



Water-Data Report 2009

01400500 RARITAN RIVER AT MANVILLE, NJ

RARITAN RIVER BASIN

LOCATION.--Lat 40°33'20", long 74°34'58" referenced to North American Datum of 1983, Bridgewater Township, Somerset County, NJ, Hydrologic Unit 02030105, on left bank at downstream side of bridge on North Main Street (Finderne Avenue) at Manville, and 1.4 mi upstream from Millstone River.

DRAINAGE AREA.--490 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--June 1903 to March 1907 (published as "at Finderne"), August 1908 to April 1915 (gage heights only, published in WSP 521), August 1921 to current year. Monthly discharge only for some periods, published in WSP 1302.

REVISED RECORDS.--WSP 1552: 1904, 1906, 1922, 1923(M), 1924-25, 1926-29(M), 1930, 1932-33(M), 1924-54. WDR NJ-75-1: 1964(M), 1969(M), 1970(P), 1971(P), 1972(P), 1973(P), WDR NJ-02-1: 2000(M).

GAGE.--Water-stage recorder. Datum of gage is 20.61 ft above NGVD of 1929. Prior to Aug 15, 1923, non-recording gage on downstream side of highway bridge at same site and datum. From Oct 1, 1952 to Sep 30, 1966, water-stage recorder at station at Bound Brook, above Calco Dam (station 01403000) used as auxiliary gage when stage was above 5.50 ft. On Oct 1, 1966, water-stage recorder at station at Bound Brook, used as auxiliary gage, was moved downstream to present site (station 01403060). Between Jun 9, 1978 and Jun 7, 1979, gage temporarily relocated at site 1.4 mi downstream, just upstream from Millstone River, because of reconstruction of highway bridge. Between Oct 1, 2006 and Mar 09, 2008, gage temporarily relocated at site 0.4 mi downstream, just upstream of an abandoned railroad bridge, because of reconstruction of highway bridge.

REMARKS.--Records good, except for estimated daily discharges, which are fair. Records given herein represent flow at gage only. Slight diurnal fluctuation at low flow. Flow regulated by Spruce Run (see 01396790) and Round Valley (see 01397050) Reservoirs. Diversion to Round Valley Reservoir (see 01396920) since March 1966. Prior to Sep 1, 1986, Johns-Manville Corporation diverted water 1,500 ft upstream from station by and returned to river 0.6 mi downstream from gage. Several measurements of water temperature were made during the year. Satellite telemetry at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 10,000 ft³/s and (or) maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec 12	1845	*15,800	*16.00
Aug 3	0515	12,700	13.40

01400500 RARITAN RIVER AT MANVILLE, NJ—Continued

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

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	303	554	1,390	732	e379	361	463	334	361	574	1,180	571
2	250	489	916	722	465	368	626	496	323	3,370	3,500	528
3	208	421	637	711	525	311	1,080	457	397	1,920	7,900	488
4	195	380	578	647	e410	411	1,800	646	1,540	968	1,650	454
5	207	355	541	576	e340	383	882	1,330	1,150	775	1,060	423
6	206	399	490	558	e340	410	754	1,920	1,660	655	878	392
7	185	402	466	2,070	e365	431	812	6,300	857	584	769	372
8	159	365	401	2,280	606	505	647	2,740	626	575	683	366
9	156	349	403	1,050	1,310	546	570	1,440	736	508	646	333
10	164	328	472	656	569	597	522	1,080	778	453	584	304
11	169	299	1,400	600	604	490	558	844	746	425	444	348
12	181	285	12,000	518	876	453	651	717	1,070	1,230	639	831
13	199	314	4,700	455	769	404	548	632	1,130	651	675	698
14	202	531	1,760	e460	646	383	492	576	3,300	471	907	428
15	196	1,220	1,140	e430	593	374	802	612	1,370	402	602	393
16	204	2,300	966	e405	542	362	648	570	941	366	538	368
17	200	1,020	1,390	e445	507	345	498	1,040	754	356	504	352
18	196	699	1,470	e645	492	332	474	685	1,330	846	476	344
19	197	576	1,130	e670	573	331	438	546	2,170	458	496	292
20	208	506	1,720	e610	579	354	402	489	1,320	358	396	256
21	220	456	1,230	e520	442	329	700	450	1,870	465	441	244
22	211	407	1,030	e430	433	307	889	414	1,360	474	3,180	237
23	209	361	e950	e400	413	298	649	389	1,020	535	3,120	232
24	209	358	1,470	e417	374	287	512	381	891	924	1,160	232
25	236	710	4,910	e340	366	275	468	577	785	506	612	235
26	675	694	2,070	e300	375	281	438	421	698	498	531	219
27	394	516	1,400	e280	344	383	400	386	794	1,250	475	499
28	1,900	459	1,500	292	363	365	370	385	628	558	3,040	551
29	2,970	427	1,460	788	---	405	336	597	555	1,160	1,900	392
30	1,030	472	1,060	e555	---	918	307	557	512	1,700	1,110	328
31	665	---	909	e405	---	569	---	421	---	802	726	---
Total	12,704	16,652	51,959	19,967	14,600	12,568	18,736	28,432	31,672	24,817	40,822	11,710
Mean	410	555	1,676	644	521	405	625	917	1,056	801	1,317	390
Max	2,970	2,300	12,000	2,280	1,310	918	1,800	6,300	3,300	3,370	7,900	831
Min	156	285	401	280	340	275	307	334	323	356	396	219

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1904 - 2009, BY WATER YEAR (WY)

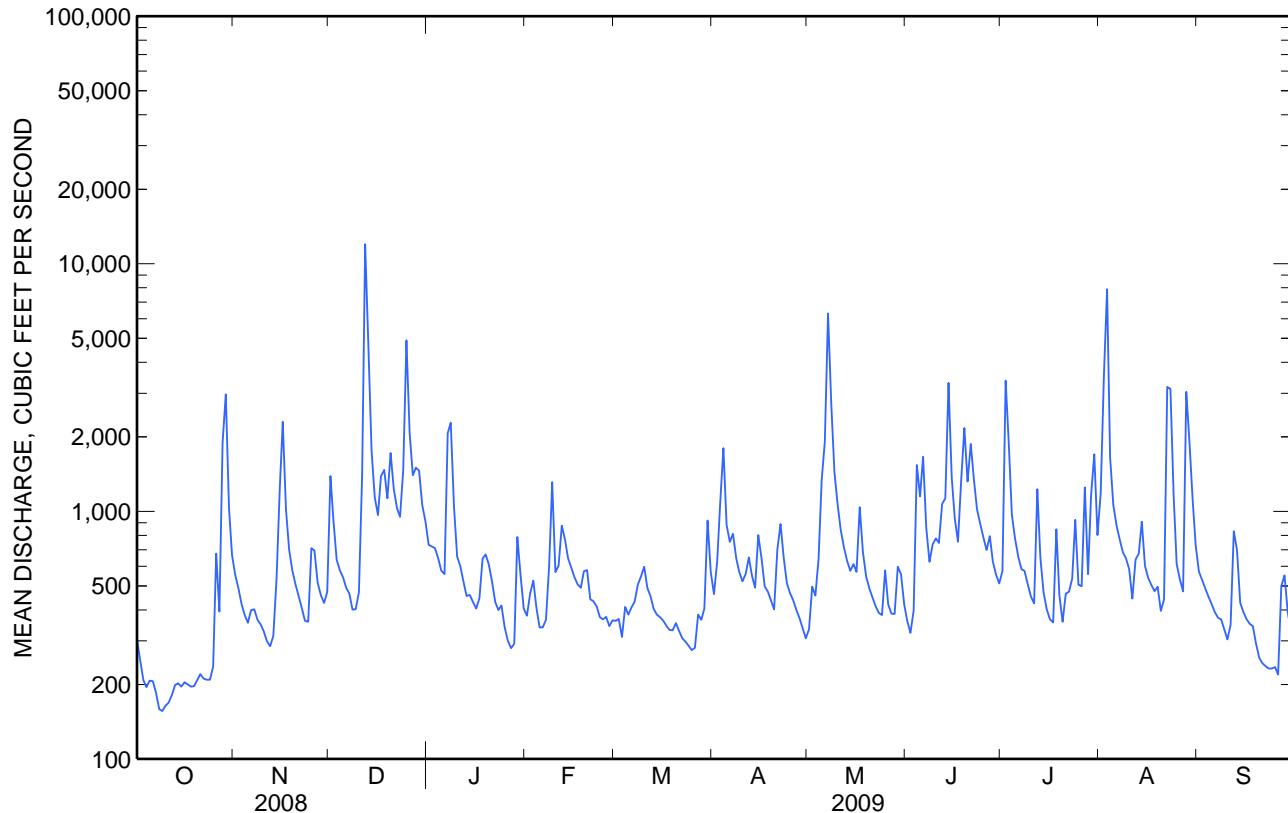
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	491	687	919	1,002	1,060	1,342	1,159	792	558	486	472	478
Max	2,433	2,460	2,877	3,856	2,406	3,260	3,507	2,707	2,581	2,542	2,552	2,068
(WY)	(1904)	(1933)	(1997)	(1979)	(1925)	(1936)	(1983)	(1989)	(1972)	(1975)	(1955)	(1971)
Min	64.8	87.5	148	188	216	354	259	212	88.8	65.1	50.5	51.2
(WY)	(1942)	(1932)	(1966)	(1966)	(2002)	(1981)	(1985)	(1926)	(1965)	(1955)	(1932)	(1941)

01400500 RARITAN RIVER AT MANVILLE, NJ—Continued**SUMMARY STATISTICS**

	Calendar Year 2008	Water Year 2009		Water Years 1904 - 2009	
Annual total	331,317		284,639		
Annual mean	905		780		786
Highest annual mean				1,365	1984
Lowest annual mean				309	1965
Highest daily mean	13,000	Mar 9	12,000	Dec 12	30,700 Sep 17, 1999
Lowest daily mean	156	Oct 9	156	Oct 9	^a 17 Sep 19, 1964
Annual seven-day minimum	173	Oct 7	173	Oct 7	29 Aug 27, 1944
Maximum peak flow			^b 15,800	Dec 12	77,600 Sep 16, 1999
Maximum peak stage			16.01	Dec 12	27.49 Sep 17, 1999
Instantaneous low flow			148	Oct 9	17 Sep 19, 1964
10 percent exceeds	1,730		1,400		1,600
50 percent exceeds	502		518		447
90 percent exceeds	241		290		150

^a Does not include water diverted to former Johns-Manville Corporation plant.

^b From rating curve extended above 14,000 ft³/s on basis of slope-area measurements at gage heights 14.9, 20.42, and 27.49 ft.



01400500 RARITAN RIVER AT MANVILLE, NJ—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1923-25, 1959-74, 1976-97, 2008 to current year.

PERIOD OF DAILY RECORD.--

DISSOLVED OXYGEN: August-September 2003, April 2008 to current year.

DISSOLVED OXYGEN, PERCENT OF SATURATION: August-September 2003, April 2008 to current year.

pH: August-September 2003, April 2008 to current year.

SPECIFIC CONDUCTANCE: August-September 2003, April 2008 to current year.

WATER TEMPERATURE: August-September 2003, April 2008 to current year.

TURBIDITY: April 2008 to current year.

INSTRUMENTATION.--Water-quality monitor since April 2008. Flow tank, pumping system; data recorded semi-hourly.

REMARKS.--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 -); Turbidity, 0.5 FNU fouling, and the greater of 2.0 FNU (+ or -) or 5% of the measured value for drift. 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 - TEMPERATURE: Oct 10 - Oct 30, Nov 24 - Jan 14, Feb 05 - Feb 26, Mar 05 - Mar 18, Apr 13 - May 12, Jun 05 - Jun 25, Jul 15 - Aug 14, Sep 03 - Sep 30; TURBIDITY: Oct 1 - Oct 10, Oct 30 - Nov 24, Dec 23 - Jan 14, Mar 18 - Apr 13, May 12 - Jun 5, Jul 15 - Aug 14.

COOPERATION.--Continuous records collected in cooperation with the New Jersey Water Supply Authority.

EXTREMES FOR PERIOD OF DAILY RECORD.--

DISSOLVED OXYGEN: Maximum, 18.2 mg/L, Mar 4, 2009; minimum, 5.3 Jun 11, 2008.

DISSOLVED OXYGEN, PERCENT OF SATURATION: Maximum, 155%, Apr 17, 2008; minimum, 66%, Jun 11, 2008.

pH: Maximum, 9.5 standard units, Mar 1, 2, 2009; minimum, 6.8 standard units, Dec 12, 13, 2008.

SPECIFIC CONDUCTANCE: Maximum, 1,820 microsiemens/cm, Jan 28, 2009; minimum, 105 microsiemens/cm, Dec 12, 2008.

WATER TEMPERATURE: Maximum, 30.8°C, Jul 20, 2008; minimum, -0.2°C, on several days during January-February 2009.

TURBIDITY: Maximum, 1,200 FNU, Mar 30, 2009; minimum, <0.5 FNU, Aug 11, 12, 2009.

EXTREMES FOR CURRENT YEAR.--

DISSOLVED OXYGEN: Maximum, 18.2 mg/L, Mar 4; minimum, 6.2 mg/L, Aug 3.

DISSOLVED OXYGEN, PERCENT OF SATURATION: Maximum, 149 %, Mar 17, 18; minimum, 71 %, Aug 3.

pH: Maximum, 9.5 standard units, Mar 1, 2; minimum, 6.8 standard units, Dec 12, 13.

SPECIFIC CONDUCTANCE: Maximum, 1,820 microsiemens/cm, Jan 28; minimum, 105 microsiemens/cm, Dec 12.

WATER TEMPERATURE: Maximum, 28.9°C, Aug 21; minimum, -0.2°C, on several days during January-February.

TURBIDITY: Maximum, 1,200 FNU, Mar 30; minimum, <0.5 FNU, Aug 11, 12.

01400500 RARITAN RIVER AT MANVILLE, NJ—Continued
DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

[e, estimated]

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	
October				November				December				January	
1	9.8	7.8	8.5	11.1	10.7	10.9	12.5	11.9	12.1	14.7	13.3	14.2	
2	10.2	7.8	8.8	11.2	10.6	10.8	12.4	11.8	12.1	14.8	14.0	14.3	
3	10.9	8.2	9.4	11.0	10.5	10.7	13.1	12.3	12.7	14.6	14.0	14.1	
4	11.4	8.8	9.9	11.1	10.1	10.6	13.5	12.9	13.1	14.8	14.1	14.5	
5	11.5	9.1	10.1	10.5	9.3	10.0	13.3	12.8	13.0	14.6	14.1	14.3	
6	11.3	9.0	9.9	9.4	8.5	9.0	13.8	12.9	13.3	14.1	13.9	14.0	
7	11.8	9.2	10.3	9.0	8.2	8.6	13.8	13.2	13.4	13.9	12.9	13.2	
8	12.1	9.2	10.5	8.5	8.0	8.2	14.5	13.4	14.0	13.0	12.8	12.9	
9	11.7	8.9	10.2	9.5	8.0	8.7	14.5	13.8	14.2	13.7	13.0	13.3	
10	11.7	8.7	10.1	10.3	8.7	9.5	13.8	12.0	13.0	13.8	13.6	13.7	
11	11.8	8.7	10.1	11.1	9.5	10.3	12.0	11.4	11.6	13.8	13.6	13.7	
12	12.0	8.9	10.3	11.6	10.2	10.9	11.9	11.4	11.6	14.4	13.6	14.0	
13	12.1	8.9	10.4	10.7	9.8	10.4	12.6	11.5	12.1	14.9	13.9	14.4	
14	12.0	8.8	10.2	10.4	9.7	10.0	13.1	12.6	12.9	14.8	13.9	14.3	
15	11.8	8.4	10	9.7	8.4	9.1	12.9	11.9	12.5	14.3	14.1	14.2	
16	11.4	8.1	9.5	9.4	8.4	8.8	11.9	11.4	11.6	14.6	14.2	14.4	
17	11.7	8.2	9.7	10.5	9.4	10.1	12.5	11.8	12.2	14.7	14.4	14.6	
18	12.0	8.7	10.1	11.8	10.5	11.2	12.7	12.4	12.5	14.4	13.9	14.3	
19	12.3	9.4	10.7	12.8	11.7	12.5	13.0	12.5	12.7	14.0	13.8	13.9	
20	12.7	9.9	11.1	13.1	12.7	12.9	13.2	13.0	13.2	14.0	13.8	13.9	
21	12.5	10.1	11.1	13.3	12.8	13.1	13.2	12.9	13.0	14.2	13.8	14.0	
22	12.7	10.2	11.3	13.9	13.2	13.6	14.0	13.0	13.5	14.3	14.0	14.1	
23	12.9	10.5	11.5	14.3	13.8	14.1	14.3	14.0	14.2	14.3	13.8	14.1	
24	13.1	10.6	11.6	14.2	13.3	13.9	14.3	13.5	13.9	14.3	13.8	14.0	
25	11.8	9.4	10.7	13.3	12.4	12.8	13.5	13.1	13.3	14.6	14.0	14.3	
26	9.9	9.0	9.5	12.6	12.3	12.4	13.5	13.1	13.4	14.7	14.2	14.4	
27	11.1	9.2	9.9	12.8	12.4	12.6	13.3	12.6	12.9	14.8	14.2	14.4	
28	10.9	9.6	10.2	13.1	12.5	12.7	12.6	11.9	12.3	14.2	13.4	13.9	
29	11.1	10.9	11.0	13.3	12.6	12.9	12.4	11.8	12.1	14.0	13.4	13.7	
30	11.3	10.9	11.1	12.9	12.4	12.7	12.8	12.3	12.6	14.2	13.9	14.0	
31	11.4	11.0	11.2	---	---	---	13.3	12.7	12.9	14.6	13.9	14.2	
Month	13.1	7.8	10.3	14.3	8.0	11.1	14.5	11.4	12.8	14.9	12.8	14.0	

01400500 RARITAN RIVER AT MANVILLE, NJ—Continued
DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

[e, estimated]

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
February				March				April				May
1	14.6	14.0	14.2	16.9	12.7	14.5	12.2	9.9	10.8	10.0	8.0	8.8
2	14.3	13.5	14.0	16.9	13.0	14.7	13.9	10.1	11.6	10.3	7.9	8.9
3	13.9	13.5	13.7	17.9	14.4	15.8	10.7	9.1	9.8	9.5	8.3	8.8
4	14.2	13.5	13.9	18.2	14.9	16.1	10.4	9.2	9.9	9.6	8.7	9.1
5	14.7	13.9	14.3	18.1	14.7	16.0	12.3	10.3	11.1	9.7	9.2	9.4
6	15.0	14.1	14.5	17.5	14.1	15.5	10.7	9.7	10.2	9.7	9.5	9.6
7	15.1	14.2	14.6	17.1	13.4	15.0	12.9	10.2	11.4	9.7	8.6	9.0
8	14.6	14.1	14.3	15.3	12.2	13.4	13.8	10.8	12.1	9.6	8.8	9.3
9	14.3	13.6	13.8	13.0	11.0	11.8	14.8	11.1	12.7	9.3	8.8	9.0
10	14.3	13.8	14.0	14.5	11.1	12.3	14.2	10.4	12.0	9.5	8.7	9.1
11	14.2	12.9	13.7	14.6	11.5	12.6	12.3	10.3	11.2	10.0	8.9	9.4
12	12.9	12.1	12.5	16.7	11.6	13.8	14.8	10.7	12.5	10.4	9.1	9.7
13	13.5	11.9	12.6	17.3	12.3	14.4	14.7	10.9	12.6	11.0	9.3	10.1
14	14.3	12.4	13.3	17.4	12.3	14.5	12.4	10.3	11.2	10.4	9.3	9.7
15	14.8	13.2	13.9	16.2	12.2	13.9	12.3	10.2	11.2	11.3	9.3	10.1
16	15.2	13.2	14.1	16.2	11.6	13.6	14.4	10.9	12.4	10.7	8.7	9.5
17	15.4	13.4	14.3	16.6	11.5	13.6	14.0	10.3	11.9	9.0	8.0	8.5
18	14.9	13.4	14.0	16.0	10.9	13.1	13.3	9.4	11.2	10.9	8.8	9.9
19	15.3	13.2	14.1	13.3	10.0	11.4	12.9	8.8	10.6	11.7	9.9	10.6
20	15.5	13.2	14.3	14.6	10.1	12.1	10.4	8.8	9.6	11.4	9.4	10.3
21	16.3	13.9	15.0	15.9	11.2	13.2	11.6	9.3	10.4	10.8	8.7	9.7
22	15.5	13.8	14.5	15.5	11.3	13.2	10.3	9.5	9.8	10.1	8.2	9.0
23	16.1	13.7	14.8	15.3	11.2	13.0	12.0	9.8	10.8	9.6	7.7	8.5
24	16.5	13.9	15.1	15.7	11.4	13.3	12.6	10.1	11.1	9.2	7.2	8.0
25	17.0	14.1	15.3	16.0	11.5	13.4	11.8	9.3	10.4	8.4	7.1	7.7
26	17.0	13.8	15.1	13.4	10.6	11.8	11.1	8.3	9.5	8.9	7.0	7.9
27	16.6	13.2	14.8	14.2	10.1	12.0	10.6	7.4	8.8	---	---	---
28	16.7	12.3	14.2	13.9	10.3	11.8	10.2	6.9	8.4	---	---	---
29	---	---	---	12.4	9.4	10.5	10.6	6.7	8.5	---	---	---
30	---	---	---	10.2	9.4	9.8	11.3	7.5	9.2	10.0	8.4	9.1
31	---	---	---	13.3	10.0	11.3	---	---	---	10.1	8.0	8.9
Month	17.0	11.9	14.2	18.2	9.4	13.3	14.8	6.7	10.8	---	---	---

01400500 RARITAN RIVER AT MANVILLE, NJ—Continued
DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

[e, estimated]

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	10.7	8.0	9.2	10.0	7.6	8.6	8.2	7.5	7.9	9.8	8.4	9.0
2	10.5	7.8	8.9	8.4	7.4	7.7	8.1	6.5	7.5	10.1	8.5	9.2
3	9.7	7.6	8.5	8.1	7.5	7.9	7.5	6.2	6.7	10.3	8.4	9.2
4	9.1	8.1	8.7	8.7	7.8	8.2	8.2	7.4	7.8	10.4	8.3	9.2
5	9.3	8.9	9.1	9.0	7.9	8.4	8.2	7.7	7.9	10.7	8.1	9.2
6	9.5	9.2	9.3	9.3	7.8	8.5	8.5	7.7	8.0	11.0	7.8	9.2
7	9.7	8.7	9.2	9.2	7.7	8.3	9.0	8.1	8.5	11.5	7.9	9.5
8	---	---	---	9.7	7.8	8.6	9.3	8.1	8.7	11.4	8.1	9.5
9	---	---	---	10.2	7.9	8.9	8.9	8.1	8.4	11.5	8.1	9.5
10	9.1	8.3	8.6	10.9	8.1	9.3	9.7	8.1	8.7	11.9	8.1	9.7
11	8.9	8.5	8.7	10.9	8.0	9.3	9.7	7.4	8.4	10.4	8.2	9.1
12	9.1	8.7	8.9	8.6	7.6	7.8	9.2	7.0	7.9	9.2	8.5	8.8
13	9.2	8.3	8.8	9.5	7.6	8.4	8.2	7.0	7.6	10.2	8.5	9.2
14	8.7	8.0	8.5	10.2	7.7	8.8	9.5	8.0	8.5	10.7	8.2	9.2
15	9.2	8.6	8.9	10.9	7.7	9.1	10.0	7.7	8.7	11.0	8.0	9.3
16	9.5	8.8	9.1	11.0	7.3	8.9	10.4	7.4	8.7	9.8	8.1	8.7
17	9.9	8.9	9.4	10.6	7.0	8.6	10.7	7.2	8.8	11.2	8.3	9.5
18	9.3	8.9	9.1	7.5	6.8	7.1	10.7	7.1	8.7	11.4	8.6	9.8
19	9.2	9.0	9.1	9.6	6.9	8.1	10.8	7.0	8.6	11.6	8.5	9.8
20	9.2	8.9	9.0	10.1	7.0	8.3	11.1	6.6	8.5	12.0	8.5	10
21	9.2	8.9	9.1	8.0	7.0	7.6	10.7	6.3	7.7	12.2	8.6	10.2
22	9.1	8.8	8.9	9.7	7.6	8.5	7.7	6.3	7.2	11.8	8.4	9.9
23	9.3	8.8	9.0	8.8	7.4	7.9	7.6	7.2	7.4	12.0	8.1	9.8
24	9.1	8.5	8.7	8.5	7.6	7.9	8.3	7.3	7.7	11.5	7.7	9.5
25	9.0	8.3	8.7	9.3	7.6	8.3	8.8	7.4	8.0	11.8	7.5	9.3
26	9.0	7.9	8.3	9.1	7.3	8.0	9.0	7.4	8.1	12.3	7.8	9.7
27	9.0	7.9	8.3	7.6	7.2	7.4	9.0	7.4	7.9	e10.1	e8.1	e8.9
28	9.5	7.8	8.5	8.5	7.2	7.7	8.2	7.7	7.9	10.8	8.5	9.3
29	9.6	7.6	8.5	8.1	6.9	7.4	8.2	7.8	8.0	11.2	8.2	9.5
30	9.7	7.6	8.3	7.6	7.0	7.4	8.7	8.0	8.3	12.0	8.5	10
31	---	---	---	8.0	7.3	7.5	9.0	8.0	8.5	---	---	---
Month	---	---	---	11.0	6.8	8.2	11.1	6.2	8.1	12.3	7.5	9.4

01400500 RARITAN RIVER AT MANVILLE, NJ—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, PERCENT OF SATURATION
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009
[*e*, estimated]

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
October				November				December				January
1	110	84	93	96	91	93	95	93	94	103	95	99
2	110	82	94	98	90	93	98	93	95	103	97	99
3	114	83	97	95	89	92	102	95	98	102	97	98
4	117	87	99	98	89	92	102	96	99	104	97	101
5	120	90	102	96	85	90	102	96	98	103	100	102
6	118	89	100	90	81	85	102	95	98	102	100	101
7	122	89	103	88	79	83	102	94	98	100	92	95
8	123	89	104	83	76	79	102	94	98	95	92	94
9	124	89	105	91	76	82	103	97	100	98	93	96
10	125	87	104	95	80	86	102	95	99	98	96	97
11	126	87	105	99	83	90	95	91	93	98	96	97
12	128	89	106	101	86	93	93	88	89	102	95	98
13	128	89	106	91	85	89	96	89	93	104	96	100
14	129	89	107	91	84	87	98	95	96	102	96	98
15	128	86	105	86	80	83	99	96	97	99	97	98
16	123	84	101	84	79	81	97	93	95	100	98	99
17	123	83	100	89	83	87	96	94	95	101	98	100
18	121	84	100	97	88	93	97	94	96	99	95	98
19	120	88	101	102	94	98	97	93	95	97	95	96
20	121	90	103	102	98	100	96	94	95	97	94	95
21	117	90	101	104	98	100	96	93	94	98	94	96
22	116	90	101	105	98	101	97	92	94	99	95	96
23	119	91	103	106	99	102	---	---	---	99	95	96
24	119	92	104	103	98	100	99	95	98	99	94	96
25	109	89	99	98	94	96	98	95	96	102	96	98
26	94	85	90	98	94	95	100	96	98	102	97	99
27	106	85	93	99	95	96	100	97	98	102	97	99
28	91	86	88	101	94	97	99	96	97	97	92	96
29	93	88	91	102	94	97	98	95	96	96	92	94
30	96	91	93	97	94	96	98	94	96	98	95	96
31	97	92	94	---	---	---	97	95	96	101	95	98
Month	129	82	100	106	76	92	---	---	---	104	92	98

01400500 RARITAN RIVER AT MANVILLE, NJ—Continued

**DISSOLVED OXYGEN, WATER, UNFILTERED, PERCENT OF SATURATION
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**
 [e, estimated]

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
February				March				April				May
1	102	96	98	132	97	111	110	90	98	107	84	93
2	99	93	96	124	96	108	130	89	106	110	82	94
3	96	93	94	130	100	112	100	85	92	99	86	92
4	99	93	96	134	103	114	94	86	91	97	88	92
5	102	95	98	135	101	115	114	91	101	94	90	92
6	104	96	99	133	101	114	99	89	94	95	91	93
7	105	97	100	138	101	117	115	89	101	95	84	88
8	103	97	99	128	99	110	120	92	105	97	88	93
9	98	94	96	110	92	99	135	94	112	98	90	94
10	102	95	98	122	92	103	130	93	108	101	90	95
11	107	95	100	122	94	104	111	92	100	105	92	98
12	101	93	97	141	94	114	134	92	110	109	93	100
13	107	92	98	147	98	119	135	94	112	116	94	104
14	108	94	101	147	99	119	112	93	101	107	95	100
15	112	96	103	138	100	116	107	89	98	123	95	106
16	114	96	104	138	95	114	133	92	109	118	94	104
17	116	97	105	149	95	117	138	93	112	98	87	90
18	109	97	102	149	92	116	136	89	110	112	91	100
19	115	95	104	120	88	102	134	87	107	123	97	108
20	112	94	103	127	86	104	99	85	92	125	96	108
21	120	97	107	141	91	112	110	85	96	123	93	106
22	114	99	105	136	92	112	97	90	92	118	88	101
23	119	96	106	135	91	109	114	89	101	114	85	97
24	122	96	107	137	90	111	126	92	107	109	81	92
25	128	98	111	143	92	114	126	91	106	99	81	89
26	129	99	111	114	90	100	126	86	104	99	79	88
27	130	100	112	127	84	104	125	81	100	---	---	---
28	135	95	112	130	91	106	122	77	97	---	---	---
29	---	---	---	115	85	96	122	74	96	---	---	---
30	---	---	---	93	84	88	125	79	100	112	89	98
31	---	---	---	124	88	102	---	---	---	116	86	98
Month	135	92	102	149	84	109	138	74	102	---	---	---

01400500 RARITAN RIVER AT MANVILLE, NJ—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, PERCENT OF SATURATION
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009
[e, estimated]

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	121	85	101	120	87	101	98	88	93	112	92	101
2	120	85	98	100	83	89	95	74	88	116	93	102
3	110	84	94	93	85	89	88	71	78	119	92	104
4	94	87	91	102	88	94	97	86	91	122	92	105
5	95	92	93	106	90	97	98	90	94	128	91	107
6	100	93	96	111	89	98	100	90	94	131	89	107
7	108	94	100	110	88	97	105	92	98	135	89	109
8	---	---	---	116	89	100	109	92	100	131	90	108
9	---	---	---	121	90	103	103	93	97	131	90	107
10	101	90	95	131	90	108	118	93	103	135	88	108
11	96	92	94	131	91	108	123	89	104	112	88	98
12	99	93	95	98	86	90	114	85	97	98	90	94
13	104	91	97	112	86	97	97	83	89	114	91	101
14	96	88	92	122	87	102	114	92	100	124	90	104
15	102	93	97	133	87	106	124	91	105	128	88	105
16	106	95	100	137	84	107	132	89	108	110	90	96
17	109	95	101	130	82	103	137	88	110	124	89	103
18	100	94	97	89	80	84	137	87	109	127	91	106
19	99	94	96	118	80	97	139	86	108	130	89	107
20	97	94	96	124	81	100	143	81	108	134	88	108
21	99	93	96	93	82	88	139	78	97	136	89	110
22	100	95	97	115	85	98	93	78	85	130	89	108
23	104	96	100	104	86	92	91	85	88	136	87	109
24	103	94	98	99	86	91	101	86	92	134	85	108
25	105	95	99	112	87	98	108	87	96	137	83	105
26	107	91	96	112	86	96	111	88	98	136	84	105
27	107	91	97	91	84	88	108	88	94	e108	e85	e95
28	114	89	99	105	85	92	93	87	89	116	88	98
29	117	88	101	97	83	89	93	87	90	119	85	100
30	118	89	98	92	82	87	102	90	95	125	86	102
31	---	---	---	98	87	90	104	91	97	---	---	---
Month	---	---	---	137	80	96	143	71	97	137	83	104

01400500 RARITAN RIVER AT MANVILLE, NJ—Continued**PH, WATER, UNFILTERED, FIELD, STANDARD UNITS****WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

[e, estimated]

Day	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median	
October				November				December				January	
1	7.8	7.4	7.5	7.4	7.4	7.4	7.5	7.3	7.4	7.5	7.4	7.4	
2	8.0	7.4	7.6	7.5	7.4	7.4	7.5	7.4	7.4	7.5	7.4	7.4	
3	8.1	7.5	7.7	7.5	7.4	7.4	7.5	7.4	7.4	7.5	7.4	7.5	
4	8.1	7.6	7.7	7.5	7.4	7.4	7.5	7.4	7.5	7.5	7.5	7.5	
5	8.2	7.6	7.8	7.5	7.4	7.4	7.6	7.5	7.5	7.5	7.5	7.5	
6	8.2	7.6	7.8	7.5	7.4	7.4	7.6	7.5	7.6	7.5	7.5	7.5	
7	8.3	7.7	7.8	7.5	7.4	7.4	7.7	7.5	7.6	7.5	7.2	7.4	
8	8.4	7.7	7.9	7.5	7.4	7.4	7.7	7.6	7.6	7.4	7.2	7.3	
9	8.3	7.6	7.9	7.6	7.4	7.5	7.7	7.6	7.6	7.4	7.3	7.4	
10	8.3	7.7	7.8	7.7	7.5	7.6	7.6	7.5	7.5	7.4	7.4	7.4	
11	8.4	7.7	7.9	7.7	7.5	7.6	7.5	7.2	7.4	7.5	7.4	7.5	
12	8.4	7.7	8.0	7.8	7.5	7.6	7.2	6.8	6.8	7.5	7.5	7.5	
13	8.5	7.7	8.0	7.6	7.5	7.6	7.1	6.8	7.0	7.5	7.5	7.5	
14	8.5	7.7	8.0	7.6	7.5	7.5	7.2	7.1	7.1	7.6	7.4	7.5	
15	8.4	7.6	7.9	7.5	7.3	7.4	7.3	7.2	7.2	7.6	7.5	7.5	
16	8.3	7.6	7.8	7.4	7.3	7.3	7.3	7.3	7.3	7.6	7.5	7.5	
17	8.4	7.5	7.8	7.4	7.4	7.4	7.4	7.3	7.3	7.6	7.6	7.6	
18	8.4	7.6	7.8	7.5	7.4	7.4	7.4	7.3	7.3	7.7	7.5	7.6	
19	8.4	7.6	7.8	7.6	7.5	7.5	7.4	7.3	7.3	7.6	7.5	7.5	
20	8.4	7.6	7.9	7.6	7.5	7.6	7.4	7.3	7.3	7.6	7.5	7.6	
21	8.3	7.6	7.9	7.6	7.5	7.6	7.4	7.3	7.4	7.6	7.5	7.6	
22	8.3	7.6	7.9	7.6	7.6	7.6	7.4	7.4	7.4	7.6	7.5	7.5	
23	8.3	7.6	7.8	7.7	7.6	7.6	7.4	7.3	7.4	7.6	7.5	7.6	
24	8.3	7.6	7.9	7.6	7.5	7.5	7.4	7.3	7.4	7.7	7.6	7.6	
25	8.0	7.5	7.7	7.6	7.4	7.5	7.3	7.1	7.2	7.7	7.6	7.6	
26	7.6	7.5	7.5	7.5	7.4	7.4	7.2	7.1	7.2	7.7	7.6	7.7	
27	7.8	7.4	7.5	7.5	7.4	7.5	7.3	7.2	7.3	7.8	7.6	7.7	
28	7.5	7.2	7.4	7.6	7.5	7.5	7.4	7.3	7.3	7.7	7.6	7.6	
29	7.3	7.2	7.2	7.6	7.5	7.5	7.4	7.4	7.4	7.6	7.6	7.6	
30	7.4	7.2	7.3	7.5	7.4	7.5	7.4	7.4	7.4	7.6	7.6	7.6	
31	7.4	7.3	7.4	---	---	---	7.5	7.4	7.4	7.7	7.6	7.6	
Max	8.5	7.7	8.0	7.8	7.6	7.6	7.7	7.6	7.6	7.8	7.6	7.7	
Min	7.3	7.2	7.2	7.4	7.3	7.3	7.1	6.8	6.8	7.4	7.2	7.3	

01400500 RARITAN RIVER AT MANVILLE, NJ—Continued
PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

[e, estimated]

Day	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median	
February				March				April				May	
1	7.8	7.6	7.7	9.5	8.8	9.1	8.2	7.7	7.8	8.1	7.7	7.8	
2	7.7	7.6	7.7	9.5	8.8	9.1	8.6	7.6	8.0	8.0	7.6	7.8	
3	7.7	7.6	7.6	9.4	8.8	9.1	8.0	7.4	7.7	7.8	7.7	7.7	
4	7.7	7.6	7.6	9.4	8.9	9.1	7.6	7.4	7.4	7.8	7.7	7.7	
5	7.8	7.6	7.7	9.2	8.7	8.9	8.0	7.5	7.7	7.7	7.6	7.6	
6	8.0	7.8	7.8	9.2	8.7	8.8	7.8	7.6	7.6	7.6	7.5	7.5	
7	8.1	7.9	8.0	9.2	8.6	8.9	8.3	7.6	7.9	7.6	7.1	7.2	
8	8.2	8.0	8.1	9.1	8.5	8.8	8.5	7.7	8.0	7.4	7.2	7.3	
9	8.1	7.7	7.8	8.6	8.0	8.3	8.8	7.8	8.2	7.5	7.4	7.4	
10	7.8	7.8	7.8	8.7	7.9	8.1	8.7	7.8	8.1	7.7	7.5	7.6	
11	8.0	7.8	7.9	8.8	7.9	8.2	8.2	7.8	7.9	7.7	7.6	7.7	
12	8.1	7.9	8.0	9.2	8.0	8.7	8.8	7.7	8.3	7.7	7.6	7.7	
13	8.3	7.9	8.1	9.4	8.6	9.0	9.0	8.0	8.4	7.9	7.6	7.7	
14	8.5	8.0	8.2	9.4	8.7	9.0	8.5	7.9	8.2	7.8	7.6	7.7	
15	8.7	8.2	8.4	9.4	8.7	9.0	8.2	7.8	8.0	8.0	7.6	7.8	
16	8.8	8.3	8.5	9.3	8.4	8.9	8.7	7.8	8.2	8.1	7.7	7.8	
17	8.9	8.4	8.6	9.3	8.4	8.9	8.8	7.9	8.2	7.7	7.5	7.5	
18	8.7	8.2	8.5	9.3	8.3	8.8	8.8	7.8	8.2	7.9	7.5	7.7	
19	8.9	8.2	8.5	9.0	8.0	8.5	8.8	7.8	8.1	8.3	7.8	8.0	
20	9.0	8.7	8.8	8.9	7.8	8.2	8.1	7.7	7.9	8.4	7.8	8.0	
21	9.2	8.7	8.8	9.1	7.9	8.6	8.0	7.6	7.8	8.6	7.8	8.1	
22	9.1	8.5	8.8	9.1	7.9	8.6	7.9	7.6	7.7	8.4	7.7	8.0	
23	9.2	8.5	8.8	9.0	8.0	8.5	8.1	7.7	7.9	8.2	7.6	7.8	
24	9.3	8.7	9.0	9.0	8.0	8.5	8.3	7.8	7.9	8.0	7.5	7.7	
25	9.4	8.8	9.1	9.0	7.9	8.5	8.3	7.8	7.9	7.7	7.4	7.6	
26	9.2	8.6	8.9	8.6	7.9	8.1	8.3	7.7	7.8	7.7	7.4	7.6	
27	9.2	8.4	8.8	8.6	7.7	8.0	8.2	7.6	7.8	---	---	---	
28	9.3	8.4	8.9	8.8	7.8	8.1	8.2	7.6	7.8	---	---	---	
29	---	---	---	8.5	7.7	7.9	8.3	7.6	7.9	---	---	---	
30	---	---	---	7.7	7.5	7.6	8.4	7.7	8.0	7.9	7.6	7.6	
31	---	---	---	8.3	7.6	7.8	---	---	---	8.0	7.6	7.7	
Max	9.4	8.8	9.1	9.5	8.9	9.1	9.0	8.0	8.4	---	---	---	
Min	7.7	7.6	7.6	7.7	7.5	7.6	7.6	7.4	7.4	---	---	---	

01400500 RARITAN RIVER AT MANVILLE, NJ—Continued
PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

[e, estimated]

Day	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median	
June				July				August				September	
1	8.2	7.6	7.8	8.3	7.8	8.0	7.6	7.6	7.6	7.7	7.5	7.6	
2	8.1	7.6	7.7	8.2	7.2	7.9	7.6	6.9	7.6	7.8	7.5	7.6	
3	7.9	7.5	7.6	7.5	7.2	7.3	7.2	6.9	7.0	7.9	7.6	7.6	
4	7.6	7.5	7.5	7.7	7.5	7.6	7.4	7.2	7.3	8.0	7.6	7.7	
5	7.6	7.5	7.6	7.8	7.6	7.7	7.5	7.4	7.4	8.2	7.6	7.7	
6	7.6	7.5	7.5	7.9	7.6	7.7	7.6	7.5	7.5	8.3	7.6	7.9	
7	7.7	7.5	7.6	8.0	7.7	7.7	7.7	7.6	7.6	8.5	7.6	8.0	
8	---	---	---	8.1	7.7	7.8	7.8	7.6	7.7	8.6	7.7	8.1	
9	---	---	---	8.3	7.8	7.9	7.7	7.6	7.7	8.6	7.7	8.0	
10	7.6	7.5	7.6	8.6	7.8	8.1	7.9	7.6	7.7	8.6	7.7	8.1	
11	7.6	7.6	7.6	8.7	7.9	8.3	8.1	7.5	7.7	8.3	7.8	8.0	
12	7.6	7.6	7.6	7.9	7.5	7.6	8.0	7.6	7.7	7.9	7.7	7.8	
13	7.7	7.3	7.6	8.0	7.5	7.7	7.6	7.4	7.5	7.9	7.6	7.7	
14	7.4	7.2	7.3	8.3	7.7	7.9	7.8	7.5	7.6	8.2	7.6	7.7	
15	7.6	7.4	7.5	8.6	7.7	8.0	8.1	7.6	7.7	8.3	7.6	7.8	
16	7.7	7.6	7.6	8.7	7.7	8.1	8.3	7.6	7.8	8.1	7.6	7.7	
17	7.8	7.6	7.7	8.6	7.7	8.0	8.4	7.6	7.9	8.2	7.6	7.8	
18	7.8	7.5	7.7	7.9	7.2	7.5	8.5	7.6	8.0	8.4	7.7	7.9	
19	7.6	7.5	7.5	8.1	7.4	7.7	8.6	7.7	8.0	8.4	7.7	8.0	
20	7.6	7.5	7.6	8.2	7.6	7.8	8.6	7.6	8.0	8.5	7.7	7.9	
21	7.6	7.5	7.5	7.7	7.6	7.6	8.5	7.4	7.6	8.5	7.7	8.0	
22	7.6	7.6	7.6	8.0	7.6	7.7	7.5	7.1	7.1	8.4	7.7	8.0	
23	7.7	7.6	7.6	7.9	7.6	7.7	7.3	7.2	7.2	8.5	7.6	7.9	
24	7.7	7.6	7.6	7.7	7.5	7.6	7.4	7.2	7.3	8.4	7.6	7.9	
25	7.8	7.6	7.7	7.9	7.6	7.7	7.5	7.3	7.4	8.5	7.6	7.9	
26	7.9	7.7	7.8	8.0	7.6	7.7	7.7	7.4	7.5	8.6	7.6	8.0	
27	7.9	7.7	7.8	7.7	7.4	7.5	7.7	7.5	7.5	e8.1	e7.6	e7.8	
28	8.1	7.7	7.8	7.7	7.4	7.6	7.5	7.1	7.3	8.1	7.6	7.7	
29	8.3	7.8	8.0	7.7	7.2	7.6	7.3	7.1	7.2	8.3	7.6	7.8	
30	8.4	7.8	8.0	7.5	7.2	7.4	7.5	7.3	7.4	8.5	7.6	7.9	
31	---	---	---	7.6	7.5	7.5	7.6	7.4	7.5	---	---	---	
Max	---	---	---	8.7	7.9	8.3	8.6	7.7	8.0	8.6	7.8	8.1	
Min	---	---	---	7.5	7.2	7.3	7.2	6.9	7.0	7.7	7.5	7.6	

01400500 RARITAN RIVER AT MANVILLE, NJ—Continued
**SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

[e, estimated]

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
October				November				December				January
1	308	238	290	303	287	295	322	265	288	355	337	346
2	333	308	323	311	303	306	280	273	276	357	353	355
3	347	333	340	317	311	313	289	280	286	359	354	357
4	356	347	350	322	317	319	297	287	290	359	353	356
5	363	356	358	324	315	323	307	297	303	358	350	353
6	365	362	364	341	312	335	313	306	309	374	349	352
7	363	354	357	343	335	339	321	313	316	738	356	505
8	355	351	353	344	336	342	331	321	324	419	395	404
9	360	354	356	346	343	345	347	331	337	470	411	449
10	369	360	365	351	346	350	383	312	347	434	422	425
11	374	369	372	355	350	353	361	212	328	656	425	539
12	375	365	370	358	353	356	212	105	124	738	643	698
13	365	346	356	360	274	346	199	137	169	729	572	642
14	346	333	342	354	345	348	229	199	217	572	512	533
15	336	329	333	345	235	294	244	229	237	524	484	507
16	335	329	332	235	207	217	268	244	251	500	483	490
17	337	328	333	249	227	239	601	268	483	492	480	486
18	332	326	330	271	249	261	541	374	425	480	411	441
19	332	326	329	290	271	281	642	374	436	431	407	419
20	331	321	327	304	290	296	665	528	605	469	430	445
21	327	317	322	312	303	306	751	554	647	467	444	459
22	322	315	319	321	312	315	748	670	721	474	461	469
23	321	315	318	328	321	324	691	549	618	477	455	469
24	321	315	318	333	317	330	1,120	537	724	461	445	454
25	322	221	308	337	300	322	802	350	468	454	441	451
26	327	285	310	300	281	285	425	397	404	450	431	439
27	293	226	287	301	286	294	404	386	397	435	425	429
28	277	185	240	306	301	303	386	343	364	1,820	420	922
29	230	185	212	312	304	307	343	334	338	1,570	952	1,070
30	268	230	250	330	304	315	336	334	335	1,080	903	1,020
31	287	268	279	---	---	---	341	335	339	903	809	833
Month	375	185	324	360	207	312	1,120	105	378	1,820	337	520

01400500 RARITAN RIVER AT MANVILLE, NJ—Continued
**SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

[e, estimated]

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
February				March				April				May
1	809	779	797	439	418	426	462	443	447	412	356	383
2	788	607	664	558	431	462	487	451	464	404	373	385
3	673	533	579	774	476	526	534	347	451	413	356	384
4	757	659	701	593	514	541	347	319	331	403	373	383
5	829	722	773	594	498	537	357	343	353	386	319	333
6	838	785	813	536	510	519	398	357	376	354	267	298
7	786	700	743	536	508	518	389	379	385	303	147	204
8	723	542	668	518	496	505	381	378	380	266	208	242
9	542	440	461	676	483	562	384	377	381	292	266	282
10	491	451	470	569	537	553	385	379	381	301	290	295
11	508	491	495	537	505	523	422	375	395	310	301	307
12	511	483	496	505	485	491	402	388	392	322	309	316
13	508	472	496	490	467	476	388	381	383	328	321	324
14	472	462	464	474	453	462	385	379	381	334	327	331
15	462	429	442	461	442	451	423	384	398	336	333	334
16	429	418	423	453	434	444	387	373	377	336	311	334
17	418	409	413	446	425	435	386	377	381	347	301	314
18	428	404	410	438	421	431	390	380	384	320	305	312
19	454	427	444	462	427	437	390	376	382	336	320	328
20	481	452	467	448	430	438	397	367	381	342	334	337
21	466	451	456	445	426	437	441	380	402	350	340	343
22	478	453	461	447	427	437	436	361	383	356	347	350
23	478	453	465	440	421	430	370	361	366	359	351	354
24	463	443	452	436	421	428	377	369	372	365	355	358
25	452	436	441	434	421	427	381	371	376	374	327	345
26	437	422	428	482	424	435	381	371	376	340	330	333
27	427	412	419	510	443	469	382	373	377	---	---	---
28	430	413	422	474	454	465	383	376	380	---	---	---
29	---	---	---	622	461	490	384	377	381	---	---	---
30	---	---	---	580	430	473	385	379	382	336	326	329
31	---	---	---	447	429	440	---	---	---	341	326	333
Month	838	404	527	774	418	473	534	319	387	---	---	---

01400500 RARITAN RIVER AT MANVILLE, NJ—Continued
**SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

[e, estimated]

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	350	341	344	352	338	344	290	281	286	314	302	308
2	369	325	353	369	150	267	298	113	226	327	314	320
3	364	306	354	229	174	199	207	110	156	329	327	328
4	369	266	310	270	229	252	258	207	236	334	328	330
5	294	267	278	290	270	282	279	258	270	337	332	333
6	289	267	274	303	290	296	289	279	285	340	334	337
7	308	278	295	312	291	306	296	288	292	341	336	339
8	---	---	---	322	310	316	301	295	298	342	335	339
9	---	---	---	324	320	322	304	300	302	343	338	341
10	318	301	307	332	324	327	313	302	306	347	343	345
11	339	309	325	336	222	330	325	313	317	361	333	349
12	333	305	315	319	222	276	345	289	326	362	301	338
13	332	179	308	296	257	274	308	261	284	304	280	289
14	244	159	209	318	296	305	301	273	284	310	291	301
15	287	244	272	332	318	324	301	286	294	329	310	318
16	293	287	291	341	332	335	308	300	303	331	327	329
17	310	292	302	346	277	340	316	308	311	331	326	328
18	332	249	311	353	250	281	321	316	318	333	329	331
19	264	242	249	322	267	304	322	315	319	337	331	333
20	294	261	273	329	321	323	327	316	323	342	337	338
21	279	260	268	335	274	324	329	148	305	349	342	348
22	287	272	282	340	321	332	310	138	184	354	349	352
23	310	287	294	346	300	335	249	193	217	356	351	354
24	328	297	308	318	270	284	256	217	235	358	354	356
25	322	312	316	309	282	292	286	256	271	358	355	356
26	327	322	324	341	289	322	309	286	298	360	330	356
27	333	309	323	341	223	264	322	309	315	e352	e274	e337
28	323	307	316	309	268	290	323	143	214	348	323	333
29	333	322	326	322	165	282	254	171	226	331	320	323
30	350	333	337	250	172	224	283	254	273	340	331	335
31	---	---	---	296	250	276	302	283	291	---	---	---
Month	---	---	---	369	150	298	345	110	276	362	274	334

01400500 RARITAN RIVER AT MANVILLE, NJ—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

[e, estimated]

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
October				November				December				January
1	20.7	18.6	19.5	8.9	7.7	8.2	5.5	3.4	4.5	1.6	0.3	0.6
2	19.2	17.0	18.2	9.2	8.0	8.5	5.5	4.8	5.2	0.5	0.2	0.4
3	17.3	15.6	16.5	8.9	8.1	8.5	4.8	3.4	4.1	0.9	0.2	0.4
4	16.5	14.4	15.3	9.9	8.3	9.2	3.7	3.0	3.4	0.9	0.2	0.5
5	17.1	14.8	15.7	11.5	9.6	10.6	4.0	3.2	3.6	1.7	0.5	1.2
6	17.5	14.9	15.7	13.1	11.4	12.5	3.2	2.2	2.7	2.1	1.7	1.9
7	17.0	13.8	15.2	14.1	13.0	13.6	2.9	1.0	2.2	1.9	1.5	1.7
8	16.1	13.5	14.9	14.0	13.2	13.8	1.4	0.5	0.8	2.5	1.8	2.2
9	17.9	15.1	16.3	13.4	11.8	12.7	1.8	0.4	0.9	2.2	1.3	1.6
10	18.6	15.2	16.8	12.0	9.8	11.1	5.5	1.8	3.8	1.4	0.7	1.0
11	18.5	15.4	16.8	10.3	8.4	9.3	6.0	4.7	5.7	1.4	0.6	0.9
12	18.2	15.2	16.6	9.1	7.5	8.3	4.7	3.9	4.2	1.2	0.4	0.7
13	18.0	15.3	16.5	8.9	7.8	8.3	4.4	3.4	4.0	0.6	0.1	0.3
14	18.6	15.6	17.1	9.9	8.7	9.2	3.4	2.6	3.0	0.6	0.1	0.3
15	19.0	16.4	17.6	13.0	9.9	11.5	6.6	3.4	4.7	0.6	0.1	0.2
16	19.1	17.1	17.8	13.0	10.0	11.8	7.0	5.5	6.6	0.4	-0.1	0.1
17	17.8	15.5	16.6	10.0	7.9	8.8	5.5	4.1	4.5	0.3	-0.1	0.0
18	15.7	13.4	14.5	7.9	5.9	7.1	4.1	3.8	3.9	0.2	-0.1	0.0
19	14.2	12.0	13.0	5.9	4.4	5.1	3.8	1.8	3.0	0.2	0.0	0.0
20	13.3	10.7	11.9	4.8	4.0	4.4	2.2	1.7	1.9	0.3	-0.1	0.0
21	12.4	10.2	11.2	4.9	3.2	4.1	2.2	1.7	2.0	0.3	-0.2	-0.1
22	11.4	9.5	10.4	3.7	1.9	2.9	1.7	0.2	0.6	0.3	-0.2	-0.1
23	11.8	9.0	10.3	3.3	1.4	2.1	---	---	---	0.4	-0.2	0.0
24	11.0	8.8	10.0	2.7	1.2	1.9	1.1	0.2	0.7	0.4	-0.1	0.0
25	14.3	10.3	11.5	3.8	2.7	3.3	2.8	1.1	2.1	0.7	-0.1	0.1
26	13.1	11.6	12.5	4.5	3.8	4.1	3.2	2.2	2.6	0.7	-0.1	0.1
27	13.0	10.8	12.1	4.6	3.6	4.1	4.4	3.2	3.8	0.3	0.0	0.1
28	10.8	6.3	8.9	4.6	3.3	3.8	6.3	4.4	5.3	0.2	-0.1	0.1
29	7.7	6.3	7.1	4.3	2.9	3.4	6.3	4.9	5.6	0.3	-0.2	0.0
30	8.0	7.1	7.5	3.7	2.8	3.2	4.9	3.6	4.1	0.3	-0.1	0.1
31	8.3	7.0	7.7	---	---	---	3.6	1.6	2.8	0.6	-0.1	0.0
Month	20.7	6.3	13.9	14.1	1.2	7.5	---	---	---	2.5	-0.2	0.5

01400500 RARITAN RIVER AT MANVILLE, NJ—Continued
TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009
[e, estimated]

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	
February				March				April				May	
1	0.8	-0.1	0.1	5.0	3.4	4.4	11.1	9.8	10.6	18.3	17.3	17.8	
2	0.6	-0.1	0.2	3.4	0.7	2.4	12.4	9.6	10.9	18.5	17.0	17.6	
3	0.3	0.0	0.1	2.4	0.3	1.1	13.0	12.4	12.7	17.3	16.3	17.0	
4	0.7	0.0	0.2	2.6	0.2	1.1	12.4	10.6	11.3	16.3	14.7	15.6	
5	0.5	-0.1	0.0	3.3	0.2	1.5	12.0	9.7	10.9	14.7	13.7	14.0	
6	0.5	-0.1	0.0	3.8	1.4	2.6	12.1	10.5	11.4	14.4	13.2	13.8	
7	0.7	-0.2	0.1	6.1	3.0	4.7	10.5	9.3	9.9	15.1	13.4	14.2	
8	1.1	-0.2	0.3	7.6	5.4	6.7	9.3	8.4	8.9	16.6	14.4	15.3	
9	1.1	-0.2	0.3	8.1	7.5	7.7	11.1	8.0	9.5	17.9	16.4	17.1	
10	1.3	0.1	0.6	7.7	7.0	7.4	11.2	10.2	10.5	18.1	16.7	17.5	
11	3.7	0.8	2.3	7.6	6.8	7.1	10.6	9.7	10.4	17.9	16.5	17.2	
12	5.4	3.7	4.8	8.2	6.0	6.9	10.9	8.6	9.6	17.7	16.0	16.8	
13	5.4	4.5	4.9	8.3	5.7	6.8	11.4	8.9	10.1	17.6	15.7	16.6	
14	4.5	2.9	3.5	8.0	5.8	6.8	10.8	9.9	10.5	16.8	16.2	16.5	
15	3.7	2.2	2.9	8.2	6.6	7.3	9.9	8.8	9.4	19.4	16.1	17.7	
16	3.6	2.3	2.8	8.5	6.8	7.6	11.6	8.1	9.8	20.1	18.8	19.3	
17	3.5	1.9	2.6	10.6	7.1	8.6	14.5	10.6	12.4	19.6	16.8	18.4	
18	2.3	1.8	2.1	12.0	8.0	9.9	16.3	12.6	14.3	16.8	15.3	16.0	
19	3.3	1.9	2.5	10.6	9.6	10.1	16.9	14.6	15.4	17.8	14.4	16.0	
20	2.4	1.0	1.7	9.6	7.7	8.8	14.6	11.6	13.2	19.8	15.7	17.6	
21	2.8	0.5	1.5	9.9	6.4	8.0	12.7	11.0	11.8	21.7	17.6	19.5	
22	2.6	1.3	1.9	9.7	6.4	8.0	12.8	12.0	12.6	22.8	18.8	20.7	
23	2.8	0.6	1.5	9.8	6.2	7.7	13.1	11.2	12.1	23.6	20.2	21.7	
24	2.9	0.3	1.3	9.4	5.4	7.3	15.2	11.3	13.2	23.8	20.7	22.1	
25	3.5	0.6	1.9	10.2	5.7	7.9	18.5	13.7	16.0	23.4	21.5	22.3	
26	3.7	1.5	2.5	8.4	7.6	8.1	21.6	17.0	19.2	21.9	18.4	20.4	
27	5.1	2.1	3.7	10.3	7.3	8.9	23.5	19.5	21.3	---	---	---	
28	6.2	4.3	5.2	12.1	9.4	10.6	24.2	20.6	22.2	---	---	---	
29	---	---	---	12.0	10.7	11.2	22.1	19.7	21.1	---	---	---	
30	---	---	---	11.3	10.1	10.6	20.0	18.0	19.0	20.7	17.3	18.9	
31	---	---	---	12.2	9.2	10.6	---	---	---	22.0	18.8	19.9	
Month	6.2	-0.2	1.8	12.2	0.2	7.0	24.2	8.0	13.0	---	---	---	

01400500 RARITAN RIVER AT MANVILLE, NJ—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009
[*e*, estimated]

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	21.4	18.1	19.7	24.2	20.2	22.8	24.2	22.4	23.5	22.0	19.8	20.8
2	21.8	18.8	20.3	23.7	21.1	22.1	24.2	21.8	23.0	22.1	19.4	20.6
3	21.4	18.6	20.3	22.3	20.7	21.5	23.4	21.6	22.3	22.4	19.7	20.9
4	18.8	16.8	17.7	23.1	21.3	22.2	23.7	22.0	22.9	23.2	20.3	21.6
5	16.8	16.1	16.6	23.4	21.5	22.4	24.4	22.8	23.6	24.4	21.0	22.6
6	18.1	15.5	16.6	24.0	21.4	22.6	23.9	22.3	23.0	24.1	21.6	22.7
7	20.7	17.8	19.2	24.2	22.0	22.9	23.1	21.4	22.3	23.2	21.1	22.2
8	---	---	---	24.0	21.4	22.5	23.2	21.5	22.4	22.1	20.5	21.3
9	---	---	---	23.6	21.5	22.3	22.6	22.0	22.3	21.7	20.4	21.0
10	20.2	19.2	19.7	24.3	20.6	22.2	25.2	21.7	23.4	21.4	19.4	20.3
11	19.6	18.2	19.1	24.4	21.4	22.9	27.6	24.3	25.8	19.8	18.2	18.7
12	20.1	17.7	18.8	22.6	21.3	22.0	26.3	24.3	25.5	18.4	18.0	18.1
13	21.0	19.7	20.2	24.0	21.3	22.4	24.3	22.9	23.5	20.9	18.3	19.5
14	19.8	18.2	19.1	24.1	21.3	22.6	24.4	21.9	23.2	22.4	19.8	20.9
15	20.1	18.9	19.6	25.1	21.0	23.0	26.2	23.5	24.7	22.6	20.0	21.1
16	20.4	18.9	19.6	26.2	22.4	24.2	27.3	24.5	25.7	20.8	19.2	20.2
17	19.7	18.4	19.0	25.7	23.2	24.6	28.0	25.1	26.4	20.0	18.4	19.1
18	18.6	17.0	18.0	24.2	22.1	23.2	27.8	25.3	26.5	20.7	17.9	19.0
19	19.0	17.0	17.9	25.7	22.4	23.9	28.2	25.5	26.7	20.9	17.6	19.1
20	18.7	17.8	18.2	25.6	22.6	23.9	28.6	25.6	27.0	20.7	16.9	18.8
21	19.3	17.5	18.1	23.7	21.6	22.5	28.9	26.2	26.9	20.7	16.9	18.9
22	19.7	18.7	19.2	23.7	20.8	22.3	26.3	23.3	24.1	20.0	18.1	19.1
23	20.9	19.3	20.0	23.7	21.9	23.0	24.4	22.9	23.7	21.4	18.9	20.1
24	21.5	20.4	21.0	22.9	21.0	21.9	24.9	23.2	24.1	22.9	20.3	21.5
25	22.9	20.9	21.8	24.6	21.5	23.1	25.5	23.3	24.3	22.5	19.8	21.1
26	23.9	22.2	22.7	25.9	21.2	24.3	25.7	23.5	24.5	20.2	18.6	19.2
27	23.7	22.1	22.8	24.5	22.6	23.7	24.2	22.1	23.8	e18.7	e17.5	e18.0
28	24.3	21.9	22.9	25.9	22.9	24.6	23.0	20.4	21.3	18.9	17.0	17.8
29	25.2	22.3	23.7	24.8	23.2	24.3	21.4	20.2	20.7	18.3	16.7	17.4
30	24.9	22.4	23.5	24.7	22.7	23.7	23.0	21.1	22.0	17.4	15.6	16.4
31	---	---	---	25.3	23.7	24.3	22.5	20.9	21.7	---	---	---
Month	---	---	---	26.2	20.2	23.0	28.9	20.2	23.9	24.4	15.6	19.9

01400500 RARITAN RIVER AT MANVILLE, NJ—Continued
TURBIDITY, WATER, UNFILT, NEAR IR LED LIGHT, 780-900 NM, DETECT ANG. 90 DEG, FORMAZIN NEPHELOMETRIC UNITS
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

[e, estimated]

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	
October				November				December				January	
1	41	5.5	12	4.5	2.4	3.0	25	12	20	6.7	3.5	4.3	
2	9.4	3.4	5.4	2.5	1.7	2.0	17	6.8	11	5.5	2.8	3.4	
3	4.1	2.6	3.3	2.8	1.4	1.7	7.4	3.8	5.2	15	2.6	3.4	
4	4.3	2.6	3.3	8.1	1.2	1.6	6.7	2.7	3.6	4.9	2.4	3.4	
5	6.3	2.4	3.5	4.4	1.2	2.0	14	2.1	3.4	6.6	2.9	3.5	
6	8.6	2.6	4.4	12	2.4	3.8	7.1	1.9	3.2	6.6	2.7	3.6	
7	4.6	2.2	3.2	3.0	1.5	2.1	21	1.8	4.0	180	4.3	41	
8	4.6	2.2	3.2	2.8	1.2	1.8	14	2.2	4.1	51	12	24	
9	11	2.6	3.5	2.4	1.2	1.7	11	1.9	3.9	12	7.0	9.0	
10	4.1	2.4	3.2	2.0	1.0	1.4	170	1.7	13	7.8	4.9	6.1	
11	12	2.2	3.1	3.0	1.1	1.5	210	8.7	32	7.1	4.2	5.1	
12	4.0	2.1	2.9	5.1	0.9	1.4	320	57	150	12	3.7	5.0	
13	5.3	2.2	3.2	130	1.0	15	58	18	33	7.2	3.3	4.7	
14	5.6	2.1	3.2	12	4.2	5.9	18	9.0	13	7.2	3.2	4.7	
15	4.3	2.2	3.0	72	4.3	32	9.0	5.9	7.3	10	2.6	4.5	
16	4.6	2.3	3.2	73	23	47	7.5	5.5	6.4	4.5	2.2	2.7	
17	3.9	1.9	2.6	23	7.6	13	15	6.6	9.5	3.8	2.1	2.6	
18	3.3	1.8	2.4	16	5.2	8.3	16	7.7	13	3.3	2.1	2.4	
19	3.4	1.8	2.3	89	5.9	22	11	5.7	7.3	2.8	1.9	2.2	
20	4.5	1.8	2.5	94	2.8	19	19	9.6	13	3.0	1.8	2.3	
21	4.3	1.8	2.6	10	2.5	3.2	10	6.6	8.2	4.0	1.8	2.3	
22	4.2	1.8	2.2	8.9	2.2	2.8	10	5.7	7.4	4.1	1.6	2.6	
23	2.5	1.7	2.0	3.4	2.1	2.4	5.8	3.9	5.0	3.6	1.7	2.3	
24	3.3	1.8	2.2	15	1.3	2.4	48	3.7	13	4.0	1.7	2.7	
25	180	1.9	14	11	5.7	8.0	94	26	55	4.7	1.6	2.3	
26	38	11	18	11	6.4	8.8	26	11	17	5.1	1.5	2.4	
27	45	3.5	6.6	6.5	3.0	4.0	12	6.6	8.1	3.7	1.6	2.7	
28	170	14	73	3.3	2.2	2.5	10	6.9	7.9	55	1.9	15	
29	130	18	47	2.9	1.7	2.1	13	5.9	8.5	13	5.0	8.1	
30	26	7.6	12	23	1.4	7.1	6.1	4.1	5.2	6.3	3.9	4.8	
31	7.6	4.1	5.2	---	---	---	5.1	3.3	4.1	5.8	2.6	3.4	
Month	180	1.7	8.3	130	0.9	7.7	320	1.7	16	180	1.5	6.0	

01400500 RARITAN RIVER AT MANVILLE, NJ—Continued
TURBIDITY, WATER, UNFILT, NEAR IR LED LIGHT, 780-900 NM, DETECT ANG. 90 DEG, FORMAZIN NEPHELOMETRIC UNITS
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

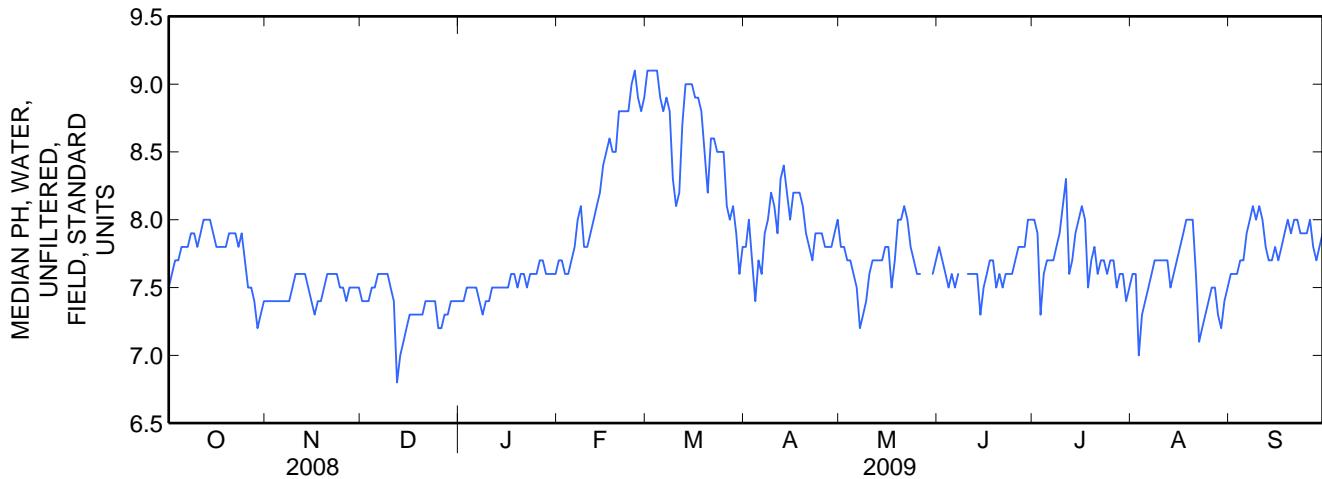
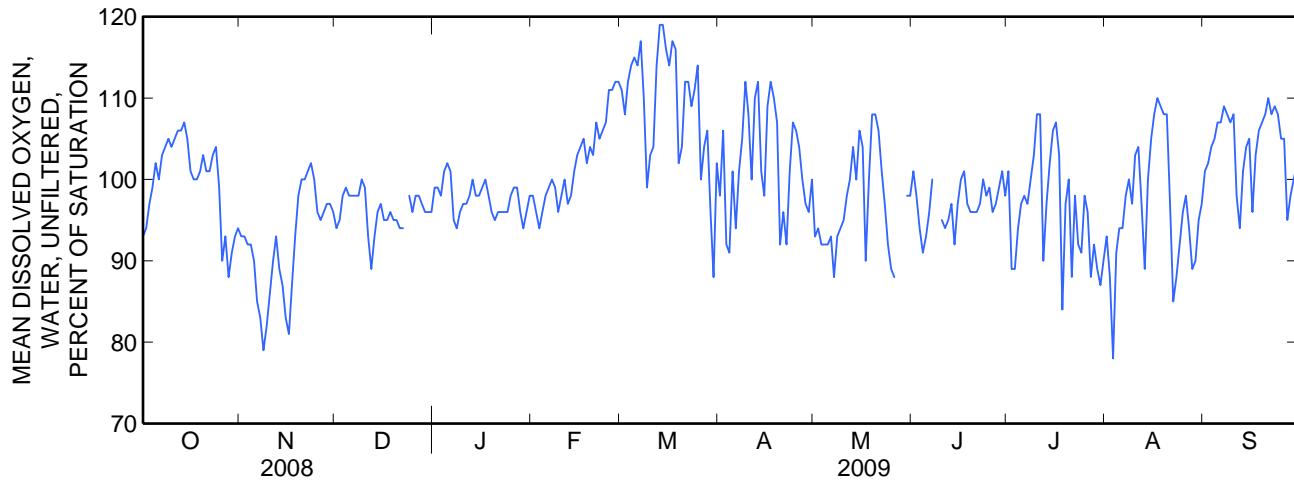
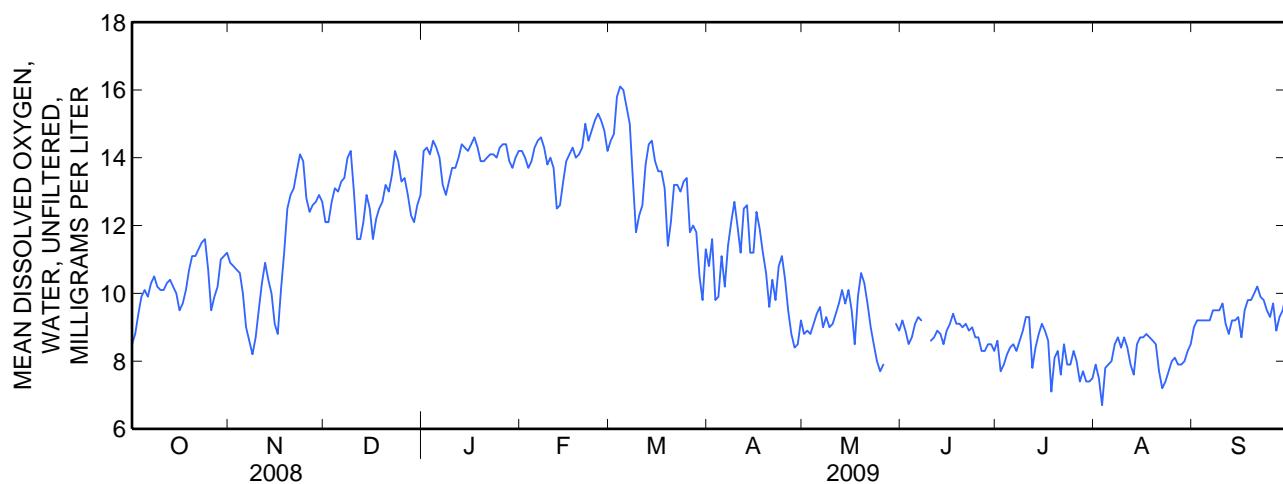
[e, estimated]

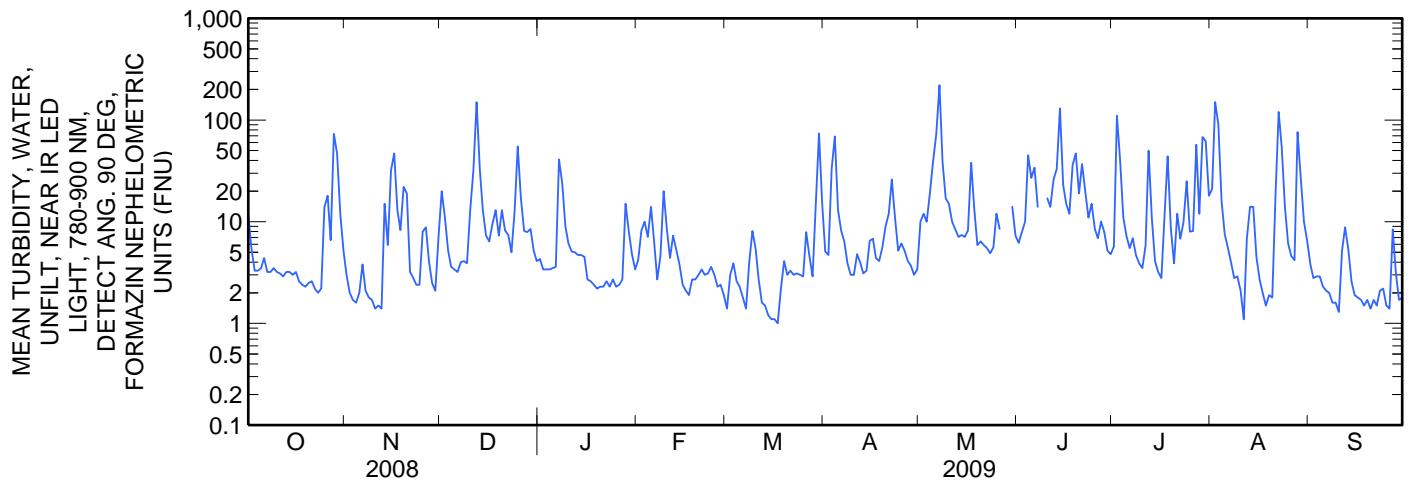
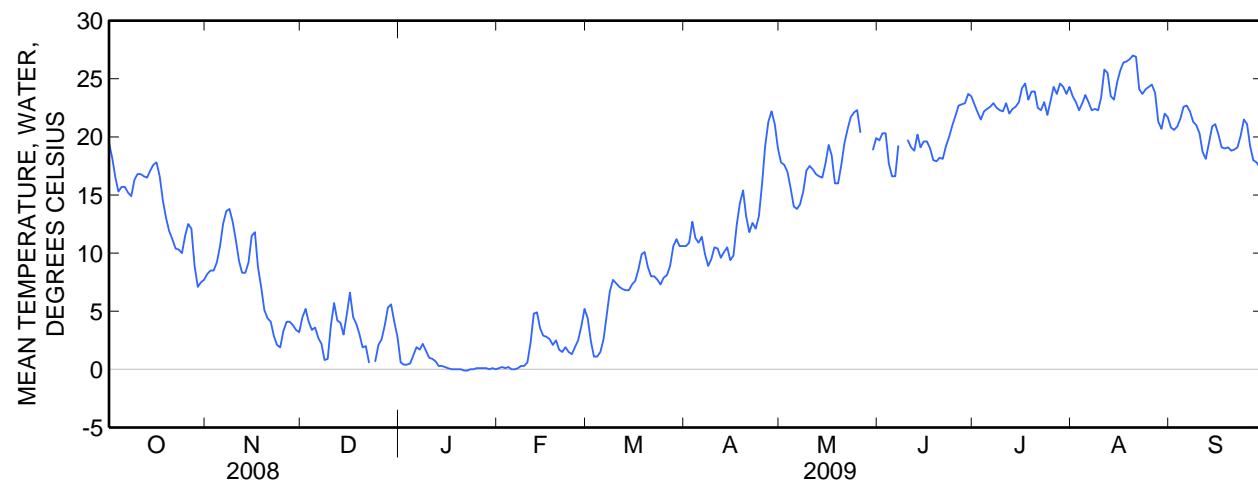
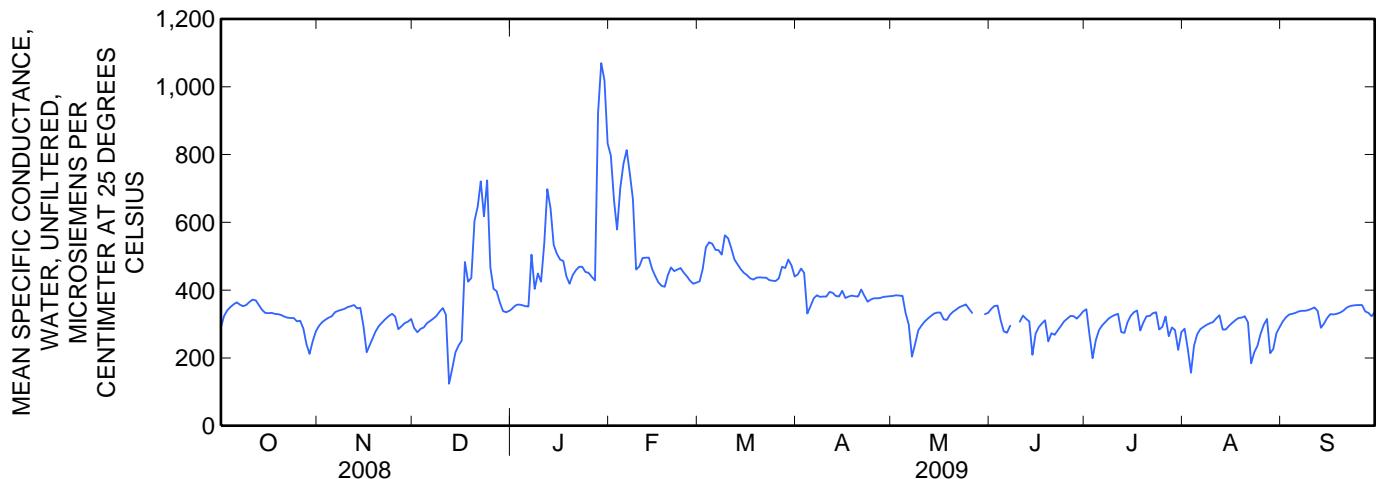
Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
February				March				April				May
1	6.8	2.5	4.2	2.5	1.0	1.4	7.4	3.7	5.1	60	4.2	10
2	20	3.7	8.2	5.9	1.7	3.0	6.4	4.0	4.7	26	7.9	12
3	17	6.6	10	10	1.7	3.9	150	6.0	33	30	6.7	10
4	12	5.4	7.1	5.1	1.5	2.6	150	24	69	48	11	19
5	45	3.8	14	5.4	1.4	2.3	24	8.0	13	54	24	39
6	20	3.4	6.5	5.0	1.1	1.8	21	5.6	8.1	130	26	73
7	4.5	1.8	2.7	4.5	1.1	1.4	8.9	5.2	6.4	530	48	220
8	13	1.9	4.6	13	1.6	4.0	5.5	3.1	3.9	76	21	39
9	27	12	20	84	1.6	8.1	3.8	2.3	3.0	23	14	17
10	14	5.1	8.5	14	3.3	5.4	4.0	2.3	3.0	18	12	15
11	6.0	3.2	4.4	10	1.6	2.7	8.1	2.6	4.8	12	8.3	10
12	9.2	4.3	7.3	2.3	1.3	1.6	5.6	3.1	4.0	10	7.1	8.4
13	7.1	4.4	5.3	2.3	1.3	1.5	4.0	2.7	3.1	8.4	5.4	7.1
14	5.5	2.7	3.8	1.8	1.0	1.2	6.8	2.3	3.3	8.9	6.4	7.4
15	4.1	1.9	2.4	1.8	0.8	1.1	9.5	4.9	6.5	9.2	5.3	7.1
16	3.2	1.7	2.1	1.7	0.8	1.1	8.8	5.5	6.8	130	4.6	8.2
17	3.9	1.5	1.9	1.3	0.8	1.0	6.3	3.1	4.4	130	25	38
18	12	1.6	2.7	7.1	1.0	2.2	6.2	3.0	4.1	25	6.9	13
19	5.0	1.6	2.7	8.2	2.8	4.1	11	3.3	5.6	8.1	4.3	5.9
20	4.6	1.8	3.0	4.9	2.8	3.0	45	3.7	9.0	8.1	4.8	6.4
21	7.9	2.1	3.4	4.9	2.8	3.3	84	7.3	12	8.0	4.0	5.9
22	9.4	1.5	3.0	3.6	2.8	3.0	35	20	26	7.2	4.0	5.5
23	7.0	1.8	3.1	4.0	2.8	3.1	20	6.3	11	7.5	3.5	4.9
24	8.6	2.1	3.6	3.9	2.8	3.0	7.4	3.8	5.2	8.6	4.0	5.6
25	7.7	1.7	3.0	3.4	2.6	2.9	9.7	4.6	6.1	14	8.5	12
26	5.6	1.3	2.3	130	2.4	7.9	7.4	4.0	5.2	13	6.1	8.5
27	4.2	1.4	2.4	12	2.9	4.6	5.2	3.5	4.1	---	---	---
28	3.5	1.2	1.9	3.5	2.5	2.9	5.7	3.1	3.7	---	---	---
29	---	---	---	260	2.5	15	3.8	2.5	3.0	---	---	---
30	---	---	---	1,200	35	74	5.1	2.7	3.4	20	8.2	14
31	---	---	---	35	6.8	15	---	---	---	10	4.6	7.3
Month	45	1.2	5.1	1,200	0.8	6.1	150	2.3	9.3	---	---	---

01400500 RARITAN RIVER AT MANVILLE, NJ—Continued
TURBIDITY, WATER, UNFILT, NEAR IR LED LIGHT, 780-900 NM, DETECT ANG. 90 DEG, FORMAZIN NEPHELOMETRIC UNITS
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

[e, estimated]

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June				July				August			
1	9.3	4.5	6.2	7.8	3.7	5.7	28	12	21	6.2	2.4	3.8
2	45	3.9	7.9	540	5.1	110	430	11	150	3.6	1.9	2.8
3	100	5.0	10	91	16	40	220	28	90	4.4	2.0	2.9
4	100	29	45	16	8.0	11	28	9.4	16	5.2	1.5	2.9
5	38	21	27	8.7	5.4	7.2	9.5	5.0	7.5	4.6	1.2	2.3
6	45	20	34	6.5	4.4	5.5	7.2	4.1	5.5	4.1	1.2	2.1
7	20	11	14	42	4.1	6.9	5.0	2.8	4.0	3.8	0.9	2.0
8	---	---	---	6.5	3.4	4.7	3.9	1.9	2.8	2.9	0.8	1.6
9	---	---	---	5.4	2.9	3.9	4.7	2.1	2.9	3.5	0.8	1.6
10	24	11	17	4.9	2.5	3.5	3.6	0.7	2.1	2.6	0.7	1.3
11	22	11	14	97	2.1	5.8	4.0	<0.5	1.1	35	1.8	5.2
12	31	21	26	97	22	50	29	<0.5	6.8	15	6.6	8.8
13	450	13	33	22	5.1	11	30	5.3	14	10	3.3	5.4
14	450	40	130	5.5	3.0	4.1	22	6.9	14	4.4	1.6	2.6
15	40	15	23	4.1	2.2	3.2	7.3	2.6	4.5	3.3	1.2	1.9
16	16	13	15	4.6	1.8	2.8	4.7	1.5	2.7	2.7	1.2	1.8
17	16	8.8	12	220	1.7	11	3.4	1.1	2.0	2.6	1.0	1.7
18	120	8.8	36	100	20	44	2.3	0.9	1.5	2.4	1.0	1.5
19	110	20	47	23	3.8	8.6	3.4	0.9	1.9	2.6	1.2	1.7
20	33	13	19	6.3	2.6	3.9	2.9	1.1	1.8	2.5	0.8	1.4
21	48	27	37	53	3.6	12	120	1.1	18	2.7	1.0	1.7
22	27	13	20	12	4.3	6.8	350	13	120	2.3	0.9	1.5
23	13	9.6	11	39	3.0	9.9	110	22	54	5.2	1.2	2.1
24	28	9.2	15	43	12	25	23	7.4	14	3.9	1.2	2.2
25	11	6.6	8.5	14	4.6	8.0	8.9	3.9	6.1	3.9	1.0	1.5
26	7.6	6.0	6.9	110	3.8	8.1	8.7	2.9	4.6	3.7	1.1	1.4
27	17	7.6	10	120	20	57	6.6	2.5	4.2	e24	e3.7	e8.4
28	12	5.6	7.9	20	7.3	12	160	4.6	76	6.3	2.0	3.2
29	7.2	4.0	5.2	280	5.9	68	55	13	27	2.4	1.2	1.7
30	6.4	3.4	4.8	220	20	62	13	7.7	10	2.8	1.2	1.8
31	---	---	---	35	9.0	18	8.9	4.4	6.5	---	---	---
Month	---	---	---	540	1.7	20	430	<0.5	22	35	0.7	2.7

01400500 RARITAN RIVER AT MANVILLE, NJ—Continued

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