

Water-Data Report 2011

01388000 RAMAPO RIVER AT POMPTON LAKES, NJ

PASSAIC RIVER BASIN

LOCATION.--Lat 40°59'31", long 74°16'48" referenced to North American Datum of 1983, Pompton Lakes Borough, Passaic County, NJ, Hydrologic Unit 02030103, on left bank 50 ft upstream from bridge on Paterson-Hamburg Turnpike in Pompton Lakes, 400 ft downstream of Pompton Lakes Dam, and 2.0 mi upstream from mouth.

DRAINAGE AREA.--160 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1921 to current year.

REVISED RECORDS.--WSP 1552: 1922(M), 1924-25, 1929-31(M), 1934-35(M). WRD-NJ 1970: 1968-69. WRD-NJ 1988: 1984(M).

GAGE.--Water-stage recorder, water-quality monitor, and concrete weir. Datum of gage is 171.35 ft above NGVD of 1929. Prior to Nov 1, 2004, gage located on right bank 400 feet upstream of current location, above dam, at datum 19.61 ft higher. Prior to Oct 1, 1981, at datum 29.61 ft higher.

REMARKS.--Records good. Diversion at lake just upstream of gage by North Jersey District Water Supply Commission to Wanaque Reservoir since December 1953 (see 01387990) for municipal supply. Significant regulation due to flood gate operations especially during periods of high flow. Flood gates installed in 2007 in the dam on Pompton Lake, capacity, 300,000,000 gal. Several measurements of water temperature were made during the year. Satellite telemetry at gage.

01388000 RAMAPO RIVER AT POMPTON LAKES, NJ—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
DAILY MEAN VALUES

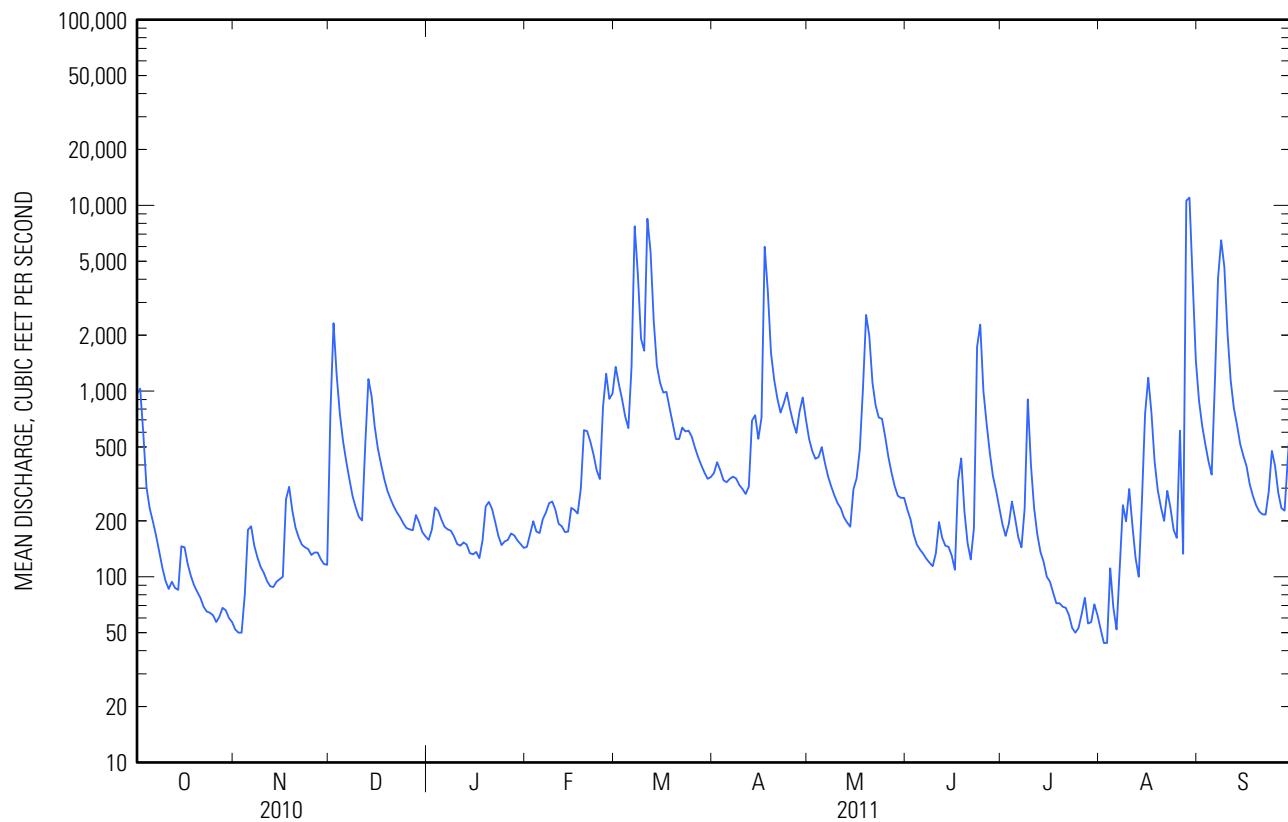
Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	966	52	749	158	145	1,350	362	553	230	192	52	890
2	1,030	50	2,320	179	170	1,090	414	476	204	166	44	652
3	588	50	1,210	236	199	906	374	432	169	192	44	517
4	303	80	751	227	175	730	331	441	149	254	111	418
5	234	179	537	204	172	632	323	499	140	206	68	355
6	199	187	419	186	204	1,350	337	410	133	163	52	1,090
7	167	147	335	180	222	7,710	346	347	125	144	112	4,030
8	137	127	272	177	249	4,230	338	306	119	232	243	6,490
9	112	113	236	165	254	1,910	312	274	114	902	199	4,660
10	95	105	210	150	229	1,650	297	249	134	398	297	2,050
11	86	95	201	147	193	8,470	279	234	197	234	189	1,140
12	94	89	512	153	187	5,630	306	209	162	169	126	809
13	87	88	1,160	149	174	2,390	693	196	147	136	100	656
14	85	94	939	134	175	1,370	741	186	145	120	256	519
15	146	97	641	132	235	1,110	553	296	130	100	755	448
16	144	100	488	136	229	982	718	339	109	94	1,180	394
17	117	261	403	126	219	990	5,980	483	328	82	764	315
18	101	305	336	157	298	812	3,430	1,030	434	72	418	273
19	90	227	290	239	616	668	1,600	2,570	226	72	292	243
20	83	184	262	253	608	552	1,150	1,980	152	69	237	225
21	77	163	239	232	535	551	912	1,110	124	68	200	217
22	69	149	222	197	456	636	766	837	182	62	290	216
23	65	144	209	166	375	606	856	720	1,730	53	235	287
24	64	141	194	148	336	612	981	709	2,280	50	179	476
25	62	131	183	155	820	568	801	570	1,000	53	162	395
26	57	135	180	158	1,240	496	676	444	670	63	611	284
27	61	135	178	171	908	441	595	364	468	77	133	234
28	68	124	215	167	970	399	776	308	349	56	10,600	227
29	66	117	196	157	---	364	923	273	291	57	11,000	427
30	60	116	174	150	---	337	705	266	236	71	3,980	773
31	57	---	165	143	---	344	---	266	---	62	1,470	---
Total	5,570	3,985	14,426	5,332	10,593	49,886	26,875	17,377	10,877	4,669	34,399	29,710
Mean	180	133	465	172	378	1,609	896	561	363	151	1,110	990
Max	1,030	305	2,320	253	1,240	8,470	5,980	2,570	2,280	902	11,000	6,490
Min	57	50	165	126	145	337	279	186	109	50	44	216

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 2011, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	166	269	342	328	347	566	513	337	216	133	142	158
Max	1,283	954	1,181	1,035	838	1,670	1,465	1,195	973	895	1,110	990
(WY)	(2006)	(1933)	(1997)	(1979)	(1970)	(1936)	(1983)	(1989)	(1972)	(1945)	(2011)	(2011)
Min	13.6	20.5	12.8	24.7	12.9	31.9	24.9	72.0	39.9	5.89	6.17	10.8
(WY)	(1981)	(2002)	(1981)	(2002)	(2002)	(2002)	(1985)	(1965)	(1965)	(1985)	(1985)	(1964)

01388000 RAMAPO RIVER AT POMPTON LAKES, NJ—Continued**SUMMARY STATISTICS**

	Calendar Year 2010	Water Year 2011			Water Years 1922 - 2011	
Annual total	121,890		213,699			
Annual mean	334		585		293	
Highest annual mean					585	2011
Lowest annual mean					61.9	2002
Highest daily mean	9,750	Mar 14	11,000	Aug 29	11,000	Aug 29, 2011
Lowest daily mean	16	Aug 14	44	Aug 2	0.00	Oct 1, 1922
Annual seven-day minimum	18	Aug 8	55	Jul 28	0.00	Dec 1, 1980
Maximum peak flow			17,800	Aug 28	17,800	Aug 28, 2011
Maximum peak stage			22.61	Aug 28	22.61	Aug 28, 2011
Instantaneous low flow			0.87	Aug 27	0.00	Mar 30, 2002
10 percent exceeds	748		1,050		651	
50 percent exceeds	156		235		166	
90 percent exceeds	26		84		35	



01388000 RAMAPO RIVER AT POMPTON LAKES, NJ—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1923, 1962-67, 1982, 1987 to current year.

NUTRIENT AND INORGANIC CHEMICAL DATA: Water years 1923, 1962-67, 1982, 1987-96.

PERIOD OF DAILY RECORD.--

DISSOLVED OXYGEN, in mg/L: April 1989 to current year.

DISSOLVED OXYGEN, in Percent of Saturation: June 2000 to current year.

pH: September 2005 to current year.

SPECIFIC CONDUCTANCE: April 1989 to current year.

WATER TEMPERATURE: April 1989 to current year.

INSTRUMENTATION.--Water-quality monitor since April 1989, pumping system, data recorded hourly.

REMARKS.--Post-Hurricane Synoptic for bacteria concentrations included stations 01381900, 01388000, 01388500, 01389500, 01389880, and 01391500.

At the same time, 01388000 was sampled for concentrations of volatile organic compounds.

Prior to Nov 1, 2004, stage was measured on the right bank above dam, 400 ft upstream of current location. Nutrient and inorganic chemical data from 1987-96 was collected at the same location; data from earlier years probably was collected at the bridge, 450 ft below dam. Temporary interruptions in the daily record were due to instrument or pumping system malfunction. The dam is normally top spilling but intermittent flood gate operation, which began during calendar year 2007, releases water from the bottom.

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 -) or 3% of the measured value; Dissolved Oxygen, the greater of 0.3 mg/L (+ or -) or 5% 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 - SPECIFIC CONDUCTANCE: Jul 7 to Aug 22. DISSOLVED OXYGEN: Oct 1-13, Jan 6 to Feb 4, Apr 4 to May 13, and Aug 3-22. pH: Nov 12 to Dec 8, Jan 6 to Apr 4, May 13 to June 15, July 7 to Aug 3, and Aug 22 to Sep 7.

COOPERATION.--Determination of concentrations of E. coli and total coliform bacteria was performed by the NJ Department of Health and Senior Services, Sanitary Bacteriology Laboratory.

Continuous records were collected in cooperation with the North Jersey District Water Supply Commission.

EXTREMES FOR PERIOD OF DAILY RECORD.--

DISSOLVED OXYGEN, in mg/L: Maximum, 15.7 mg/L, Mar 9, 2007; minimum, 4.5 mg/L, Aug 4, 1999.

DISSOLVED OXYGEN, in Percent of Saturation: Maximum, 130 %, Jul 21, 2008; minimum, 64 %, Apr 17, 2007.

pH: Maximum, 10.4 standard units, Jul 31, 2008; minimum, 6.4 standard units, Nov 30, 2007 and Jan 16, 2010.

SPECIFIC CONDUCTANCE: Maximum, 1,120 microsiemens/cm, Feb 25, 26, 2010; minimum, 74 microsiemens/cm, Aug 29, 2011.

WATER TEMPERATURE: Maximum, 31.7°C, Jul 22, 2011; minimum, 0.0°C, on several days during winters.

EXTREMES FOR CURRENT YEAR.--

DISSOLVED OXYGEN, mg/L: Maximum, 14.4 mg/L, Jan. 31; minimum, 6.2 mg/L, July 22, 23, 24.

DISSOLVED OXYGEN, in Percent of Saturation: Maximum, 107 %, Aug. 1; minimum, 80 %, Aug. 27.

pH: Maximum, 9.4 standard units, July 1, 5; minimum, 6.5 standard units, Feb. 18.

SPECIFIC CONDUCTANCE: Maximum, 1,060 microsiemens/cm, Feb. 9; minimum, 74 microsiemens/cm, Aug. 29.

WATER TEMPERATURE: Maximum, 31.7°C, July 22; minimum, 0.5°C, Jan. 28, 29, 30, 31.

01388000 RAMAPO RIVER AT POMPTON LAKES, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER
2011

[MF, membrane filter; col/100 mL, colonies per 100 milliliters; <, less than]

Date	Sample start time	Escherichia coli, m-TEC	Total coliform, water, most probable number per 100
		Sample Date col/100 mL (31633)	water, col/100 mL (31686) milliliters
08-31-2011	1250	< 1,000	2,300
09-01-2011	1010	70	7,900

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 1 of 8

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

Date	Sample start time	1,2-Dichloro-ethane-d4, surrogate, Schedule 2090, water, unfiltered, percent recovery (99832)	1-Bromo-4-fluoro-benzene, surrogate, VOC schedules, water, unfiltered, percent recovery (99834)	Toluene-d8, surrogate, Schedule 2090, water, unfiltered, percent recovery (99833)	1,2,3-Tri-chloro-propane, water, unfiltered, percent recovery; (77443)	Dibromo-3-chloro-propane, water, unfiltered, recoverable, µg/L (82625)	1,2-Dibromo-ethane, water, unfiltered, recoverable, µg/L (77651)	1,2-Dichloro-ethane, water, unfiltered, recoverable, µg/L (77103)	1,2-Dichloro-propane, water, unfiltered, recoverable, µg/L (34541)	1,3-Dichloropropane, water, unfiltered, recoverable, µg/L (77173)
09-01-2011	1010	137	77.6	86.2	< .2	< 0.5	< .2	< .2	< .1	< .2

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 2 of 8

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

Date	Sample start time	1,4-Dichlorobenzene, water, unfiltered, recoverable, µg/L (34571)	Acrylo-nitrile, water, unfiltered, recoverable, µg/L (34215)	Bromo-methane, water, unfiltered, recoverable, µg/L (34413)	cis-1,3-Di-chloro-propene, water, unfiltered, recoverable, µg/L (34704)	trans-1,3-Dichloro-propene, water, unfiltered, recoverable, µg/L (34699)	Tetra-chloro-ethane, water, unfiltered, recoverable, µg/L (77562)	1,1,1,2-Tetra-chloro-ethane, water, unfiltered, recoverable, µg/L (34506)	1,1,1-Tetra-chloro-ethane, water, unfiltered, recoverable, µg/L (34516)	1,1,2-Tri-chloro-ethane, water, unfiltered, recoverable, µg/L (77652)
09-01-2011	1010	< .1	< 2.5	< .4	< .2	< .2	< .2	< .1	< .2	< .1

01388000 RAMAPO RIVER AT POMPTON LAKES, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 3 of 8

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

Date	Sample start time	1,1,2-Tri-chloro-ethane, water, unfiltered, recoverable, µg/L (34511)	1,1-Di-chloro-ethane, water, unfiltered, recoverable, µg/L (34496)	1,1-Di-chloro-ethene, water, unfiltered, recoverable, µg/L (34501)	1,1-Di-chloro-propene, water, unfiltered, recoverable, µg/L (77168)	1,2,3-Tri-chloro-benzene, water, unfiltered, recoverable, µg/L (77613)	1,2,4-Tri-chloro-benzene, water, unfiltered, recoverable, µg/L (34551)	1,2,4-Tri-methyl-benzene, water, unfiltered, recoverable, µg/L (77222)	1,2-Dichloro-benzene, water, unfiltered, recoverable, µg/L (34536)	1,3,5-Tri-methyl-benzene, water, unfiltered, recoverable, µg/L (77226)
09-01-2011	1010	<.2	<.1	<.1	<.2	<.2	<.2	<.2	<.1	<.2

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 4 of 8

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

Date	Sample start time	1,3-Dichloro-benzene, water, unfiltered, recoverable, µg/L (34566)	2,2-Di-chloro-propane, water, unfiltered, recoverable, µg/L (77170)	2-Chloro-toluene, water, unfiltered, recoverable, µg/L (77275)	4-Chloro-toluene, water, unfiltered, recoverable, µg/L (77277)	4-Iso-propyl-toluene, water, unfiltered, recoverable, µg/L (77356)	Benzene, water, unfiltered, recoverable, µg/L (34030)	Bromo-benzene, water, unfiltered, recoverable, µg/L (81555)	Bromo-chloro-methane, water, unfiltered, recoverable, µg/L (77297)	Bromo-dichloro-methane, water, unfiltered, recoverable, µg/L (32101)
09-01-2011	1010	<.1	<.2	<.2	<.2	<.2	<.1	<.2	<.2	<.1

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 5 of 8

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

Date	Sample start time	Chloro-benzene, water, unfiltered, recoverable, µg/L (34301)	Chloro-ethane, water, unfiltered, recoverable, µg/L (34311)	Chloro-methane, water, unfiltered, recoverable, µg/L (34418)	cis-1,2-Di-chloro-ethene, water, unfiltered, recoverable, µg/L (77093)	Dibromo-chloro-methane, water, unfiltered, recoverable, µg/L (32105)	Dibromo-methane, water, unfiltered, recoverable, µg/L (30217)	Dichloro-difluoro-methane, water, unfiltered, recoverable, µg/L (34668)	Dichloro-methane, water, unfiltered, recoverable, µg/L (34423)	Ethyl-benzene, water, unfiltered, recoverable, µg/L (34371)
09-01-2011	1010	<.1	<.2	<.2	<.1	<.2	<.2	<.2	<.2	<.1

01388000 RAMAPO RIVER AT POMPTON LAKES, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 6 of 8

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

Date	Sample start time	Hexa-chloro-butadiene, water, unfiltered, recoverable, µg/L (39702)	Isopropyl-benzene, water, unfiltered, recoverable, µg/L (77223)	Methyl tert-butyl ether, water, unfiltered, recoverable, µg/L (78032)	Naphtha-lene, water, unfiltered, recoverable, µg/L (34696)	n-Butyl-benzene, water, unfiltered, recoverable, µg/L (77342)	n-Propyl-benzene, water, unfiltered, recoverable, µg/L (77224)	sec-Butyl-benzene, water, unfiltered, recoverable, µg/L (77350)	Styrene, water, unfiltered, recoverable, µg/L (77128)	tert-Butyl-benzene, water, unfiltered, recoverable, µg/L (77353)
09-01-2011	1010	<.2	<.2	<.2	<.5	<.2	<.2	<.2	<.1	<.2

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 7 of 8

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

Date	Sample start time	Tetra-chloro-ethene, water, unfiltered, recoverable, µg/L (34475)	Tetra-chloro-methane, water, unfiltered, recoverable, µg/L (32102)	Toluene, water, unfiltered, recoverable, µg/L (34010)	trans-1,2-Dichloro-ethene, water, unfiltered, recoverable, µg/L (34546)	Tribromo-methane, water, unfiltered, recoverable, µg/L (32104)	Trichloro-ethene, water, unfiltered, recoverable, µg/L (39180)	Trichloro-fluoro-methane, water, unfiltered, recoverable, µg/L (34488)	Trichloro-methane, water, unfiltered, recoverable, µg/L (32106)	Vinyl chloride, water, unfiltered, recoverable, µg/L (39175)
09-01-2011	1010	<.1	<.2	<.1	<.1	<.2	<.1	<.2	<.1	<.2

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 8 of 8

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

Date	Sample start time	Xylene (all isomers), water, unfiltered, recoverable, µg/L (81551)
09-01-2011	1010	<.2

01388000 RAMAPO RIVER AT POMPTON LAKES, NJ—Continued**DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	
October				November				December				January	
1	8.7	8.1	8.3	10.9	10.1	10.4	12.1	11.5	11.8	14.0	13.9	14.0	
2	8.9	8.7	8.8	11.3	10.4	10.8	11.9	11.3	11.6	13.9	13.8	13.9	
3	9.2	8.9	9.1	11.6	10.7	11.0	12.0	11.8	11.9	13.9	13.8	13.8	
4	9.4	9.2	9.3	11.1	10.7	10.9	12.2	12.0	12.2	13.8	13.5	13.6	
5	9.5	9.3	9.4	11.2	10.9	11.0	12.5	12.2	12.4	13.6	13.5	13.5	
6	9.5	9.3	9.4	11.3	11.1	11.2	12.7	12.5	12.6	---	---	---	
7	9.4	9.2	9.3	11.5	11.2	11.3	13.0	12.7	12.9	---	---	---	
8	9.5	9.3	9.4	11.6	11.2	11.4	13.5	13.0	13.3	---	---	---	
9	9.5	9.1	9.3	11.8	11.6	11.7	13.6	13.4	13.5	---	---	---	
10	9.5	9.2	9.3	11.9	11.6	11.7	13.5	13.4	13.4	---	---	---	
11	9.6	9.1	9.3	12.0	11.7	11.8	13.4	13.4	13.4	14.0	13.8	13.9	
12	9.5	9.0	9.2	12.1	11.7	11.8	13.4	13.2	13.3	13.8	13.7	13.8	
13	9.8	9.1	9.3	12.0	11.5	11.7	13.2	12.4	12.6	14.1	13.8	14.0	
14	9.7	9.2	9.4	12.0	11.6	11.8	13.4	12.5	12.9	14.2	14.0	14.1	
15	9.7	9.3	9.5	11.8	11.4	11.6	13.8	13.4	13.7	14.2	13.9	14.0	
16	---	---	---	11.6	11.2	11.4	13.9	13.8	13.8	14.2	13.8	14.0	
17	---	---	---	11.3	11.1	11.2	13.9	13.8	13.9	14.3	14.0	14.1	
18	---	---	---	11.3	11.1	11.2	13.9	13.8	13.9	14.1	13.7	13.9	
19	---	---	---	11.4	11.2	11.3	13.8	13.7	13.8	13.9	13.7	13.8	
20	10.6	10.0	10.2	11.4	11.3	11.3	13.7	13.6	13.7	14.0	13.7	13.9	
21	10.6	10.0	10.2	11.6	11.4	11.5	13.6	13.5	13.6	13.7	13.5	13.6	
22	10.8	10.1	10.4	11.6	11.3	11.4	13.6	13.5	13.5	13.9	13.7	13.8	
23	11.1	10.3	10.6	11.4	11.2	11.2	13.6	13.5	13.5	14.1	13.8	13.9	
24	10.9	10.3	10.6	11.6	11.2	11.4	13.7	13.6	13.6	14.3	14.0	14.2	
25	10.8	10.2	10.4	11.8	11.5	11.7	13.7	13.6	13.6	14.2	14.0	14.1	
26	10.6	9.8	10.2	11.7	11.5	11.6	13.6	13.4	13.5	14.1	13.9	14.0	
27	10.2	9.6	9.8	11.9	11.6	11.7	13.7	13.4	13.5	14.1	13.9	14.0	
28	10.2	9.5	9.8	12.3	11.8	12.1	13.9	13.7	13.8	14.1	14.0	14.0	
29	10.1	9.5	9.7	12.6	12.2	12.4	14.0	13.8	13.9	14.2	14.0	14.1	
30	10.4	9.7	10	12.4	12.1	12.3	14.1	13.9	14.0	14.2	14.0	14.1	
31	10.5	9.8	10.1	---	---	---	14.1	14.0	14.0	14.4	14.1	14.3	
Month	---	---	---	12.6	10.1	11.5	14.1	11.3	13.3	---	---	---	

01388000 RAMAPO RIVER AT POMPTON LAKES, NJ—Continued**DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
February				March				April				May
1	14.2	14.0	14.1	13.3	13.1	13.2	12.3	12.1	12.2	10.3	9.9	10.1
2	14.1	13.8	13.9	13.6	13.2	13.3	12.3	12.1	12.2	10.3	10.1	10.2
3	14.2	13.9	14.1	13.7	13.5	13.6	12.4	12.0	12.2	10.3	10.1	10.2
4	14.3	14.1	14.1	13.8	13.6	13.7	12.1	11.7	11.9	10.2	10.0	10.1
5	14.1	13.6	13.9	13.6	13.1	13.4	11.8	11.6	11.7	10.4	10.2	10.3
6	14.1	13.6	13.9	13.1	12.4	12.7	12.1	11.6	11.8	10.5	10.2	10.3
7	14.2	13.8	14.0	13.5	12.2	12.9	12.0	11.7	11.8	10.4	10.1	10.2
8	13.9	13.7	13.8	13.7	13.3	13.6	12.1	11.8	11.9	10.4	10.0	10.2
9	14.0	13.8	13.9	13.4	13.1	13.3	12.2	11.8	12.0	10.4	10.0	10.2
10	13.9	13.7	13.8	13.1	12.8	12.9	12.0	11.6	11.8	10.3	9.9	10.1
11	14.1	13.9	14.0	12.9	12.5	12.6	11.7	10.9	11.4	10.2	9.7	9.9
12	14.0	13.8	13.9	12.9	12.5	12.7	11.0	10.8	10.9	10.1	9.7	9.8
13	14.2	13.9	14.0	12.5	12.3	12.4	10.9	10.8	10.9	10.0	9.4	9.7
14	13.9	13.8	13.9	12.5	12.3	12.4	11.1	10.9	11.0	9.6	9.4	9.5
15	14.2	13.9	14.1	12.6	12.3	12.5	11.3	10.9	11.1	9.7	9.4	9.5
16	14.0	13.6	13.8	12.4	12.2	12.3	11.3	11.0	11.1	9.6	9.5	9.5
17	13.8	13.6	13.7	12.3	11.9	12.1	11.7	11.3	11.6	9.6	9.5	9.6
18	13.6	13.3	13.5	11.9	11.4	11.7	11.8	11.4	11.5	9.8	9.6	9.7
19	13.4	13.3	13.4	11.6	11.4	11.5	11.4	11.3	11.4	9.9	9.8	9.8
20	13.6	13.4	13.6	11.9	11.5	11.7	11.4	11.3	11.3	9.8	9.5	9.7
21	13.8	13.6	13.7	11.8	11.7	11.8	11.5	11.3	11.4	9.6	9.3	9.5
22	14.0	13.7	13.9	12.1	11.8	12.0	11.6	11.4	11.5	9.5	9.4	9.4
23	14.1	13.9	14.0	12.3	12.0	12.2	11.6	11.5	11.6	9.5	9.5	9.5
24	14.0	13.8	13.9	12.5	12.2	12.4	11.6	11.1	11.4	9.5	9.3	9.5
25	13.8	13.6	13.7	12.8	12.4	12.6	11.3	10.8	11.1	9.5	9.2	9.4
26	13.8	13.6	13.7	12.9	12.5	12.7	10.9	10.2	10.6	9.2	8.8	9.1
27	13.7	13.4	13.5	12.8	12.6	12.7	10.3	9.8	10.1	9.0	8.6	8.8
28	13.4	13.0	13.2	12.9	12.6	12.8	9.8	9.6	9.7	8.8	8.6	8.7
29	---	---	---	12.9	12.6	12.8	9.7	9.5	9.6	8.7	8.4	8.6
30	---	---	---	12.8	12.4	12.6	10.0	9.7	9.8	8.7	8.2	8.4
31	---	---	---	12.5	12.2	12.3	---	---	---	8.5	8.2	8.3
Month	14.3	13.0	13.8	13.8	11.4	12.6	12.4	9.5	11.3	10.5	8.2	9.6

01388000 RAMAPO RIVER AT POMPTON LAKES, NJ—Continued**DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
				June			July			August		
1	8.3	7.8	8.1	8.8	8.2	8.4	8.3	6.7	7.4	8.8	8.6	8.7
2	8.2	7.7	7.9	8.8	8.1	8.4	8.1	6.5	7.2	8.7	8.6	8.7
3	8.2	7.3	7.9	8.5	8.1	8.3	8.2	6.3	7.1	8.7	8.6	8.7
4	8.2	7.3	7.8	8.7	8.1	8.3	8.1	7.2	7.6	8.7	8.6	8.6
5	8.3	7.9	8.2	8.5	7.8	8.2	8.4	7.3	7.8	8.6	8.5	8.6
6	8.2	7.6	8.0	8.2	7.7	8.0	8.4	7.2	7.6	9.0	8.6	8.8
7	8.5	7.7	8.1	8.0	7.5	7.7	8.2	7.2	7.6	9.5	9.0	9.3
8	8.3	7.6	7.9	8.4	7.6	7.8	8.1	7.5	7.8	9.6	9.5	9.5
9	8.4	7.3	7.7	8.4	8.0	8.1	7.9	7.5	7.7	9.5	9.0	9.3
10	7.8	6.8	7.4	8.2	7.9	8.1	7.8	7.4	7.6	9.0	8.8	8.9
11	7.7	7.0	7.5	8.1	7.8	8.0	7.8	7.3	7.5	8.9	8.9	8.9
12	8.0	7.6	7.8	7.9	7.4	7.7	7.7	7.2	7.4	9.0	8.8	8.9
13	8.1	7.8	8.0	7.9	7.5	7.7	7.8	7.2	7.5	8.9	8.8	8.8
14	8.0	7.8	7.9	8.0	7.6	7.8	7.6	7.3	7.5	8.9	8.8	8.8
15	8.4	7.8	8.1	8.0	7.4	7.7	7.8	7.6	7.7	9.0	8.8	8.9
16	8.5	7.9	8.2	8.0	7.5	7.8	8.2	7.8	8.1	9.3	9.0	9.2
17	8.5	8.1	8.3	8.2	7.5	7.8	8.3	8.1	8.2	9.5	9.3	9.4
18	8.5	8.3	8.4	8.1	6.8	7.5	8.2	8.0	8.1	9.7	9.5	9.6
19	8.5	8.0	8.3	7.5	6.4	7.0	8.1	7.9	8.0	9.8	9.6	9.7
20	8.6	8.1	8.4	7.5	6.4	7.0	8.1	7.8	8.0	9.8	9.6	9.7
21	8.5	7.8	8.2	7.7	6.8	7.2	8.1	7.8	8.0	9.9	9.7	9.8
22	8.3	7.8	8.0	7.1	6.2	6.8	8.3	7.9	8.1	9.9	9.5	9.7
23	8.6	8.2	8.3	7.1	6.2	6.6	8.4	8.2	8.3	9.5	9.4	9.5
24	8.7	8.6	8.6	7.2	6.2	6.7	8.5	8.2	8.4	9.4	9.2	9.3
25	8.6	8.4	8.6	7.0	6.4	6.8	8.4	8.2	8.3	9.3	8.9	9.1
26	8.6	8.4	8.5	7.5	6.9	7.2	9.0	8.2	8.4	9.2	8.9	9.0
27	8.6	8.4	8.5	7.6	7.0	7.3	8.3	6.9	8.0	9.1	8.9	8.9
28	8.5	8.2	8.4	8.0	7.0	7.4	8.4	7.0	7.8	9.0	8.8	8.9
29	8.4	8.1	8.2	7.8	7.1	7.4	9.3	7.9	8.9	8.9	8.8	8.9
30	8.5	8.1	8.3	8.0	7.0	7.5	9.3	8.9	9.1	9.0	8.9	8.9
31	---	---	---	8.1	6.7	7.4	9.0	8.7	8.9	---	---	---
Month	8.7	6.8	8.1	8.8	6.2	7.6	9.3	6.3	7.9	9.9	8.5	9.1

01388000 RAMAPO RIVER AT POMPTON LAKES, NJ—Continued**DISSOLVED OXYGEN, WATER, UNFILTERED, PERCENT OF SATURATION
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	
October				November				December				January	
1	95	93	94	102	95	98	99	97	98	99	98	98	
2	96	95	96	104	96	99	99	97	98	98	98	98	
3	97	96	97	104	96	98	99	97	97	99	98	98	
4	97	97	97	99	95	97	97	96	96	99	97	98	
5	97	96	97	99	97	98	96	96	96	98	97	98	
6	97	96	97	100	97	98	96	96	96	---	---	---	
7	97	95	96	100	97	98	96	96	96	---	---	---	
8	98	96	97	97	96	96	98	96	97	---	---	---	
9	99	97	98	99	96	97	99	98	99	---	---	---	
10	99	96	97	100	97	98	100	99	99	---	---	---	
11	101	96	98	101	98	99	99	98	99	99	97	98	
12	103	96	99	101	99	100	98	96	97	98	97	97	
13	103	94	98	101	98	99	96	96	96	99	97	98	
14	99	93	95	101	98	99	97	96	96	100	98	99	
15	97	93	95	101	98	99	97	96	97	99	97	98	
16	---	---	---	100	97	98	98	97	97	99	97	98	
17	---	---	---	98	96	97	99	97	98	100	98	99	
18	---	---	---	98	97	98	99	98	99	98	96	97	
19	---	---	---	99	97	98	99	98	98	98	96	97	
20	101	95	97	98	96	97	98	98	98	99	97	98	
21	101	95	97	99	97	98	98	98	98	98	96	97	
22	102	96	98	98	96	97	98	98	98	99	97	97	
23	103	96	99	97	96	96	98	98	98	99	97	98	
24	104	97	99	99	96	97	99	98	98	100	98	99	
25	103	96	98	98	96	97	99	98	98	99	98	98	
26	102	95	98	97	95	96	98	96	97	99	97	98	
27	98	95	96	98	96	96	97	95	96	99	97	98	
28	100	95	96	100	97	98	97	96	97	99	97	97	
29	100	94	96	100	98	99	98	97	98	99	97	98	
30	100	94	96	99	98	98	99	98	98	99	98	98	
31	100	93	96	---	---	---	99	98	98	100	98	99	
Month	---	---	---	104	95	98	100	95	97	---	---	---	

01388000 RAMAPO RIVER AT POMPTON LAKES, NJ—Continued**DISSOLVED OXYGEN, WATER, UNFILTERED, PERCENT OF SATURATION
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
February				March				April				May
1	99	98	99	100	98	99	102	100	101	102	99	100
2	98	97	98	100	99	99	102	101	102	101	100	100
3	100	98	99	101	100	101	104	102	103	101	100	100
4	100	98	98	102	101	102	104	101	102	101	99	100
5	98	96	97	102	100	101	102	101	101	100	99	100
6	99	96	98	100	98	100	104	101	102	101	99	100
7	100	97	98	103	97	100	104	102	103	102	99	100
8	99	97	98	104	102	103	104	102	103	103	99	100
9	100	98	99	102	101	101	105	102	103	103	99	101
10	100	98	99	101	99	100	105	102	103	104	99	101
11	100	99	99	102	101	102	104	101	102	104	99	100
12	100	98	99	103	101	102	103	101	101	103	98	100
13	100	98	99	101	100	100	101	99	100	103	97	99
14	99	98	98	100	99	100	101	99	100	101	98	99
15	101	98	100	100	100	100	104	101	102	101	98	99
16	101	99	100	101	99	100	102	100	101	99	98	98
17	101	99	100	101	101	101	104	101	103	98	97	97
18	100	98	99	101	100	101	104	102	103	99	96	97
19	100	99	99	102	101	102	102	100	101	101	98	100
20	99	99	99	103	102	102	101	99	100	101	99	100
21	99	98	99	102	100	101	102	100	101	99	98	99
22	100	98	99	101	100	100	103	102	102	99	97	98
23	100	99	100	101	99	100	102	101	102	98	97	97
24	100	99	100	100	99	100	102	100	101	98	96	97
25	99	97	98	103	100	101	102	100	102	99	97	98
26	99	98	98	103	101	102	102	101	101	99	97	98
27	99	99	99	102	101	102	102	100	101	100	97	98
28	100	97	98	102	101	102	100	98	99	100	97	99
29	---	---	---	103	102	102	98	97	98	100	98	99
30	---	---	---	104	102	103	100	98	99	105	97	101
31	---	---	---	104	102	103	---	---	---	103	97	99
Month	101	96	99	104	97	101	105	97	101	105	96	99

01388000 RAMAPO RIVER AT POMPTON LAKES, NJ—Continued**DISSOLVED OXYGEN, WATER, UNFILTERED, PERCENT OF SATURATION
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
				June			July			August		
1	98	93	96	105	96	100	107	86	94	99	97	98
2	100	92	95	105	96	100	105	83	93	98	97	97
3	97	85	93	100	96	98	105	81	90	98	96	97
4	95	85	91	102	96	98	102	90	96	98	97	98
5	94	91	92	102	94	98	105	91	97	99	98	98
6	96	89	92	98	92	96	104	89	94	100	98	99
7	96	90	93	98	92	95	102	89	95	102	99	101
8	99	90	94	101	94	96	103	94	98	103	102	103
9	99	88	93	101	95	97	99	92	95	103	100	102
10	96	87	92	96	95	95	97	91	93	100	99	100
11	93	88	91	97	94	96	96	89	92	100	99	99
12	94	90	92	99	94	96	95	88	91	99	98	99
13	94	90	92	99	94	96	95	87	90	99	98	99
14	92	89	91	99	94	96	92	88	90	100	99	99
15	96	90	93	98	93	95	91	89	90	101	99	100
16	98	92	94	99	93	96	94	90	93	101	99	100
17	99	92	96	100	92	96	96	93	94	101	100	100
18	98	95	96	100	87	94	96	93	94	102	100	101
19	101	95	97	98	84	90	95	94	94	103	100	101
20	101	95	98	95	84	89	97	94	95	102	100	101
21	100	94	97	95	87	90	97	93	95	104	100	102
22	99	93	96	95	84	90	100	94	97	104	101	102
23	97	94	96	95	83	88	100	97	98	102	100	101
24	97	95	96	96	82	89	100	97	98	102	100	101
25	97	95	96	91	84	88	98	96	97	103	98	100
26	97	96	97	96	87	91	106	96	99	102	98	100
27	97	96	96	97	88	92	97	80	93	102	99	100
28	98	95	96	102	88	93	96	81	89	102	99	100
29	100	96	98	98	89	92	103	90	100	100	98	99
30	102	96	99	102	89	95	103	100	101	99	98	98
31	---	---	---	104	87	94	100	98	99	---	---	---
Month	102	85	95	105	82	94	107	80	95	104	96	100

01388000 RAMAPO RIVER AT POMPTON LAKES, NJ—Continued**PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Day	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median	
October				November				December				January	
1	7.9	7.6	7.8	8.8	8.4	8.6	7.6	7.3	7.4	7.5	7.1	7.4	
2	7.6	7.5	7.5	8.9	8.5	8.6	7.6	7.3	7.4	7.4	7.2	7.2	
3	7.6	7.5	7.5	8.8	8.5	8.6	7.4	7.3	7.4	7.6	7.3	7.5	
4	7.6	7.6	7.6	8.9	8.6	8.8	7.6	7.4	7.5	7.6	7.4	7.5	
5	7.6	7.6	7.6	8.8	8.4	8.7	7.7	7.6	7.7	7.7	7.4	7.6	
6	7.6	7.6	7.6	8.4	8.0	8.1	7.8	7.7	7.7	---	---	---	
7	7.6	7.6	7.6	8.1	8.0	8.0	7.8	7.8	7.8	---	---	---	
8	7.7	7.6	7.7	8.0	8.0	8.0	7.8	7.6	7.7	---	---	---	
9	7.9	7.7	7.8	8.2	8.0	8.1	7.7	7.6	7.6	---	---	---	
10	7.8	7.8	7.8	8.2	8.0	8.1	7.7	7.6	7.7	---	---	---	
11	8.1	7.8	7.9	8.3	8.0	8.1	7.6	7.5	7.6	7.7	7.6	7.6	
12	8.7	7.9	8.1	8.2	8.0	8.1	7.5	7.2	7.5	7.7	7.6	7.6	
13	8.8	8.1	8.3	8.0	7.8	8.0	7.6	7.3	7.4	7.7	7.6	7.7	
14	8.6	7.9	8.2	8.0	7.7	7.9	7.6	7.6	7.6	7.8	7.6	7.7	
15	8.5	8.1	8.2	8.0	7.8	7.8	7.6	7.6	7.6	7.8	7.6	7.7	
16	---	---	---	7.8	7.6	7.7	7.6	7.6	7.6	7.6	7.4	7.6	
17	---	---	---	7.6	7.4	7.6	7.6	7.5	7.6	7.7	7.5	7.6	
18	---	---	---	7.7	7.5	7.6	7.6	7.4	7.6	7.6	7.5	7.6	
19	---	---	---	7.7	7.6	7.6	7.6	7.5	7.6	7.5	7.2	7.4	
20	8.7	8.4	8.5	7.8	7.6	7.7	7.6	7.6	7.6	7.5	7.3	7.4	
21	8.9	8.5	8.6	7.8	7.5	7.6	7.7	7.5	7.6	7.5	7.4	7.4	
22	8.8	8.7	8.8	7.6	7.2	7.6	7.7	7.6	7.6	7.7	7.5	7.6	
23	8.8	8.7	8.7	7.4	7.2	7.3	7.7	7.6	7.7	7.7	7.6	7.7	
24	9.1	8.8	9.0	7.7	7.4	7.6	7.7	7.5	7.7	7.8	7.6	7.7	
25	9.1	8.5	9.0	7.7	7.6	7.7	7.7	7.6	7.7	7.6	7.4	7.6	
26	8.9	8.5	8.7	7.7	7.6	7.6	7.8	7.7	7.7	7.5	7.4	7.5	
27	8.8	8.2	8.5	7.8	7.7	7.7	7.9	7.8	7.8	7.5	7.4	7.5	
28	8.8	8.2	8.6	7.9	7.5	7.8	7.8	7.6	7.8	7.5	7.3	7.4	
29	8.8	8.7	8.7	7.9	7.5	7.8	7.7	7.5	7.6	7.5	7.3	7.4	
30	8.7	8.3	8.5	7.7	7.4	7.7	7.7	7.4	7.6	7.4	7.2	7.3	
31	8.6	8.3	8.4	---	---	---	7.6	7.3	7.5	7.5	7.3	7.4	
Max	---	---	---	8.9	8.6	8.8	7.9	7.8	7.8	---	---	---	
Min	---	---	---	7.4	7.2	7.3	7.4	7.2	7.4	---	---	---	

01388000 RAMAPO RIVER AT POMPTON LAKES, NJ—Continued**PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Day	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median	
February				March				April				May	
1	7.5	7.4	7.5	7.5	7.1	7.3	8.2	7.9	8.0	7.8	7.7	7.7	
2	7.5	7.3	7.4	7.6	7.1	7.5	8.1	7.6	8.0	7.8	7.7	7.8	
3	7.5	7.3	7.4	7.7	7.5	7.6	8.0	7.5	7.9	7.8	7.8	7.8	
4	7.7	7.4	7.6	7.7	7.4	7.6	8.4	7.9	8.1	7.9	7.8	7.8	
5	7.8	7.6	7.7	7.4	6.8	7.3	8.5	8.4	8.5	7.9	7.8	7.8	
6	7.6	7.1	7.6	7.1	6.8	6.9	8.5	8.3	8.4	7.9	7.9	7.9	
7	7.6	7.3	7.5	7.3	7.1	7.2	8.5	8.4	8.5	8.1	7.9	8.0	
8	7.8	7.4	7.6	7.3	7.0	7.2	8.6	8.3	8.5	8.2	7.9	8.0	
9	8.0	7.8	7.9	7.3	7.2	7.3	8.5	8.3	8.4	8.3	7.9	8.1	
10	8.0	7.7	7.8	7.4	7.3	7.3	8.6	8.4	8.5	8.4	8.1	8.2	
11	8.1	7.7	7.9	7.3	6.9	7.1	8.7	8.4	8.5	8.5	8.1	8.3	
12	8.0	7.8	7.9	7.2	6.8	7.1	8.5	8.3	8.4	8.4	8.1	8.2	
13	8.0	7.5	7.8	7.2	7.0	7.1	8.3	7.9	8.1	8.3	8.1	8.2	
14	7.6	7.0	7.5	7.3	7.2	7.2	7.9	7.8	7.8	8.4	8.0	8.2	
15	8.0	7.5	7.8	7.5	7.2	7.3	8.0	7.8	8.0	8.7	8.3	8.4	
16	8.0	7.4	7.8	7.5	7.3	7.3	8.0	7.8	7.9	8.4	7.9	8.0	
17	7.7	6.7	7.5	7.6	7.0	7.4	7.8	7.3	7.4	7.9	7.8	7.8	
18	7.6	6.5	7.2	7.4	6.7	7.2	7.4	7.3	7.4	7.8	7.6	7.7	
19	8.0	7.0	7.8	7.7	7.0	7.5	7.5	7.4	7.4	7.6	7.3	7.4	
20	8.0	7.5	8.0	7.7	7.3	7.6	7.6	7.5	7.5	7.4	7.3	7.3	
21	7.7	7.5	7.7	7.7	7.5	7.7	7.7	7.6	7.6	7.4	7.3	7.4	
22	7.9	7.4	7.8	7.7	7.5	7.6	7.7	7.6	7.7	7.4	7.4	7.4	
23	7.8	7.3	7.7	7.9	7.6	7.8	7.7	7.6	7.7	7.4	7.4	7.4	
24	7.8	7.4	7.7	7.9	7.6	7.8	7.7	7.6	7.6	7.4	7.4	7.4	
25	7.6	7.4	7.5	8.0	7.7	7.9	7.7	7.6	7.7	7.5	7.4	7.5	
26	7.6	7.1	7.5	8.0	7.9	8.0	7.8	7.6	7.7	7.6	7.5	7.5	
27	7.3	6.7	7.2	8.0	7.7	8.0	7.8	7.7	7.8	7.6	7.5	7.6	
28	7.3	7.0	7.2	8.0	7.7	7.9	7.7	7.6	7.7	7.8	7.6	7.6	
29	---	---	---	8.0	7.6	7.9	7.7	7.6	7.6	8.4	7.5	7.7	
30	---	---	---	8.0	7.3	7.8	7.7	7.6	7.7	9.2	7.8	8.5	
31	---	---	---	7.9	7.5	7.9	---	---	---	8.8	8.0	8.3	
Max	8.1	7.8	8.0	8.0	7.9	8.0	8.7	8.4	8.5	9.2	8.3	8.5	
Min	7.3	6.5	7.2	7.1	6.7	6.9	7.4	7.3	7.4	7.4	7.3	7.3	

01388000 RAMAPO RIVER AT POMPTON LAKES, NJ—Continued**PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Day	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
				June			July			August		
1	8.3	7.5	7.9	9.4	8.4	9.2	8.7	8.2	8.5	7.3	7.2	7.3
2	9.1	8.2	8.8	9.3	9.0	9.2	8.8	8.5	8.7	7.4	7.3	7.3
3	9.0	8.5	8.8	9.3	8.6	9.1	9.1	8.6	8.8	7.4	7.2	7.4
4	8.8	8.6	8.7	9.2	8.8	8.9	9.1	8.6	8.9	7.4	7.3	7.4
5	8.6	7.9	8.2	9.4	8.9	9.0	8.8	8.0	8.5	7.6	7.3	7.4
6	8.8	7.9	8.1	9.1	8.1	8.9	8.6	8.0	8.2	7.7	7.4	7.5
7	8.6	7.8	8.2	9.2	8.8	8.9	9.1	8.3	8.6	7.4	7.2	7.3
8	8.9	8.6	8.6	9.2	8.6	8.9	9.2	8.4	8.9	7.3	7.1	7.2
9	8.9	8.3	8.8	8.6	7.6	7.9	8.9	8.3	8.7	7.2	7.1	7.1
10	9.0	8.7	8.9	7.7	7.6	7.6	8.5	8.0	8.2	7.3	7.2	7.2
11	8.8	8.5	8.6	7.8	7.4	7.7	8.2	8.0	8.1	7.4	7.3	7.4
12	8.6	7.7	8.1	8.3	7.5	7.9	8.2	8.0	8.0	7.4	7.3	7.4
13	7.8	7.7	7.7	8.5	7.9	8.2	8.1	7.9	8.0	7.5	7.3	7.4
14	7.7	7.6	7.7	8.4	7.8	8.2	8.0	7.9	8.0	7.5	7.3	7.4
15	8.1	7.6	8.0	8.0	7.8	7.9	7.9	7.7	7.7	7.7	7.5	7.6
16	8.1	7.9	8.0	8.3	7.8	8.0	7.7	7.6	7.7	7.7	7.7	7.7
17	8.3	7.9	8.0	8.3	7.7	7.9	7.6	7.5	7.6	7.8	7.7	7.7
18	8.1	7.9	8.0	9.0	7.9	8.1	7.6	7.5	7.6	7.8	7.7	7.8
19	8.4	7.9	8.3	9.0	8.8	8.9	7.8	7.6	7.7	7.9	7.7	7.8
20	8.7	8.3	8.4	8.8	7.8	8.7	7.9	7.7	7.8	7.8	7.8	7.8
21	8.9	8.4	8.4	8.4	7.3	7.8	7.9	7.8	7.8	8.0	7.7	7.8
22	9.0	8.4	8.9	8.3	7.5	8.1	8.1	7.9	8.0	7.9	7.7	7.9
23	8.8	7.3	7.9	8.3	8.0	8.2	8.2	8.0	8.1	8.0	7.8	7.9
24	7.4	7.3	7.4	8.2	8.0	8.0	8.1	7.9	8.0	7.8	7.7	7.8
25	7.5	7.3	7.4	8.0	7.7	7.9	8.1	7.8	7.9	8.0	7.7	7.8
26	7.5	7.4	7.5	7.8	7.5	7.7	8.1	7.6	7.9	7.8	7.7	7.7
27	7.6	7.5	7.5	7.9	7.7	7.8	7.6	7.6	7.6	7.9	7.7	7.8
28	7.7	7.5	7.6	8.0	7.6	7.8	7.7	6.9	7.3	8.2	7.8	7.9
29	8.4	7.7	8.1	7.8	7.6	7.6	7.2	7.0	7.0	7.8	7.6	7.7
30	8.9	8.0	8.3	8.2	7.7	8.0	7.2	7.1	7.2	7.7	7.6	7.7
31	---	---	---	8.7	7.9	8.2	7.3	7.2	7.3	---	---	---
Max	9.1	8.7	8.9	9.4	9.0	9.2	9.2	8.6	8.9	8.2	7.8	7.9
Min	7.4	7.3	7.4	7.7	7.3	7.6	7.2	6.9	7.0	7.2	7.1	7.1

01388000 RAMAPO RIVER AT POMPTON LAKES, NJ—Continued**SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
October				November				December				January
1	608	391	539	535	533	534	416	381	407	407	399	403
2	391	327	359	538	535	537	381	169	230	424	407	416
3	327	279	292	541	538	540	181	169	172	439	424	432
4	290	279	285	541	534	537	201	181	190	464	439	449
5	292	287	289	544	535	538	220	201	211	485	464	476
6	309	292	298	555	544	552	241	220	232	---	---	---
7	328	309	316	565	554	561	258	241	250	---	---	---
8	341	328	334	562	543	551	271	257	265	---	---	---
9	357	341	350	546	543	545	283	270	276	---	---	---
10	368	357	363	543	539	541	301	283	294	---	---	---
11	376	366	371	540	536	538	316	301	309	502	496	500
12	388	376	381	536	517	529	334	316	325	509	502	506
13	395	388	391	518	508	513	334	248	292	515	509	512
14	409	395	400	509	505	507	248	218	227	525	515	520
15	432	409	417	505	497	502	234	218	225	531	525	529
16	---	---	---	497	492	495	242	233	237	544	531	539
17	---	---	---	502	484	491	257	242	248	548	544	546
18	---	---	---	487	484	486	277	257	267	555	546	548
19	---	---	---	484	446	468	294	277	285	568	553	558
20	499	496	497	446	417	429	310	294	301	669	568	615
21	501	499	500	417	405	408	318	310	314	839	669	750
22	505	500	503	410	404	407	327	318	323	867	839	861
23	510	505	508	404	394	399	341	327	334	863	841	849
24	511	508	509	396	392	393	350	341	346	852	840	845
25	517	511	513	392	391	392	358	350	354	858	850	855
26	521	516	518	393	390	391	371	358	364	853	839	845
27	527	521	524	394	391	392	382	371	376	839	798	820
28	529	523	526	397	394	396	390	382	386	798	762	779
29	529	526	528	402	397	400	399	389	394	762	738	751
30	532	529	530	407	401	403	401	399	400	738	734	737
31	533	532	532	---	---	---	399	396	398	740	735	738
Month	---	---	---	565	390	479	416	169	298	---	---	---

01388000 RAMAPO RIVER AT POMPTON LAKES, NJ—Continued**SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
February				March				April				May
1	739	735	737	406	364	386	521	513	517	334	325	328
2	735	732	733	364	348	354	514	507	510	349	332	342
3	732	723	727	348	344	345	510	504	508	362	348	355
4	772	725	747	360	347	353	504	495	500	379	361	370
5	917	772	830	367	360	364	507	499	503	391	379	386
6	974	917	957	376	336	369	507	500	504	391	386	388
7	977	967	972	336	139	191	500	494	498	399	387	392
8	1,050	973	1,010	226	145	188	494	487	489	408	398	402
9	1,060	1,040	1,050	270	225	248	490	487	489	417	408	411
10	1,050	1,040	1,050	300	270	288	488	484	485	431	417	424
11	1,050	1,020	1,040	300	139	182	495	486	492	442	430	437
12	1,020	983	1,000	206	140	172	498	493	496	457	442	450
13	983	960	971	259	206	233	494	469	486	474	457	466
14	960	921	939	294	259	278	469	402	426	479	473	476
15	921	843	884	326	294	310	404	387	395	480	474	477
16	843	794	811	343	326	335	387	365	381	488	478	484
17	794	764	779	356	340	350	367	148	198	490	471	485
18	764	733	742	364	348	356	193	148	168	471	351	421
19	733	672	710	380	361	371	233	191	212	351	187	256
20	672	591	625	390	379	384	263	230	247	194	176	183
21	591	516	551	416	389	403	286	262	276	223	194	209
22	516	483	494	480	416	439	310	283	297	248	222	236
23	489	484	486	496	477	487	327	310	320	266	248	256
24	496	484	490	504	476	485	329	314	322	295	266	279
25	566	496	508	537	504	519	317	314	315	308	295	301
26	573	454	512	543	533	537	332	316	323	324	307	315
27	454	415	432	548	534	541	345	332	337	345	322	335
28	415	394	402	548	540	544	357	345	352	368	345	359
29	---	---	---	540	532	536	358	327	342	389	365	380
30	---	---	---	532	528	530	327	319	322	405	382	391
31	---	---	---	529	520	524	---	---	---	436	405	418
Month	1,060	394	757	548	139	374	521	148	390	490	176	368

01388000 RAMAPO RIVER AT POMPTON LAKES, NJ—Continued**SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
				June			July			August		
1	449	435	443	355	329	344	569	557	562	266	231	249
2	447	441	444	375	353	362	576	557	567	292	264	276
3	456	445	448	402	375	386	574	555	565	316	292	303
4	465	456	460	428	402	412	562	553	559	341	316	330
5	477	465	471	449	419	436	587	554	567	360	341	353
6	483	476	478	466	449	457	586	576	580	377	330	364
7	490	482	485	462	456	460	579	553	569	330	168	216
8	508	489	495	467	460	464	576	563	570	168	132	144
9	523	504	510	471	332	399	578	558	572	164	135	145
10	533	521	526	332	311	318	565	526	551	210	164	187
11	534	513	525	323	317	319	526	494	511	240	210	227
12	557	534	544	331	321	326	494	463	479	272	240	256
13	559	549	554	336	330	332	467	444	460	299	272	285
14	559	553	555	346	336	340	448	416	439	323	299	310
15	554	547	549	363	346	353	417	363	400	342	323	330
16	547	539	544	369	357	360	363	232	292	359	342	351
17	548	525	537	404	369	384	232	199	207	372	359	362
18	546	484	522	408	390	397	222	203	212	384	372	378
19	484	463	470	418	390	400	244	222	234	414	384	399
20	463	449	456	458	415	430	270	244	256	436	414	426
21	463	456	459	487	444	461	301	270	288	451	430	439
22	470	461	464	517	468	484	322	300	309	467	440	454
23	473	219	421	516	502	507	342	321	334	476	458	465
24	219	173	182	530	511	519	346	341	343	477	456	469
25	210	185	198	532	526	529	343	340	342	456	438	446
26	234	208	220	537	521	530	377	342	352	438	422	432
27	260	234	246	550	532	539	392	372	385	425	416	421
28	284	259	273	550	539	543	372	87	216	422	415	420
29	303	283	292	563	545	552	132	74	102	431	420	425
30	331	302	321	566	554	558	184	132	159	436	376	413
31	---	---	---	573	560	566	231	184	209	---	---	---
Month	559	173	436	573	311	434	587	74	393	477	132	342

01388000 RAMAPO RIVER AT POMPTON LAKES, NJ—Continued
TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

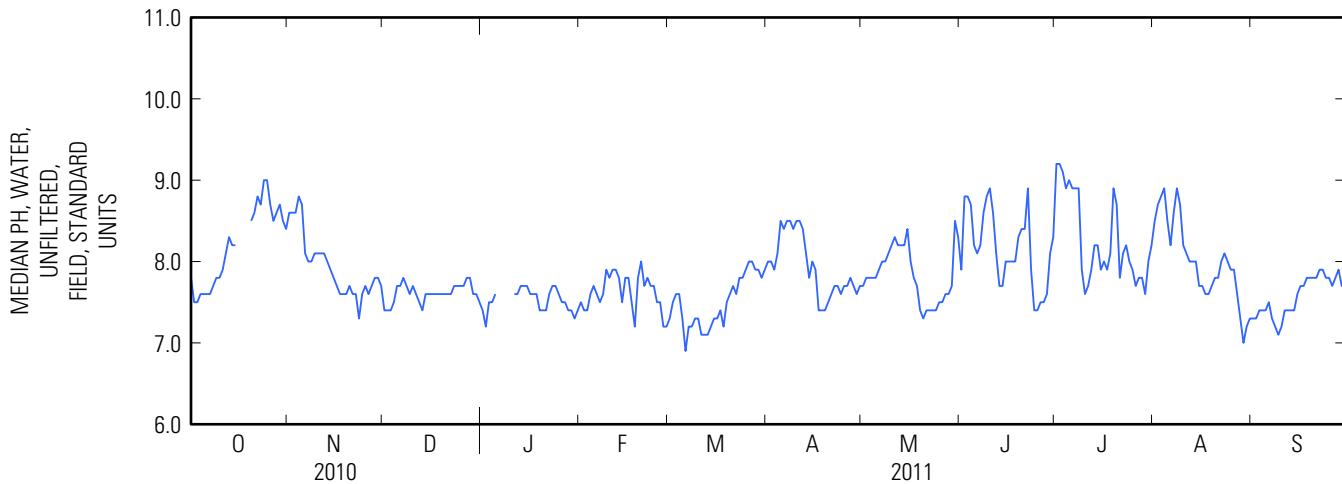
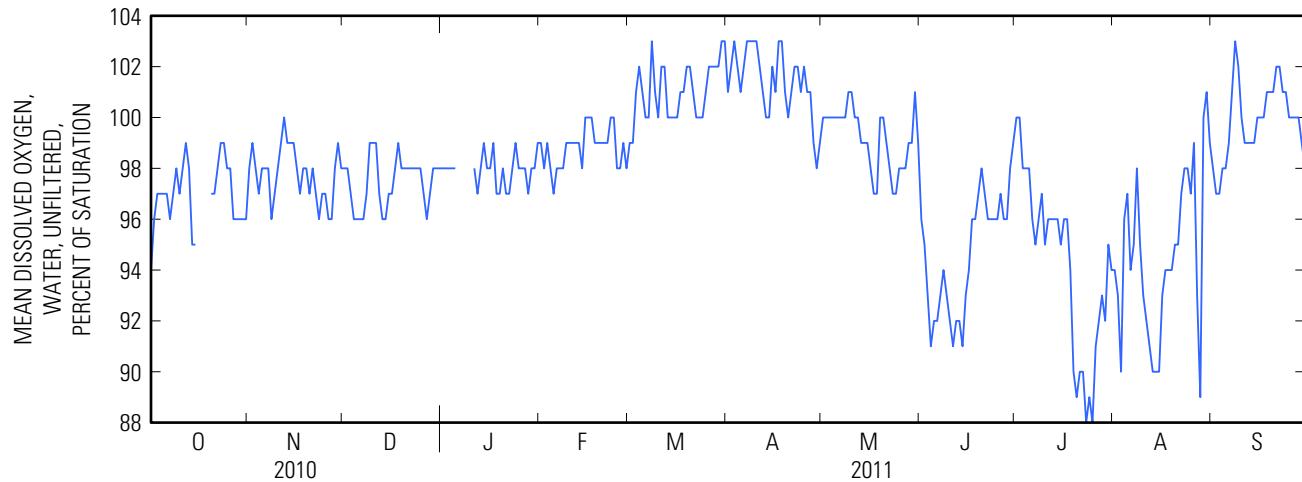
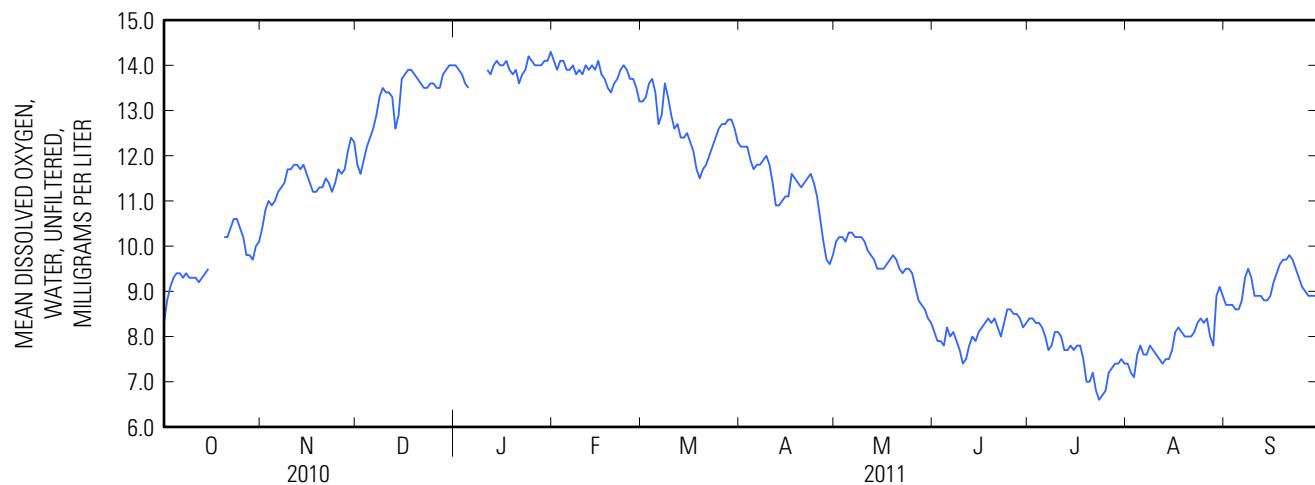
Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	
October				November				December				January	
1	21.4	19.3	20.5	12.8	11.7	12.2	8.1	6.1	7.0	1.0	0.8	0.9	
2	19.3	18.2	18.6	11.7	10.9	11.3	8.6	7.2	8.1	1.1	1.0	1.1	
3	18.3	17.2	17.5	10.9	10.0	10.4	7.2	6.1	6.6	1.4	1.1	1.2	
4	17.2	16.0	16.6	10.0	9.9	10	6.1	5.2	5.6	1.9	1.4	1.7	
5	16.0	15.5	15.7	9.9	9.8	9.9	5.2	4.3	4.7	2.1	1.9	2.0	
6	15.8	15.4	15.5	9.9	9.5	9.7	4.3	3.4	3.8	---	---	---	
7	16.5	15.6	15.9	9.5	8.8	9.1	3.4	2.8	3.0	---	---	---	
8	16.4	15.7	16.0	8.8	7.3	8.0	2.8	2.1	2.3	---	---	---	
9	17.1	16.0	16.5	7.7	7.2	7.4	2.5	2.1	2.3	---	---	---	
10	16.4	15.8	16.0	8.0	7.4	7.7	2.8	2.5	2.7	---	---	---	
11	17.0	15.9	16.2	8.1	7.3	7.7	2.8	2.5	2.7	1.2	1.1	1.1	
12	17.6	16.5	17.1	8.2	7.4	7.7	2.5	2.0	2.3	1.1	1.0	1.1	
13	17.7	16.4	16.9	8.9	7.3	8.0	4.5	2.1	3.8	1.0	0.9	1.0	
14	16.5	15.7	16.0	8.3	7.5	7.8	4.1	2.0	3.0	1.0	0.8	0.9	
15	15.7	14.9	15.4	8.8	7.8	8.3	2.0	1.0	1.3	0.9	0.7	0.8	
16	---	---	---	8.8	8.6	8.7	1.0	0.8	0.9	0.8	0.7	0.8	
17	---	---	---	9.5	8.3	9.0	1.3	0.9	1.1	0.8	0.7	0.8	
18	---	---	---	9.4	8.8	9.0	1.5	1.2	1.3	1.0	0.7	0.9	
19	---	---	---	9.1	8.6	8.9	1.6	1.5	1.5	1.0	0.9	0.9	
20	13.2	13.0	13.1	8.6	8.3	8.5	1.8	1.6	1.7	1.0	0.9	0.9	
21	13.2	13.0	13.1	8.5	8.1	8.3	2.1	1.8	1.9	1.4	1.0	1.2	
22	13.1	12.5	12.8	8.5	8.0	8.2	2.1	1.9	2.0	1.2	0.9	1.1	
23	12.5	11.7	12.0	8.6	8.4	8.5	2.1	2.0	2.0	0.9	0.8	0.9	
24	13.0	12.0	12.4	8.6	7.7	8.1	2.0	1.8	1.9	0.8	0.6	0.7	
25	13.0	12.1	12.6	7.7	7.3	7.4	2.1	1.9	2.0	0.7	0.6	0.7	
26	14.0	12.7	13.4	7.3	7.1	7.2	2.0	1.6	1.9	0.7	0.6	0.7	
27	15.1	13.5	14.1	7.1	6.7	6.8	1.6	1.0	1.3	0.7	0.6	0.6	
28	15.4	13.8	14.8	6.7	6.0	6.3	1.0	0.8	0.9	0.6	0.5	0.6	
29	15.2	14.4	14.9	6.1	5.6	5.8	1.0	0.8	0.9	0.6	0.5	0.5	
30	14.4	13.2	13.8	6.1	5.7	5.9	0.9	0.8	0.8	0.6	0.5	0.6	
31	13.2	12.8	13.0	---	---	---	1.0	0.8	0.9	0.7	0.5	0.6	
Month	---	---	---	12.8	5.6	8.4	8.6	0.8	2.7	---	---	---	

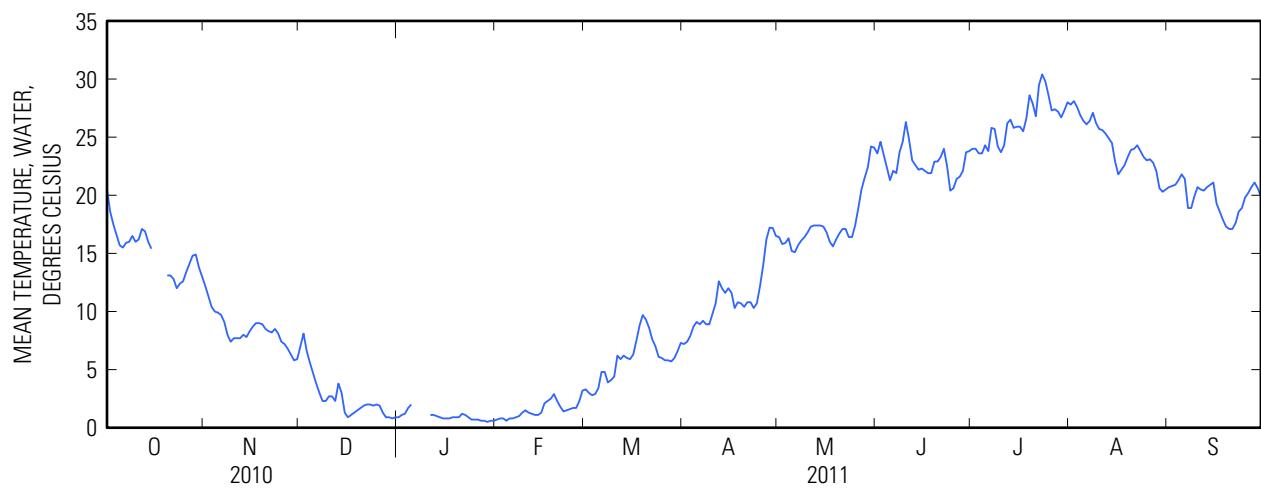
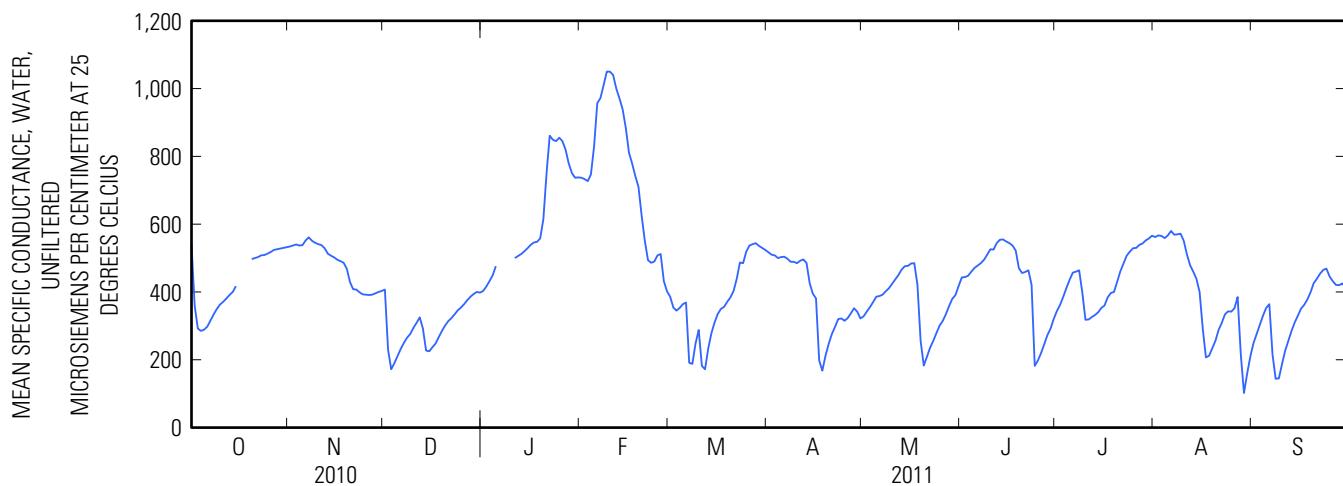
01388000 RAMAPO RIVER AT POMPTON LAKES, NJ—Continued
TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
February				March				April				May
1	0.7	0.6	0.7	3.5	3.1	3.3	7.3	7.1	7.2	16.8	16.1	16.4
2	0.9	0.7	0.8	3.3	2.8	3.0	7.8	7.0	7.4	16.4	15.6	15.8
3	0.8	0.6	0.8	3.0	2.5	2.8	8.5	7.6	7.9	16.6	15.6	15.9
4	0.7	0.6	0.6	3.1	2.6	2.9	9.0	8.5	8.7	16.8	15.5	16.3
5	0.9	0.6	0.8	3.9	3.0	3.4	9.2	8.9	9.1	15.5	14.8	15.2
6	0.9	0.8	0.8	6.0	3.9	4.8	9.4	8.6	8.9	15.6	14.7	15.1
7	0.9	0.8	0.9	6.0	3.9	4.8	9.4	9.0	9.2	16.2	15.2	15.7
8	1.1	0.9	1.0	4.4	3.3	3.9	9.0	8.8	8.9	16.9	15.3	16.1
9	1.5	1.0	1.3	4.3	3.7	4.1	9.6	8.7	8.9	17.2	15.8	16.4
10	1.6	1.3	1.5	5.1	4.2	4.4	10.1	9.6	9.8	17.6	16.2	16.8
11	1.4	1.2	1.3	6.7	5.1	6.2	12.2	10.1	10.7	18.3	16.8	17.3
12	1.3	1.1	1.2	6.4	5.4	5.9	12.8	12.2	12.6	18.2	17.0	17.4
13	1.2	1.0	1.1	6.4	5.8	6.2	12.4	11.6	12.0	17.6	17.1	17.4
14	1.3	1.0	1.1	6.3	5.8	6.0	12.3	10.9	11.6	17.6	17.2	17.4
15	1.6	1.1	1.3	6.3	5.4	5.9	12.4	11.7	12.0	17.4	17.2	17.3
16	2.3	1.6	2.1	7.0	6.0	6.3	12.3	10.9	11.6	17.2	16.4	16.8
17	2.4	2.1	2.3	8.4	6.9	7.5	10.9	9.7	10.3	16.4	15.8	16.0
18	2.8	2.2	2.5	9.9	8.1	8.8	11.2	10.3	10.8	15.8	15.3	15.6
19	3.1	2.7	2.9	10.0	9.4	9.7	11.1	10.5	10.7	16.8	15.6	16.2
20	2.7	2.0	2.3	9.8	8.8	9.3	10.7	10.2	10.4	17.1	16.3	16.7
21	2.0	1.5	1.8	9.4	8.0	8.6	11.4	10.4	10.8	17.8	16.4	17.1
22	1.5	1.3	1.4	8.0	7.4	7.6	11.3	10.7	10.8	17.6	16.7	17.1
23	1.6	1.3	1.5	7.6	6.4	7.0	10.7	10.2	10.3	16.7	16.2	16.4
24	1.7	1.5	1.6	6.4	5.7	6.1	11.7	10.0	10.7	17.3	16.0	16.4
25	1.8	1.6	1.7	6.4	5.5	6.0	13.1	11.5	12.2	18.2	16.7	17.4
26	2.0	1.6	1.7	6.3	5.3	5.8	15.6	13.1	14.0	20.2	18.2	18.9
27	2.9	2.0	2.3	6.1	5.4	5.8	16.9	15.6	16.2	21.4	19.9	20.5
28	3.4	2.9	3.2	6.1	5.2	5.7	17.7	16.9	17.2	22.4	21.0	21.5
29	---	---	---	6.3	5.7	6.0	17.6	16.9	17.2	23.4	21.8	22.4
30	---	---	---	7.0	6.2	6.6	17.1	15.9	16.5	25.7	22.8	24.2
31	---	---	---	7.5	7.0	7.3	---	---	---	25.5	23.4	24.1
Month	3.4	0.6	1.5	10.0	2.5	5.9	17.7	7.0	11.2	25.7	14.7	17.5

01388000 RAMAPO RIVER AT POMPTON LAKES, NJ—Continued
**TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
				June			July			August		
1	24.4	23.1	23.6	25.0	23.0	24.0	28.4	27.3	27.8	21.1	20.3	20.7
2	25.2	23.8	24.6	24.8	23.5	24.0	28.7	27.4	28.1	21.2	20.6	20.8
3	24.0	23.0	23.5	24.1	22.9	23.6	28.4	26.9	27.6	21.3	20.6	20.9
4	23.0	22.1	22.4	25.1	22.9	23.6	27.6	26.5	26.9	21.9	21.0	21.3
5	22.1	20.8	21.3	25.9	23.2	24.3	26.7	26.1	26.4	22.4	21.4	21.8
6	23.9	20.8	22.1	24.3	23.1	23.8	26.3	25.8	26.1	22.5	19.9	21.4
7	23.2	21.0	21.9	27.7	24.3	25.8	27.9	25.8	26.4	19.9	18.7	18.9
8	25.3	22.7	23.7	26.4	24.7	25.7	28.2	26.3	27.1	19.3	18.4	18.9
9	25.3	22.1	24.6	24.8	23.6	24.2	27.1	25.7	26.2	20.8	19.3	19.9
10	28.6	24.4	26.3	24.5	23.2	23.7	26.1	25.4	25.7	21.3	20.2	20.7
11	27.0	23.8	24.8	25.1	23.9	24.3	25.9	25.1	25.6	20.9	20.4	20.5
12	23.8	22.3	23.0	27.9	24.5	26.2	26.1	24.6	25.3	21.2	20.0	20.4
13	23.0	22.3	22.6	27.4	25.7	26.5	25.5	24.7	24.9	21.2	20.4	20.7
14	22.5	21.8	22.2	26.6	25.3	25.8	24.8	24.0	24.5	21.3	20.7	20.9
15	23.5	21.2	22.3	27.4	24.7	25.9	24.0	22.1	22.9	21.5	20.1	21.1
16	23.0	21.6	22.1	26.4	25.4	25.9	22.2	21.2	21.8	20.1	18.9	19.3
17	22.7	21.4	21.9	26.4	25.0	25.5	23.0	21.5	22.2	19.0	18.1	18.6
18	22.6	21.2	21.9	28.3	25.6	26.6	23.3	22.2	22.6	18.4	17.6	17.9
19	24.4	21.7	22.9	30.2	27.2	28.6	24.1	23.0	23.3	17.8	16.9	17.3
20	23.4	22.6	22.9	29.4	26.9	27.9	24.9	23.5	23.9	17.3	16.9	17.1
21	24.5	22.9	23.3	27.7	25.7	26.8	24.3	23.4	24.0	17.4	16.8	17.1
22	24.6	23.2	24.0	31.7	27.2	29.5	24.5	24.0	24.3	18.3	17.2	17.6
23	23.7	20.9	22.5	31.3	30.0	30.4	24.2	23.5	23.8	19.0	18.3	18.6
24	20.9	20.2	20.4	30.3	29.4	29.8	23.7	22.9	23.3	19.3	18.6	18.9
25	21.6	20.0	20.6	29.8	27.6	28.6	23.3	22.5	23.0	20.3	19.3	19.8
26	21.9	20.8	21.4	27.7	26.8	27.3	23.8	22.8	23.1	20.5	19.9	20.2
27	22.0	21.2	21.6	27.9	26.8	27.4	23.0	22.5	22.8	21.2	20.3	20.7
28	22.9	21.9	22.1	27.7	26.8	27.2	22.9	21.4	22.1	21.4	20.7	21.1
29	24.8	22.8	23.7	26.9	26.4	26.7	21.4	20.3	20.6	21.0	20.4	20.6
30	24.8	23.1	23.8	28.3	26.5	27.3	20.9	19.6	20.3	20.4	19.6	19.9
31	---	---	---	29.2	26.9	28.0	21.0	19.9	20.5	---	---	---
Month	28.6	20.0	22.8	31.7	22.9	26.3	28.7	19.6	24.3	22.5	16.8	19.8

01388000 RAMAPO RIVER AT POMPTON LAKES, NJ—Continued

01388000 RAMAPO RIVER AT POMPTON LAKES, NJ—Continued

01388000 RAMAPO RIVER AT POMPTON LAKES, NJ—Continued

CROSS-SECTIONAL WATER-QUALITY MEASUREMENTS WITH RECORDED MONITOR VALUES, AT NOTED TIME, ON JANUARY 27, 2012.

[Cross sectional measurements were made periodically to document river variability and verify that recorded monitor values were representative of river conditions. Water-quality measurements acquired at increments of 10 feet.]

