ-04-1: 2003 (M)

GAGE.--Water-stage and precipitation recorder. Datum of gage is 34.18 ft above NAVD of 1988.

REMARKS.--Records fair, except for estimated daily discharges, which are poor. Water diverted for water supply upstream of gage. Several measurements of water temperature were made during the year. Satellite telemetry at station.

Suggested citation: U.S. Geological Survey, 2014, Water-resources data for the United States, Water Year 2012: U.S. Geological Survey Water-Data Report WDR-US-2012, site 01466900, accessed at http://wdr.water.usgs.gov/wy2012/pdfs/01466900.2012.pdf

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012
DAILY MEAN VALUES

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	123	e175	146	163	133	115	75	71	59	46	38	32
2	127	167	139	150	124	122	78	73	59	42	42	31
3	125	153	131	140	118	125	78	78	59	37	40	31
4	116	131	124	129	115	126	74	80	55	39	38	51
5	106	113	111	121	113	126	70	76	51	46	38	88
6	99	107	103	118	112	122	66	72	50	42	64	143
7	95	104	110	118	112	117	63	67	51	36	85	e215
8	92	100	163	121	115	109	61	66	50	34	77	e200
9	90	97	e260	121	114	105	60	84	47	35	59	155
10	90	100	e220	118	113	102	60	123	44	33	52	147
11	88	115	163	114	113	98	61	140	41	33	57	135
12	86	109	146	131	119	92	60	136	41	31	63	109
13	89	95	134	174	116	90	59	113	60	30	62	90
14	97	89	126	e190	110	90	56	93	65	30	61	76
15	104	86	122	e160	108	87	55	88	56	32	61	69
16	102	88	120	164	108	85	57	91	48	39	59	65
17	96	99	119	156	108	83	52	84	44	37	51	63
18	89	109	115	154	107	82	59	75	42	33	46	62
19	86	109	113	151	105	79	82	67	40	36	44	91
20	98	104	111	149	103	79	95	64	39	38	40	108
21	106	100	110	143	106	79	80	65	37	41	37	109
22	106	100	110	140	109	79	77	68	44	36	36	99
23	108	131	130	139	102	76	124	71	111	31	33	93
24	112	e225	170	145	101	75	e210	86	e157	29	32	85
25	101	e220	e205	147	107	79	e165	82	132	28	31	77
26	89	e190	174	147	105	81	123	89	92	27	31	71
27	84	175	163	143	102	76	105	110	73	35	33	70
28	85	161	e245	152	100	73	94	119	59	42	38	70
29	92	150	e260	157	101	70	83	115	51	65	41	67
30	122	146	e235	152	---	68	75	89	50	53	38	65
31	161	---	e200	143	---	71	---	68	---	43	33	---
Total	3,164	3,848	4,778	4,450	3,199	2,861	2,457	2,703	1,807	1,159	1,460	2,767
Mean	102	128	154	144	110	92.3	81.9	87.2	60.2	37.4	47.1	92.2
Max	161	225	260	190	133	126	210	140	157	65	85	215
Min	84	86	103	114	100	68	52	64	37	27	31	31

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2012, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	68.9	87.0	106	117	117	137	137	89.5	69.9	59.9	64.5	68.3
Max	132	192	219	182	199	387	236	129	162	204	216	184
(WY)	(2006)	(2007)	(2010)	(2006)	(2010)	(2010)	(2010)	(2010)	(2003)	(2004)	(2011)	(2011)
Min	28.5	34.6	29.3	42.4	37.2	48.3	61.8	60.4	39.0	27.6	21.8	25.6
(WY)	(2009)	(1999)	(1999)	(2002)	(2002)	(2002)	(2002)	(2002)	(1999)	(2002)	(2002)	(2010)

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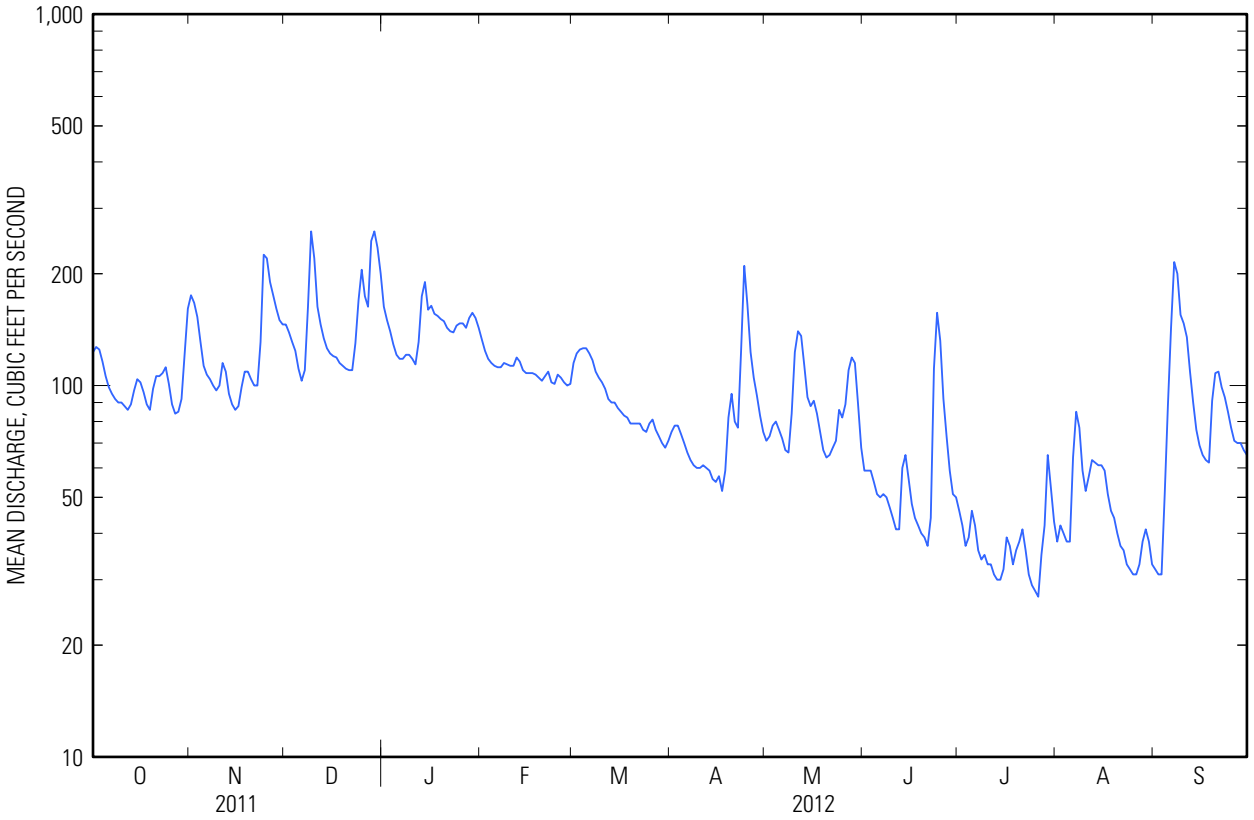
SUMMARY STATISTICS

	Calendar Year 2011		Water Year 2012		Water Years 1998 - 2012	
Annual total	43,552		34,653			
Annual mean	119		94.7		93.7	
Highest annual mean					140	2010
Lowest annual mean					40.7	2002
Highest daily mean	1,450	Aug 29	[a]260	Dec 9,29	[a]1,450	Aug 29, 2011
Lowest daily mean	30	Aug 3	27	Jul 26	17	Aug 4, 1999
Annual seven-day minimum	35	Jul 28	32	Jul 9	18	Aug 15, 2002
Maximum peak flow			[a]315	Dec 29	[a]1,800	Aug 29, 2011
Maximum peak stage			2.87	Many days	9.87	Aug 29, 2011
Instantaneous low flow			25	Jul 26	15	Aug 16, 2002
10 percent exceeds	197		152		163	
50 percent exceeds	103		90		79	
90 percent exceeds	40		38		32	

[a] Estimated.



01466900 GREENWOOD BRANCH AT NEW LISBON, NJ—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water year 2001 to current year.

REMARKS.--Cooperative Network Site Descriptor: Undeveloped Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 19.

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. Analysis of the split and concurrent replicate samples was performed by the Laboratory Branch of the U.S. EPA, Region II, Division of Environmental Science and Assessment.

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 1 of 5

[%, percent; ANC, acid neutralizing capacity; $CaCO_3$, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO_2, silicon dioxide; cm, centimeter; ft^3/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)
11-16-2011	**0930**	759	14.0	0.440	0.344	87	8.7	82	5.8
02-02-2012	**1000**	762	6.0	.435	.340	124	10.1	83	5.8
05-11-2012	**0930**	761	12.0	.679	.535	141	7.0	71	5.2
08-01-2012	**1000**	758	24.0	.503	.403	39	5.9	70	5.7

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 2 of 5

[%, percent; ANC, acid neutralizing capacity; $CaCO_3$, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO_2, silicon dioxide; cm, centimeter; ft^3/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	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)
11-16-2011	**0930**	65	11.8	3.4	98	69	14.0	8.0	3.52
02-02-2012	**1000**	75	7.3	2.8	57	< 38	9.64	< 1.0	2.35
05-11-2012	**0930**	56	15.3	4.6	40	< 29	7.90	3.0	1.86
08-01-2012	**1000**	66	23.0	5.1	46	66	10.3	2.0	2.42

01466900 GREENWOOD BRANCH AT NEW LISBON, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 3 of 5

[%, percent; ANC, acid neutralizing capacity; $CaCO_3$, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO_2, silicon dioxide; cm, centimeter; ft^3/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 (pH 4.5) titration, laboratory, mg/L as $CaCO_3$ (90410)	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)
11-16-2011	0930	1.26	1.55	11.2	0.87	0.70	34.9	< .04	< .03	6.02
02-02-2012	1000	.918	.90	7.31	< 1.74	.43	13.0	< .04	< .03	4.83
05-11-2012	0930	.790	.96	5.82	< 1.74	1.20	9.44	< .04	< .03	3.67
08-01-2012	1000	1.03	1.25	7.19	1.20	.63	11.8	< .04	< .03	34.5

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 4 of 5

[%, percent; ANC, acid neutralizing capacity; $CaCO_3$, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO_2, silicon dioxide; cm, centimeter; ft^3/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	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)
11-16-2011	0930	8.31	0.37	0.024	0.070	0.025	0.018	0.032	0.44	0.47
02-02-2012	1000	7.25	.29	.054	.043	< .017	.014	.021	.33	< .35
05-11-2012	0930	5.04	.38	.030	.067	.061	.026	.064	.44	.51
08-01-2012	1000	7.03	.48	.044	.099	.053	.034	.111	.58	.63

01466900 GREENWOOD BRANCH AT NEW LISBON, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 5 of 5

[%, percent; ANC, acid neutralizing capacity; $CaCO_3$, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO_2, silicon dioxide; cm, centimeter; ft^3/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	Aluminum, water, filtered, µg/L (01106)	Iron, water, filtered, µg/L (01046)	Organic carbon, suspended sediment, total, mg/L (00689)	Organic carbon, water, filtered, mg/L (00681)
11-16-2011	**0930**	198	959	0.69	9.78
02-02-2012	**1000**	--	--	.43	7.94
05-11-2012	**0930**	--	--	1.20	11.0
08-01-2012	**1000**	--	--	.63	9.30