

Water-Data Report 2007

01408029 MANASQUAN RIVER NEAR ALLENWOOD, NJ

MANASQUAN RIVER BASIN

LOCATION.--Lat 40°08'48", long 74°07'20" referenced to North American Datum of 1983, Wall Township, Monmouth County, NJ, Hydrologic Unit 02040301, on left bank just downstream from pumping station of Manasquan Water Supply System, 1400 ft upstream from Hospital Road, 1.1 mi west of Allenwood, 1.2 mi downstream from Mill Run, 2.2 mi east of Squankum, and 7.9 mi upstream of mouth.

DRAINAGE AREA.--63.3 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--June 1990 to current year.

REVISED RECORDS.--WDR NJ-92-1: 1991 Diversions.

GAGE.--Water-stage recorder and concrete control. Datum of gage is NGVD of 1929 (New Jersey Water Supply Authority benchmark).

REMARKS.--Records good. Diversion by New Jersey-American Water Company from Manasquan Reservoir (see 0140802880) since 1990 and by Manasquan Water Supply System at gage to Manasquan Reservoir (see 0140802890) for municipal supply since March 1990. Records of diversions provided by New Jersey Water Supply Authority. Satellite gage-height and water-quality parameters available at gage. Several measurements of water temperature were made during the year.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	35	95	41	220	58	112	27	119	27	26	14	14
2	40	93	31	421	55	661	72	144	27	21	27	14
3	30	87	18	176	36	565	75	116	28	19	29	15
4	27	78	38	118	20	228	186	98	286	17	26	14
5	72	74	43	93	46	136	381	90	171	27	21	16
6	31	73	77	36	66	49	157	82	89	93	20	16
7	36	71	76	64	64	36	111	76	36	14	20	15
8	12	333	70	499	61	31	94	74	28	26	17	14
9	12	875	66	439	60	28	83	72	33	20	15	15
10	17	245	65	196	60	15	77	76	29	16	26	15
11	35	64	65	130	60	27	71	90	26	23	29	15
12	340	114	63	113	60	35	317	87	37	36	17	27
13	101	235	66	106	60	35	454	127	33	20	14	15
14	39	390	73	119	177	54	197	96	30	15	14	15
15	20	232	66	110	155	71	525	84	27	12	14	15
16	15	179	63	101	95	190	1,910	82	24	12	15	16
17	24	354	59	85	89	275	685	122	23	12	15	15
18	282	206	59	78	79	247	345	89	19	120	33	14
19	96	152	57	94	70	183	232	83	17	164	19	15
20	78	119	55	87	57	218	182	86	38	13	77	15
21	65	98	54	72	102	200	115	52	39	23	75	14
22	34	101	54	72	105	143	97	13	51	19	71	16
23	27	386	269	74	89	138	113	34	21	142	17	18
24	23	653	181	70	17	147	119	42	23	132	28	14
25	54	313	123	68	21	119	111	41	19	20	30	17
26	68	200	350	56	99	101	110	39	20	24	26	15
27	67	122	207	19	135	95	335	37	17	30	23	15
28	305	61	124	25	148	88	442	35	103	26	19	15
29	335	48	82	55	---	79	226	12	44	119	16	15
30	141	40	15	62	---	68	161	30	12	326	14	16
31	106	---	13	61	---	29	---	29	---	80	15	---
Total	2,567	6,091	2,623	3,919	2,144	4,403	8,010	2,257	1,377	1,647	796	465
Mean	82.8	203	84.6	126	76.6	142	267	72.8	45.9	53.1	25.7	15.5
Max	340	875	350	499	177	661	1,910	144	286	326	77	27
Min	12	40	13	19	17	15	27	12	12	12	14	14

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2007, BY WATER YEAR (WY)

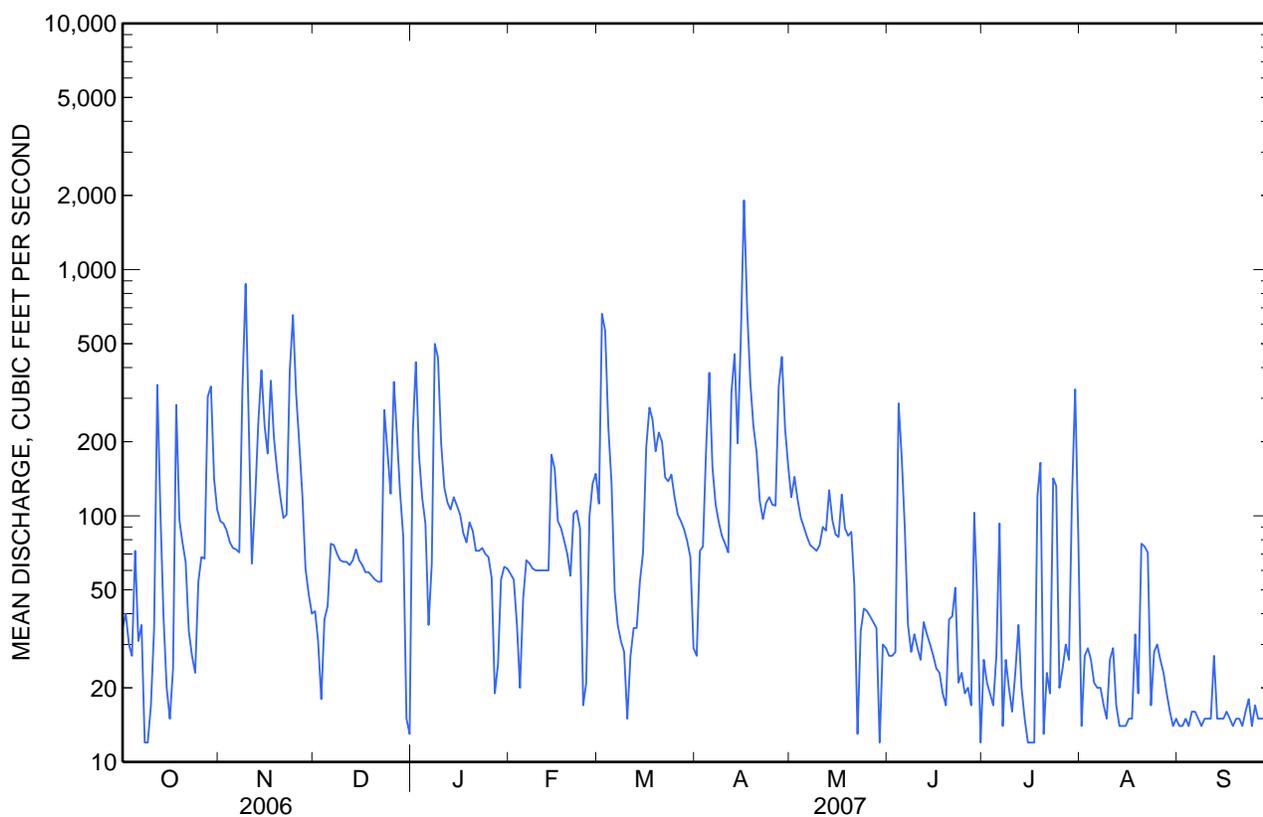
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	59.1	69.4	97.7	120	101	148	124	77.9	60.0	37.8	46.0	45.6
Max	229	203	227	218	270	319	267	312	216	66.4	131	109
(WY)	(2006)	(2007)	(1997)	(1996)	(1998)	(1993)	(2007)	(1998)	(2003)	(1990)	(1990)	(2006)
Min	19.2	15.4	16.5	16.9	11.6	22.5	21.4	31.2	17.0	15.0	14.5	13.7
(WY)	(1995)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)	(1992)	(1999)	(1999)	(2005)	(2005)

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SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 1990 - 2007	
Annual total	34,778		36,299			
Annual mean	95.3		99.4		81.6	
Highest annual mean					133	1998
Lowest annual mean					23.5	2002
Highest daily mean	1,090	Sep 3	1,910	Apr 16	2,850	Oct 14, 2005
Lowest daily mean	10	Aug 10	12	Many days	7.7	Mar 29, 2002
Annual seven-day minimum	10	Aug 10	15	Aug 29	8.8	Apr 5, 2002
Maximum peak flow			2,360	Apr 16	3,880	Oct 14, 2005
Maximum peak stage			15.85	Apr 16	16.97	Oct 14, 2005
Instantaneous low flow			6.7	Jun 21	^a 0.00	Jun 24, 1993
10 percent exceeds	215		227		168	
50 percent exceeds	58		61		44	
90 percent exceeds	13		15		14	

^a Results of pumping to Manasquan Reservoir, also occurred on Nov 26, 2001.



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WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 2006 to September 2007.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: December 2006 to September 2007.

WATER TEMPERATURE: December 2006 to September 2007.

TURBIDITY: December 2006 to September 2007.

INSTRUMENTATION.--Water-quality monitor since December 2006, pumping system, data recorded every 15 minutes.

REMARKS.--Temporary interruptions in the daily record were due to instrument or pumping system malfunction. 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; Turbidity, the greater of 0.5 FNU (+ or -) or 5% of the measured value. 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: Jan. 4 - 24.

TURBIDITY: Jan. 4 to Mar. 2, Mar. 23 to Apr. 20, May 18 to July 3, and Aug. 3 to Sep. 11.

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

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 3,060 microsiemens/cm, Feb. 26; minimum, 75 microsiemens/cm, Apr. 16.

WATER TEMPERATURE: Maximum, 23.3°C, Aug. 8; minimum, 0.0°C, Feb. 5, 6.

TURBIDITY: Maximum, 220 FNU, July 6; minimum, 2.7 FNU, Sept. 6.

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SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	October			November			December			January		
1	---	---	---	---	---	---	---	---	---	186	99	164
2	---	---	---	---	---	---	---	---	---	125	99	110
3	---	---	---	---	---	---	---	---	---	156	125	142
4	---	---	---	---	---	---	---	---	---	170	151	161
5	---	---	---	---	---	---	---	---	---	178	170	174
6	---	---	---	---	---	---	---	---	---	181	168	174
7	---	---	---	---	---	---	---	---	---	175	169	173
8	---	---	---	---	---	---	---	---	---	175	89	125
9	---	---	---	---	---	---	---	---	---	122	91	105
10	---	---	---	---	---	---	---	---	---	149	122	138
11	---	---	---	---	---	---	---	---	---	163	148	157
12	---	---	---	---	---	---	---	---	---	172	163	168
13	---	---	---	---	---	---	---	---	---	176	172	174
14	---	---	---	---	---	---	---	---	---	179	175	177
15	---	---	---	---	---	---	---	---	---	178	172	174
16	---	---	---	---	---	---	---	---	---	178	174	176
17	---	---	---	---	---	---	---	---	---	183	178	180
18	---	---	---	---	---	---	---	---	---	188	183	186
19	---	---	---	---	---	---	---	---	---	212	186	190
20	---	---	---	---	---	---	---	---	---	326	212	272
21	---	---	---	---	---	---	---	---	---	324	220	258
22	---	---	---	---	---	---	---	---	---	220	208	213
23	---	---	---	---	---	---	---	---	---	304	219	258
24	---	---	---	---	---	---	---	---	---	319	239	281
25	---	---	---	---	---	---	---	---	---	239	216	226
26	---	---	---	---	---	---	---	---	---	216	211	214
27	---	---	---	---	---	---	---	---	---	216	211	214
28	---	---	---	---	---	---	---	---	---	217	208	210
29	---	---	---	---	---	---	175	163	169	306	206	224
30	---	---	---	---	---	---	181	175	179	1,010	306	585
31	---	---	---	---	---	---	185	181	184	1,010	473	757
Month	---	---	---	---	---	---	---	---	---	1,010	89	218

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SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	February			March			April			May		
1	473	307	374	346	278	298	234	229	232	185	178	181
2	307	261	280	299	161	219	232	221	227	192	184	187
3	935	262	492	172	152	160	241	231	236	191	182	184
4	942	416	627	199	172	186	231	174	215	194	185	190
5	416	284	343	861	197	339	174	160	169	197	194	195
6	296	267	287	211	204	208	191	171	181	201	197	199
7	271	253	264	241	211	216	201	191	197	203	201	202
8	253	242	249	449	232	319	206	201	204	205	203	204
9	247	240	244	422	270	340	208	206	207	207	204	206
10	241	234	238	270	232	250	210	208	209	208	207	207
11	234	228	231	325	227	253	212	209	211	209	207	208
12	229	224	227	511	325	425	213	119	176	212	209	209
13	224	220	222	350	237	275	147	120	134	216	203	210
14	457	166	251	238	232	236	172	147	161	205	193	197
15	713	347	563	232	225	229	176	86	148	208	197	202
16	761	513	634	580	221	333	89	75	81	209	201	207
17	688	531	610	1,280	483	851	131	89	113	210	193	202
18	643	485	568	1,690	508	1,040	164	131	149	196	190	192
19	486	410	435	508	288	416	179	164	171	203	196	201
20	410	336	365	440	343	392	187	179	183	206	203	204
21	1,360	351	662	367	255	298	193	187	190	211	206	209
22	1,360	395	695	256	248	250	197	193	195	211	207	208
23	545	350	456	291	249	258	200	197	198	212	208	211
24	350	277	307	337	288	314	202	200	201	216	212	214
25	277	249	265	304	257	269	204	202	203	219	216	217
26	3,060	239	1,010	259	241	249	207	202	205	223	219	221
27	2,290	466	1,060	251	237	240	213	127	174	226	223	225
28	466	346	404	252	235	241	136	120	126	230	224	226
29	---	---	---	235	234	234	160	136	149	234	224	230
30	---	---	---	235	231	233	179	160	171	227	224	226
31	---	---	---	234	232	233	---	---	---	234	227	231
Month	3,060	166	442	1,690	152	316	241	75	181	234	178	207

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SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	235	229	232	212	200	207	194	177	186	237	232	234
2	242	231	238	222	212	218	205	194	201	240	235	237
3	240	195	233	226	222	225	211	205	209	240	236	237
4	210	145	169	229	226	227	215	210	212	242	237	239
5	161	148	153	226	214	219	225	215	221	242	238	239
6	182	161	174	224	111	176	225	221	222	241	238	239
7	206	182	200	186	148	169	225	222	224	245	240	242
8	209	201	205	207	186	198	230	225	228	249	241	243
9	216	209	212	219	207	215	237	230	233	249	243	245
10	221	216	219	224	219	223	236	230	232	248	243	245
11	226	221	224	231	214	227	231	214	224	246	241	244
12	229	224	226	216	201	211	223	214	219	256	194	219
13	229	218	226	216	207	210	231	223	226	215	197	205
14	223	218	221	221	211	217	234	228	231	227	215	221
15	224	220	223	228	221	224	237	234	235	232	227	229
16	227	224	225	231	227	229	243	235	239	242	232	238
17	233	227	230	234	231	232	243	238	240	238	234	235
18	236	229	231	233	110	206	255	190	227	237	232	235
19	234	231	233	166	112	138	206	190	198	239	229	234
20	251	183	227	182	152	168	204	141	167	243	237	239
21	200	183	190	201	182	192	178	160	169	244	239	241
22	212	148	181	213	201	207	167	151	159	245	242	243
23	201	169	186	215	104	173	191	167	180	243	239	241
24	220	201	213	144	113	130	202	191	198	242	240	240
25	227	220	224	176	144	161	213	202	209	242	211	238
26	231	225	228	190	176	183	221	213	218	245	238	241
27	234	228	232	203	190	197	234	221	226	245	237	241
28	228	137	181	210	203	207	231	227	229	242	236	241
29	185	159	174	210	113	192	235	228	232	243	241	242
30	200	185	192	141	97	120	237	231	234	245	243	243
31	---	---	---	178	141	164	235	233	235	---	---	---
Month	251	137	210	234	97	196	255	141	215	256	194	237

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TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	October			November			December			January		
1	---	---	---	---	---	---	---	---	---	10.3	7.3	8.6
2	---	---	---	---	---	---	---	---	---	10.3	7.9	9.3
3	---	---	---	---	---	---	---	---	---	7.9	6.4	7.1
4	---	---	---	---	---	---	---	---	---	7.9	6.7	7.2
5	---	---	---	---	---	---	---	---	---	10.9	7.9	9.0
6	---	---	---	---	---	---	---	---	---	13.3	10.9	12.3
7	---	---	---	---	---	---	---	---	---	12.8	10.6	11.4
8	---	---	---	---	---	---	---	---	---	10.6	9.9	10.4
9	---	---	---	---	---	---	---	---	---	9.9	7.3	8.1
10	---	---	---	---	---	---	---	---	---	7.6	5.6	6.7
11	---	---	---	---	---	---	---	---	---	5.6	4.8	5.0
12	---	---	---	---	---	---	---	---	---	6.6	4.8	5.4
13	---	---	---	---	---	---	---	---	---	9.3	6.6	7.9
14	---	---	---	---	---	---	---	---	---	10.0	9.3	9.7
15	---	---	---	---	---	---	---	---	---	10.3	9.7	9.9
16	---	---	---	---	---	---	---	---	---	10.4	8.6	10.1
17	---	---	---	---	---	---	---	---	---	8.6	4.6	6.2
18	---	---	---	---	---	---	---	---	---	4.6	3.6	4.0
19	---	---	---	---	---	---	---	---	---	5.5	4.4	5.1
20	---	---	---	---	---	---	---	---	---	5.3	3.8	4.6
21	---	---	---	---	---	---	---	---	---	3.8	2.7	3.0
22	---	---	---	---	---	---	---	---	---	4.0	3.1	3.4
23	---	---	---	---	---	---	---	---	---	4.5	4.0	4.3
24	---	---	---	---	---	---	---	---	---	4.4	3.4	3.9
25	---	---	---	---	---	---	---	---	---	4.1	3.5	3.9
26	---	---	---	---	---	---	---	---	---	3.5	1.0	1.8
27	---	---	---	---	---	---	---	---	---	3.4	1.0	2.1
28	---	---	---	---	---	---	---	---	---	4.7	3.4	4.1
29	---	---	---	---	---	---	7.6	7.1	7.3	4.6	3.0	3.8
30	---	---	---	---	---	---	7.9	6.8	7.4	3.0	1.8	2.3
31	---	---	---	---	---	---	7.6	6.6	7.0	3.1	2.6	2.9
Month	---	---	---	---	---	---	---	---	---	13.3	1.0	6.2

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TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	February			March			April			May		
1	3.2	2.4	2.7	5.6	3.9	4.8	10.1	8.9	9.4	15.6	14.6	15.1
2	4.6	3.2	3.8	6.1	5.3	5.7	10.6	9.0	9.6	16.0	14.1	15.0
3	4.5	2.5	3.5	5.7	4.1	5.0	12.1	10.1	10.9	15.8	14.1	15.1
4	2.5	1.4	1.9	5.7	4.8	5.3	12.0	8.3	10.1	15.3	13.4	14.5
5	1.4	0.0	0.4	4.8	3.8	4.5	8.5	7.5	8.0	15.6	13.3	14.5
6	0.2	0.0	0.1	3.8	1.7	2.5	8.0	7.1	7.6	15.4	13.8	14.5
7	0.3	0.1	0.2	1.7	0.9	1.3	7.6	6.7	7.2	14.3	12.2	13.3
8	0.6	0.1	0.3	2.7	0.3	1.6	7.3	6.0	6.6	15.0	12.2	13.6
9	1.0	0.1	0.5	3.7	1.4	2.6	8.3	5.8	6.9	17.5	14.5	15.8
10	2.1	0.8	1.3	6.4	2.6	4.3	9.5	7.3	8.4	18.7	16.8	17.6
11	2.0	0.8	1.4	8.3	6.2	7.0	9.4	7.7	8.6	18.3	16.8	17.5
12	3.3	1.4	2.2	7.6	5.3	6.6	9.4	7.8	8.4	17.6	16.5	17.1
13	3.3	2.8	3.1	8.7	6.1	7.4	8.1	7.3	7.6	17.0	15.3	16.0
14	2.8	0.9	1.7	10.8	7.8	8.8	9.4	7.1	8.0	15.9	13.8	14.7
15	1.0	0.2	0.6	11.8	10.6	11.1	9.3	8.2	8.7	16.6	13.9	14.9
16	0.9	0.1	0.5	11.4	2.9	7.6	9.2	7.6	8.7	18.4	16.4	17.1
17	2.3	0.3	1.1	4.3	1.9	2.9	8.4	7.3	7.7	18.1	16.7	17.3
18	3.4	2.3	2.8	5.0	3.0	4.0	9.0	8.2	8.6	16.7	13.4	14.8
19	3.0	0.9	1.7	5.8	4.1	5.1	10.0	9.0	9.3	13.4	12.6	13.0
20	4.2	1.6	2.7	8.0	5.8	6.8	12.2	9.4	10.5	14.9	12.9	13.6
21	5.1	4.2	4.7	7.5	6.0	6.8	13.6	10.5	11.9	17.1	14.5	15.6
22	4.6	3.0	3.5	9.9	6.9	7.9	15.1	11.9	13.4	16.0	14.0	15.1
23	4.1	3.0	3.6	11.0	9.9	10.5	16.0	12.9	14.4	16.2	14.3	15.3
24	3.4	1.5	2.6	10.9	10.3	10.6	17.3	15.4	16.3	17.2	15.2	16.2
25	3.7	2.5	3.1	10.8	9.7	10.3	16.9	15.0	15.6	18.5	16.4	17.4
26	3.3	2.8	3.0	10.4	9.1	9.6	15.0	13.6	14.0	19.4	17.8	18.6
27	4.5	2.9	3.6	13.1	9.5	10.9	13.7	11.8	12.5	19.8	18.7	19.2
28	5.2	3.8	4.5	13.6	12.2	12.9	14.3	12.5	13.2	19.5	18.8	19.1
29	---	---	---	13.3	10.8	11.6	14.4	13.9	14.2	19.0	17.7	18.4
30	---	---	---	11.4	9.3	10.3	15.8	13.1	14.5	18.5	17.0	17.9
31	---	---	---	11.0	9.2	10.1	---	---	---	19.3	17.4	18.4
Month	5.2	0.0	2.2	13.6	0.3	7.0	17.3	5.8	10.4	19.8	12.2	16.0

01408029 MANASQUAN RIVER NEAR ALLENWOOD, NJ—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	20.3	18.7	19.5	19.9	18.7	19.2	21.8	20.3	21.1	19.7	18.9	19.3
2	20.7	19.2	20.0	18.9	17.2	18.0	22.2	20.7	21.5	19.2	17.7	18.3
3	20.4	18.6	19.7	18.3	16.8	17.6	22.7	21.3	22.0	18.5	17.1	17.9
4	18.6	18.0	18.4	18.0	17.3	17.7	23.0	21.8	22.4	19.7	18.2	18.9
5	19.0	18.2	18.5	18.7	17.8	18.2	22.6	21.2	21.7	19.3	18.5	19.0
6	19.0	18.0	18.4	21.0	18.4	19.6	21.8	20.8	21.3	19.1	18.1	18.7
7	19.9	16.1	17.6	21.2	19.5	20.4	22.0	20.8	21.4	20.1	18.6	19.4
8	19.1	16.8	17.9	21.5	19.7	20.6	23.3	21.5	22.3	21.1	19.7	20.4
9	20.3	18.9	19.5	22.4	20.5	21.5	22.9	22.1	22.5	21.2	20.2	20.7
10	19.7	18.3	18.8	22.6	21.3	22.0	22.2	20.5	21.6	21.4	20.7	21.0
11	19.3	17.4	18.4	22.9	21.5	22.2	20.5	19.2	19.8	21.2	20.3	20.7
12	19.8	18.6	19.2	22.5	21.3	21.8	20.5	18.9	19.7	20.3	19.2	19.7
13	19.5	17.8	18.6	21.5	20.0	20.8	21.4	19.9	20.6	19.3	17.6	18.1
14	17.8	16.0	16.6	20.7	19.5	20.2	21.0	19.8	20.4	17.7	16.9	17.4
15	16.9	15.5	16.2	21.5	19.7	20.6	20.4	19.1	19.9	18.1	17.2	17.7
16	18.0	16.1	17.1	21.6	21.0	21.3	20.9	20.0	20.4	17.2	15.3	16.0
17	19.4	17.2	18.3	21.6	20.2	20.9	21.2	20.2	20.7	15.3	14.2	14.6
18	20.4	18.8	19.6	22.1	20.7	21.1	20.9	19.0	19.9	14.8	13.8	14.4
19	20.3	18.7	19.6	22.4	21.5	22.0	19.4	18.2	18.6	15.2	14.6	14.9
20	20.1	19.1	19.7	22.2	21.4	21.7	18.7	17.7	18.3	15.4	14.3	14.9
21	19.9	18.3	19.4	21.4	19.8	20.5	18.1	17.1	17.4	16.5	15.1	15.8
22	19.7	18.0	19.0	20.6	19.2	20.0	17.2	17.0	17.1	17.1	16.2	16.6
23	18.8	17.2	18.1	20.3	18.5	19.2	17.7	16.9	17.3	17.9	16.8	17.4
24	18.1	16.4	17.4	19.4	18.2	18.8	19.2	17.6	18.3	17.4	16.3	16.8
25	18.0	17.2	17.6	20.3	18.4	19.3	20.7	19.1	19.8	18.9	15.9	16.8
26	20.1	17.7	18.8	21.0	19.8	20.3	20.9	20.4	20.7	18.6	17.0	17.8
27	21.5	19.7	20.6	21.8	20.3	21.0	20.8	19.9	20.4	19.4	18.4	18.9
28	22.9	20.6	21.9	21.9	21.0	21.5	20.3	19.1	19.7	19.8	19.1	19.4
29	22.4	20.4	21.3	21.6	20.7	21.1	19.7	18.6	19.2	19.1	17.5	18.2
30	20.5	19.3	19.9	21.5	21.1	21.3	19.6	18.4	19.1	17.5	16.2	16.6
31	---	---	---	22.1	20.7	21.5	19.9	18.8	19.3	---	---	---
Month	22.9	15.5	18.9	22.9	16.8	20.4	23.3	16.9	20.1	21.4	13.8	17.9

01408029 MANASQUAN RIVER NEAR ALLENWOOD, NJ—Continued

TURBIDITY, WATER, UNFILT, NEAR IR LED LIGHT, 780-900 NM, DETECT ANG. 90 DEG, FORMAZIN NEPHELOMETRIC UNITS
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	October			November			December			January		
1	---	---	---	---	---	---	---	---	---	160	12.4	55.2
2	---	---	---	---	---	---	---	---	---	150	23.5	57.0
3	---	---	---	---	---	---	---	---	---	42.6	13.1	18.6
4	---	---	---	---	---	---	---	---	---	27.0	9.6	11.9
5	---	---	---	---	---	---	---	---	---	61.8	9.9	13.3
6	---	---	---	---	---	---	---	---	---	74.1	17.1	22.7
7	---	---	---	---	---	---	---	---	---	39.6	12.9	16.7
8	---	---	---	---	---	---	---	---	---	110	12.9	63.9
9	---	---	---	---	---	---	---	---	---	56.9	20.2	33.8
10	---	---	---	---	---	---	---	---	---	38.7	13.3	17.6
11	---	---	---	---	---	---	---	---	---	95.2	10.0	13.7
12	---	---	---	---	---	---	---	---	---	25.5	9.2	10
13	---	---	---	---	---	---	---	---	---	30.0	9.2	10.9
14	---	---	---	---	---	---	---	---	---	24.0	10.6	14.8
15	---	---	---	---	---	---	---	---	---	47.9	12.3	16.7
16	---	---	---	---	---	---	---	---	---	46.6	12.6	14.4
17	---	---	---	---	---	---	---	---	---	32.4	12.5	14.2
18	---	---	---	---	---	---	---	---	---	44.8	10.8	13.1
19	---	---	---	---	---	---	---	---	---	47.3	11.3	15.9
20	---	---	---	---	---	---	---	---	---	57.5	13.1	16.4
21	---	---	---	---	---	---	---	---	---	23.7	11.5	13.3
22	---	---	---	---	---	---	---	---	---	27.0	11.5	12.7
23	---	---	---	---	---	---	---	---	---	20.1	11.8	13.3
24	---	---	---	---	---	---	---	---	---	17.3	12.6	13.8
25	---	---	---	---	---	---	---	---	---	15.0	12.6	13.6
26	---	---	---	---	---	---	---	---	---	15.0	13.1	14.0
27	---	---	---	---	---	---	---	---	---	15.0	11.1	12.6
28	---	---	---	---	---	---	---	---	---	15.0	11.6	13.4
29	---	---	---	---	---	---	53.6	9.4	11.1	17.8	14.0	15.7
30	---	---	---	---	---	---	74.5	9.2	12.5	15.2	11.3	13.9
31	---	---	---	---	---	---	71.7	10.2	12.3	12.3	10.1	11.4
Month	---	---	---	---	---	---	---	---	---	160	9.2	19.3

01408029 MANASQUAN RIVER NEAR ALLENWOOD, NJ—Continued

TURBIDITY, WATER, UNFILT, NEAR IR LED LIGHT, 780-900 NM, DETECT ANG. 90 DEG, FORMAZIN NEPHELOMETRIC UNITS
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	February			March			April			May		
1	10.9	10.1	10.6	29.4	21.7	24.8	9.4	7.1	8.3	11.4	8.8	9.7
2	16.4	10.5	12.6	200	22.3	120	16.3	8.5	13.3	17.2	9.4	13.3
3	43.8	16.4	30.6	110	23.4	45.5	15.8	8.2	11.1	12.8	8.9	10.6
4	21.2	12.4	15.1	23.7	13.0	17.9	180	8.3	38.5	10.6	8.9	9.5
5	24.9	13.0	15.2	57.8	9.8	14.8	180	20.4	63.2	12.0	9.0	9.9
6	21.8	14.6	17.4	16.5	8.1	9.9	22.6	10.0	14.5	11.1	9.5	10.3
7	20.2	13.6	15.6	8.7	7.3	7.9	10.3	7.8	8.8	10.7	9.1	9.9
8	15.3	13.8	14.4	10.6	7.2	7.9	9.3	6.3	7.3	10.7	9.1	9.8
9	16.7	14.7	15.7	10.8	6.9	7.8	7.4	5.9	6.7	11.2	9.3	10.0
10	17.0	15.3	16.2	12.9	7.2	8.6	8.0	6.4	7.1	12.0	9.7	10.5
11	17.6	15.5	16.4	12.2	9.6	10.9	8.3	6.5	7.4	11.4	9.3	10.3
12	17.6	16.0	16.9	11.9	6.5	8.9	130	7.0	51.5	12.8	10.5	11.7
13	20.3	17.3	18.7	10.1	6.7	8.5	120	18.6	42.0	30.3	11.7	19.3
14	85.7	18.4	50.3	11.9	7.3	9.1	19.0	10.0	13.4	26.0	9.7	14.5
15	69.4	21.6	35.2	10.2	7.7	9.1	89.3	8.9	37.4	11.8	9.7	10.6
16	22.1	18.0	19.6	68.1	8.3	35.6	96.0	46.6	71.5	12.4	10.1	10.9
17	20.0	16.5	17.9	39.6	17.0	23.7	47.6	22.3	32.1	22.8	11.8	16.7
18	19.8	17.0	18.7	26.7	11.6	19.0	30.9	14.9	19.0	15.3	10.9	12.4
19	18.9	17.0	17.8	23.3	11.4	13.8	15.8	11.4	12.9	12.7	10.6	11.6
20	34.1	16.9	19.5	19.8	11.4	16.4	12.7	10.2	11.1	13.7	10.9	12.4
21	110	17.8	49.2	25.3	11.3	19.0	12.0	9.5	10.4	22.4	10.5	15.5
22	200	35.5	100	11.6	8.2	9.7	10.9	8.9	9.7	18.6	14.3	16.2
23	79.9	33.6	53.5	14.1	8.3	10.1	10.8	8.6	9.5	18.3	13.3	14.9
24	35.9	19.9	24.6	18.6	9.4	14.3	10.1	8.8	9.3	15.1	12.7	13.7
25	22.6	19.1	20.0	12.0	9.1	10.3	10.9	9.2	10.0	14.8	12.4	13.4
26	70.0	20.8	41.9	10.2	7.8	8.9	11.6	9.6	10.4	23.9	12.6	14.1
27	43.2	28.4	34.1	9.5	7.9	8.5	100	9.6	49.7	14.4	12.7	13.4
28	48.9	26.7	37.6	10.4	8.4	9.3	45.9	15.5	28.8	20.0	13.7	15.5
29	---	---	---	10.5	8.2	9.2	15.5	9.7	12.1	18.7	14.5	16.1
30	---	---	---	10.4	7.9	8.8	61.1	9.2	14.0	15.2	13.4	14.4
31	---	---	---	10.0	7.3	8.4	---	---	---	16.2	12.8	14.2
Month	200	10.1	27.0	200	6.5	17.3	180	5.9	21.4	30.3	8.8	12.8

01408029 MANASQUAN RIVER NEAR ALLENWOOD, NJ—Continued

TURBIDITY, WATER, UNFILT, NEAR IR LED LIGHT, 780-900 NM, DETECT ANG. 90 DEG, FORMAZIN NEPHELOMETRIC UNITS
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	15.2	12.9	13.9	20.6	15.3	17.0	19.8	15.8	16.9	14.0	6.9	8.6
2	15.2	12.7	13.7	18.3	14.0	15.9	17.5	13.5	15.3	15.7	7.0	9.2
3	45.2	13.0	16.0	20.0	12.9	14.5	15.7	9.8	12.1	27.2	6.0	8.7
4	64.7	28.3	41.4	14.1	12.2	13.0	13.4	8.8	10.7	7.1	4.2	5.6
5	32.0	16.3	22.7	18.1	12.5	16.6	11.7	9.0	10	5.7	3.5	4.5
6	21.8	15.3	18.5	220	15.9	91.0	11.1	9.3	10.2	60.9	2.7	4.4
7	35.3	18.7	27.5	70.2	19.1	33.4	18.8	10.2	13.1	37.4	3.1	12.0
8	33.7	20.7	27.5	19.1	14.0	16.7	20.7	9.3	11.8	46.0	10.0	12.3
9	37.9	16.4	24.2	18.2	14.3	16.4	15.2	10.3	11.8	31.1	10.0	15.1
10	24.9	17.6	20.0	24.7	15.3	18.2	34.1	11.5	17.4	15.5	12.8	14.1
11	22.4	16.8	18.8	40.5	13.0	28.3	59.1	20.2	29.7	16.7	12.9	14.6
12	28.9	17.5	22.5	91.6	27.3	38.3	49.6	15.5	25.0	76.7	14.4	43.0
13	28.8	20.6	23.9	78.4	12.8	22.7	25.6	11.9	18.6	31.9	12.3	18.4
14	31.2	22.1	26.2	16.8	12.2	13.9	23.4	12.3	15.8	13.2	11.8	12.5
15	28.7	20.3	24.5	15.0	12.5	13.4	23.0	12.6	16.1	13.8	12.7	13.2
16	29.2	18.1	23.9	15.7	12.9	14.0	25.1	8.5	11.7	15.1	12.0	13.4
17	27.4	18.9	22.9	16.6	11.6	13.5	18.1	9.0	9.9	13.4	11.2	12.1
18	29.1	16.9	23.4	180	11.8	42.4	49.5	11.1	29.0	12.9	10.3	11.3
19	28.0	14.9	21.1	99.9	33.1	65.2	35.4	12.4	21.0	11.3	9.8	10.6
20	100	16.8	47.1	50.0	16.3	23.3	150	19.6	67.1	12.6	10.1	11.1
21	46.3	17.0	27.2	20.6	14.8	16.9	110	33.3	47.7	12.4	10.0	10.9
22	140	19.2	67.4	20.7	14.1	17.5	88.8	24.7	47.8	11.3	10.3	10.8
23	41.2	15.0	23.5	160	13.9	64.4	26.0	14.0	18.0	53.0	10.9	14.1
24	16.0	12.6	14.1	100	22.0	44.7	16.9	12.2	14.0	15.1	12.6	13.7
25	15.0	12.5	13.4	22.4	14.4	17.7	14.7	11.5	12.8	14.8	9.9	12.3
26	15.3	12.2	13.3	27.5	14.8	18.7	14.0	11.0	12.3	12.3	10.4	11.2
27	15.3	12.2	13.2	35.6	14.0	20.3	14.9	11.5	12.7	13.6	10.9	11.8
28	210	15.3	86.1	17.8	13.7	15.1	14.5	11.1	12.4	23.2	12.1	14.6
29	59.5	22.2	39.0	170	14.5	37.3	13.8	10.2	11.4	20.2	14.2	16.4
30	25.7	19.5	21.5	170	24.7	63.5	11.6	8.7	10.0	30.7	17.0	22.4
31	---	---	---	43.8	16.0	23.8	10.5	7.7	9.0	---	---	---
Month	210	12.2	26.6	220	11.6	28.0	150	7.7	18.8	76.7	2.7	13.1

01408029 MANASQUAN RIVER NEAR ALLENWOOD, NJ—Continued

