



Water-Data Report 2011

01454700 LEHIGH RIVER AT GLENDON, PA

Upper Delaware Basin
Lehigh Subbasin

LOCATION.--Lat 40°40'09", long 75°14'12" referenced to North American Datum of 1927, Northampton County, PA, Hydrologic Unit 02040106, on right bank, on right upstream bridge wall at entrance to Hugh Moore Parkway at Glendon, 2.3 mi upstream from mouth, and 2.0 mi southwest of Easton.

DRAINAGE AREA.--1,359 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1966 to September 2005, (continuous-record gaging station), October 2005 to current year.

REVISED RECORDS.--WDR PA-72-1: 1971(M).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 164.30 feet above National Geodetic Vertical Datum of 1929. Satellite telemetry at station.

COOPERATION.--Station established and maintained by the U.S. Geological Survey in cooperation with the Pennsylvania Department of Environmental Protection.

REMARKS.--Flow regulated by Francis E. Walter Reservoir (station 01447780), Penn Forest Reservoir (station 01449400), Wild Creek Reservoir (station 01449700), and since February 1971, by Beltzville Lake (station 01449790) about 60 mi upstream.

EXTREMES FOR PERIOD OF RECORD.--Discharge, 60,600 ft³/s (gage height 24.86 ft), Jun 23, 1972, gage height, 27.93 ft (from floodmark; backwater from Delaware River), Jun 28, 2006.

PEAK DISCHARGES FOR CURRENT YEAR.--

**MAXIMUM PEAK DISCHARGE
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Date	Discharge, in ft ³ /s	Discharge qualification code	Gage height, in ft	Gage height qualification code
Mar 11, 2011	49,500	6	22.50	---

Discharge qualification code:

6 - Discharge affected by regulation or diversion

01454700 LEHIGH RIVER AT GLENDON, PA—Continued**WATER-QUALITY RECORDS**

PERIOD OF RECORD.--November 1956 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: July 2010 to current year.

pH: July 2010 to current year.

WATER TEMPERATURE: July 2010 to current year.

DISSOLVED OXYGEN: July 2010 to current year.

INSTRUMENTATION.--Water-quality monitor since July 2010. Sonde interfaced with a data collection platform since the 2010 water year.

REMARKS.--Water temperature, pH, specific conductance and dissolved oxygen records rated good. No data were recorded during the months of November through March.

Water-quality sampling analyses for pH, water temperature, specific conductance, and dissolved oxygen were performed on site. All other sample analyses were performed at the Pennsylvania Department of Environmental Protection laboratory in Harrisburg, Pa.

COOPERATION.--Water-quality samples were collected as part of the Pennsylvania Department of Environmental Protection Water-Quality Network (WQN) with cooperation from the Pennsylvania Department of Environmental Protection.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 441 microsiemens/cm, Aug 22, 2010; minimum, 117 microsiemens/cm, Aug 28, 2011.

pH: Maximum, 8.7, Aug 01, 2010; minimum, 7.1, Oct 1, 2010.

WATER TEMPERATURE: Maximum, 28.2 °C, Jul 23, 2011; minimum, 6.7°C, Apr 9, 2011.

DISSOLVED OXYGEN: Maximum, 12.8 mg/L, Apr 7, 8, 2011; minimum, 7.1 mg/L, Jul 23, 2011.

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 1 of 5

[ANC, acid neutralizing capacity; CaCO₃, calcium carbonate; N, nitrogen; P, phosphorus; ft³/s, cubic feet per second; mg/L, milligrams per liter; °C, degrees Celsius; μS/cm, microsiemens per centimeter; μg/L, micrograms per liter; --, no data; <, less than; M, presence verified but not quantified]

Date	Sample start time	Discharge, instantaneous, ft ³ /s (00061)	Dissolved oxygen, water, unfiltered, mg/L (00300)	Osmotic pressure, water, unfiltered, milliosmoles per kilogram (82550)	pH, water, unfiltered, field, standard units (00400)	pH, water, unfiltered, laboratory, standard units (00403)	Specific conductance, water, unfiltered, laboratory, μS/cm at 25 °C (90095)	Specific conductance, water, unfiltered, μS/cm at 25 °C (00095)	Temperature, water, °C (00010)	Dissolved solids dried at 180 °C, water, filtered, mg/L (70300)
11-17-2010	1500	3,000	11.5	3.0	7.8	7.6	246	236	10.4	154
01-05-2011	1300	1,750	14.4	--	7.7	7.6	253	239	2.4	142
03-03-2011	1330	5,450	14.3	5.0	7.5	7.3	200	187	3.5	114
05-12-2011	1500	3,050	10.5	6.0	7.9	7.8	244	196	16.9	166
07-14-2011	1400	1,230	8.8	3.0	7.8	8.0	334	327	24.1	208
09-15-2011	1330	10,500	9.0	1.0	7.4	7.3	150	151	18.1	154

01454700 LEHIGH RIVER AT GLENDON, PA—Continued

WATER-QUALITY DATA

WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 2 of 5

[ANC, acid neutralizing capacity; CaCO₃, calcium carbonate; N, nitrogen; P, phosphorus; ft³/s, cubic feet per second; mg/L, milligrams per liter; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; --, no data; <, less than; M, presence verified but not quantified]

Date	Sample start time	Hardness, water, mg/L as CaCO ₃ (00900)	Suspended solids, water, unfiltered, mg/L (00530)	Calcium, water, unfiltered, recoverable, mg/L (00916)	Magnesium, water, unfiltered, recoverable, mg/L (00927)	Potassium, water, unfiltered, recoverable, mg/L (00937)	Sodium, water, unfiltered, recoverable, mg/L (00929)	ANC, water, unfiltered, fixed endpoint titration, laboratory, mg/L as CaCO ₃ (00417)	Bromide, water, filtered, mg/L (71870)	Chloride, water, filtered, mg/L (00940)
11-17-2010	1500	86	8	21.6	7.7	2.1	14.1	50	< .1	23.1
01-05-2011	1300	83	< 5	19.4	8.5	1.8	14.4	50	--	25.0
03-03-2011	1330	50	8	12.8	4.3	1.1	16.0	29	< .1	25.4
05-12-2011	1500	78	< 5	17.9	8.2	1.8	12.4	50	< .1	22.9
07-14-2011	1400	100	6	24.4	10.6	2.6	16.5	76	< .1	30.5
09-15-2011	1330	50	12	13.3	4.1	1.3	7.8	32	< .1	13.0

WATER-QUALITY DATA

WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 3 of 5

[ANC, acid neutralizing capacity; CaCO₃, calcium carbonate; N, nitrogen; P, phosphorus; ft³/s, cubic feet per second; mg/L, milligrams per liter; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; --, no data; <, less than; M, presence verified but not quantified]

Date	Sample start time	Sulfate, water, filtered, mg/L (00945)	Ammonia, water, unfiltered, mg/L as N (00610)	Nitrate, water, unfiltered, mg/L as N (00620)	Nitrite, water, unfiltered, mg/L as N (00615)	Orthophosphate, water, unfiltered, mg/L as P (70507)	Phosphorus, water, unfiltered, mg/L as P (00665)	Total nitrogen, water, unfiltered, mg/L (00600)	Aluminum, water, unfiltered, recoverable, µg/L (01105)	Barium, water, unfiltered, recoverable, µg/L (01007)
11-17-2010	1500	27.9	.100	1.72	< .040	.10	.145	2.0	< 200	M
01-05-2011	1300	23.6	.170	1.69	< .040	.10	.111	2.1	< 200	--
03-03-2011	1330	14.7	.120	1.28	< .040	.04	.051	1.6	< 200	M
05-12-2011	1500	22.7	.090	1.38	< .040	.04	.053	1.5	< 200	M
07-14-2011	1400	30.6	.080	1.96	< .040	.13	.162	2.1	< 200	M
09-15-2011	1330	13.7	.030	.96	< .040	.03	.044	1.1	300	M

01454700 LEHIGH RIVER AT GLENDON, PA—Continued

WATER-QUALITY DATA

WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 4 of 5

[ANC, acid neutralizing capacity; CaCO₃, calcium carbonate; N, nitrogen; P, phosphorus; ft³/s, cubic feet per second; mg/L, milligrams per liter; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; --, no data; <, less than; M, presence verified but not quantified]

Date	Sample start time	Copper, water, unfiltered, recoverable, µg/L (01042)	Iron, water, unfiltered, recoverable, µg/L (01045)	Lead, water, unfiltered, recoverable, µg/L (01051)	Manganese, water, unfiltered, recoverable, µg/L (01055)	Nickel, water, unfiltered, recoverable, µg/L (01067)	Strontium, water, unfiltered, recoverable, micrograms per liter (01082)	Zinc, water, unfiltered, recoverable, µg/L (01092)	Boron, water, unfiltered, recoverable, micrograms per liter (01022)	Selenium, water, unfiltered, µg/L (01147)
11-17-2010	1500	M	280	M	40	< 50	90	40	< 200	< 7
01-05-2011	1300	< 4	90	< 1.0	40	< 50	--	40	--	--
03-03-2011	1330	< 4	220	< 1.0	50	< 50	60	40	< 200	< 7
05-12-2011	1500	< 4	90	< 1.0	30	< 50	90	30	< 200	< 7
07-14-2011	1400	< 4	150	< 1.0	50	< 50	110	20	< 200	< 7
09-15-2011	1330	M	490	M	70	< 50	50	40	< 200	< 7

WATER-QUALITY DATA

WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 5 of 5

[ANC, acid neutralizing capacity; CaCO₃, calcium carbonate; N, nitrogen; P, phosphorus; ft³/s, cubic feet per second; mg/L, milligrams per liter; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; --, no data; <, less than; M, presence verified but not quantified]

Date	Sample start time	Organic carbon, water, filtered, mg/L (00681)
11-17-2010	1500	3.1
01-05-2011	1300	1.9
03-03-2011	1330	1.8
05-12-2011	1500	4.1
07-14-2011	1400	3.5
09-15-2011	1330	5.1

01454700 LEHIGH RIVER AT GLENDON, PA—Continued

CROSS-SECTION ANALYSES
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

[ft, feet; ft³/s, cubic feet per second; mg/L, milligrams per liter; °C, degrees Celsius; μS/cm, microsiemens per centimeter; -
 -, no data]

Date	Sample start time	Discharge, instantaneous, ft ³ /s (00061)	Dissolved oxygen, water, unfiltered, mg/L (00300)	pH, water, unfiltered, field, standard units (00400)	Specific conductance, water, unfiltered, μS/cm at 25 °C (00095)	Temperature, water, °C (00010)	Sample location, relative to right bank, looking downstream, ft (72103)	Sampling depth, ft (00003)
08-24-2011	1215	2,290	9.3	7.8	250	19.5	0	.50
08-24-2011	1221	2,290	9.3	7.8	248	19.5	30.0	.50
08-24-2011	1227	2,290	9.3	7.9	247	19.6	60.0	.50
08-24-2011	1233	2,290	9.4	7.9	246	19.6	90.0	.50
08-24-2011	1239	2,290	9.4	7.9	247	19.6	120.0	.50
08-24-2011	1245	2,290	9.4	7.9	246	19.7	150.0	.50
08-24-2011	1251	2,290	9.3	7.9	246	19.7	180.0	.50
08-24-2011	1257	2,290	9.4	7.9	246	19.8	210.0	.50
08-24-2011	1303	2,290	9.4	7.9	246	19.8	240.0	.50
08-24-2011	1309	2,290	9.3	8.0	247	20.1	270.0	.50
08-24-2011	1315	2,290	9.7	8.0	254	20.3	300.0	.50

01454700 LEHIGH RIVER AT GLENDON, PA—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	241	133	155	254	241	249	---	---	---	---	---	---
2	220	148	185	---	---	---	---	---	---	---	---	---
3	229	162	192	---	---	---	---	---	---	---	---	---
4	167	157	162	---	---	---	---	---	---	---	---	---
5	165	142	149	---	---	---	---	---	---	---	---	---
6	156	140	145	---	---	---	---	---	---	---	---	---
7	153	142	146	---	---	---	---	---	---	---	---	---
8	161	148	153	---	---	---	---	---	---	---	---	---
9	180	153	165	---	---	---	---	---	---	---	---	---
10	181	173	176	---	---	---	---	---	---	---	---	---
11	187	175	180	---	---	---	---	---	---	---	---	---
12	221	180	196	---	---	---	---	---	---	---	---	---
13	255	221	240	---	---	---	---	---	---	---	---	---
14	256	242	247	---	---	---	---	---	---	---	---	---
15	270	248	257	---	---	---	---	---	---	---	---	---
16	257	242	247	---	---	---	---	---	---	---	---	---
17	255	244	250	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	288	267	278	---	---	---	---	---	---	---	---	---
21	296	278	287	---	---	---	---	---	---	---	---	---
22	309	283	294	---	---	---	---	---	---	---	---	---
23	313	288	301	---	---	---	---	---	---	---	---	---
24	316	297	308	---	---	---	---	---	---	---	---	---
25	319	298	305	---	---	---	---	---	---	---	---	---
26	321	298	307	---	---	---	---	---	---	---	---	---
27	331	304	313	---	---	---	---	---	---	---	---	---
28	309	211	247	---	---	---	---	---	---	---	---	---
29	218	209	213	---	---	---	---	---	---	---	---	---
30	233	217	224	---	---	---	---	---	---	---	---	---
31	259	231	248	---	---	---	---	---	---	---	---	---
Month	331	133	227	254	241	249	---	---	---	---	---	---

01454700 LEHIGH RIVER AT GLENDON, PA—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	---	---	---	---	---	---	---	---	---	188	143	162
2	---	---	---	---	---	---	---	---	---	190	174	181
3	---	---	---	---	---	---	---	---	---	203	181	192
4	---	---	---	---	---	---	---	---	---	214	199	205
5	---	---	---	---	---	---	---	---	---	204	179	189
6	---	---	---	---	---	---	223	200	210	187	181	184
7	---	---	---	---	---	---	209	185	194	218	187	201
8	---	---	---	---	---	---	214	186	196	215	207	212
9	---	---	---	---	---	---	206	201	204	214	209	212
10	---	---	---	---	---	---	209	202	204	215	211	213
11	---	---	---	---	---	---	239	207	211	224	214	219
12	---	---	---	---	---	---	231	215	219	241	223	232
13	---	---	---	---	---	---	226	197	211	250	241	247
14	---	---	---	---	---	---	197	186	190	255	249	252
15	---	---	---	---	---	---	199	185	190	258	237	246
16	---	---	---	---	---	---	214	194	202	253	237	244
17	---	---	---	---	---	---	194	129	150	254	234	243
18	---	---	---	---	---	---	173	141	160	237	182	203
19	---	---	---	---	---	---	170	142	146	238	211	226
20	---	---	---	---	---	---	151	144	146	240	211	224
21	---	---	---	---	---	---	150	147	149	211	177	189
22	---	---	---	---	---	---	180	150	164	193	180	185
23	---	---	---	---	---	---	215	167	188	209	193	199
24	---	---	---	---	---	---	215	201	205	213	180	190
25	---	---	---	---	---	---	225	204	214	185	174	178
26	---	---	---	---	---	---	239	206	216	201	179	191
27	---	---	---	---	---	---	211	205	208	206	189	197
28	---	---	---	---	---	---	231	173	202	195	189	191
29	---	---	---	---	---	---	176	144	155	207	195	200
30	---	---	---	---	---	---	162	143	151	210	200	207
31	---	---	---	---	---	---	---	---	---	210	192	197
Month	---	---	---	---	---	---	239	129	187	258	143	207

01454700 LEHIGH RIVER AT GLENDON, PA—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			September		
1	211	200	206	282	268	277	308	291	300	149	136	139
2	226	210	219	291	281	287	332	287	308	203	145	182
3	244	226	236	309	286	298	344	324	333	232	203	222
4	254	243	250	303	257	286	346	336	341	233	228	231
5	263	254	258	291	282	286	345	327	335	235	140	198
6	263	256	261	290	270	284	353	334	342	170	140	158
7	270	262	268	272	263	269	349	147	236	160	141	147
8	280	268	275	281	256	269	217	159	182	156	131	151
9	287	274	282	279	235	263	246	217	237	181	124	149
10	298	284	289	291	265	282	260	246	255	183	162	170
11	298	268	285	305	277	292	281	260	273	166	148	155
12	272	234	255	311	283	300	298	278	289	153	145	148
13	238	228	233	325	302	314	307	287	298	156	147	151
14	244	220	233	340	320	328	296	160	192	158	148	152
15	224	216	220	346	333	339	215	184	197	174	152	159
16	244	220	231	354	343	348	232	213	222	170	158	162
17	255	239	248	357	346	352	241	229	233	217	164	193
18	243	222	229	357	348	353	263	237	249	248	215	226
19	236	226	231	361	347	355	275	263	272	258	248	250
20	251	234	242	360	347	355	280	229	261	260	249	255
21	283	250	270	366	344	353	231	211	219	272	254	259
22	300	281	292	360	342	351	228	209	219	278	259	267
23	297	280	292	362	349	356	234	219	225	278	253	265
24	281	208	235	367	341	357	260	234	247	---	---	---
25	244	204	221	341	168	296	280	257	270	---	---	---
26	218	205	211	221	155	179	270	186	235	---	---	---
27	228	217	225	263	218	238	186	151	160	221	179	191
28	233	224	228	298	262	280	156	117	143	182	133	158
29	263	233	248	321	297	311	206	148	178	161	137	145
30	268	250	262	333	314	324	207	165	181	157	144	149
31	---	---	---	331	300	321	165	138	147	---	---	---
Month	300	200	248	367	155	307	353	117	244	278	124	186

01454700 LEHIGH RIVER AT GLENDON, PA—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	7.8	7.1	7.3	7.8	7.7	7.7	---	---	---	---	---	---
2	7.7	7.2	7.6	---	---	---	---	---	---	---	---	---
3	7.8	7.3	7.6	---	---	---	---	---	---	---	---	---
4	7.6	7.3	7.4	---	---	---	---	---	---	---	---	---
5	7.9	7.2	7.4	---	---	---	---	---	---	---	---	---
6	7.8	7.2	7.3	---	---	---	---	---	---	---	---	---
7	7.5	7.2	7.3	---	---	---	---	---	---	---	---	---
8	7.5	7.3	7.3	---	---	---	---	---	---	---	---	---
9	7.6	7.3	7.4	---	---	---	---	---	---	---	---	---
10	7.7	7.4	7.4	---	---	---	---	---	---	---	---	---
11	7.6	7.4	7.4	---	---	---	---	---	---	---	---	---
12	7.7	7.4	7.5	---	---	---	---	---	---	---	---	---
13	7.8	7.5	7.6	---	---	---	---	---	---	---	---	---
14	7.7	7.6	7.6	---	---	---	---	---	---	---	---	---
15	7.7	7.6	7.6	---	---	---	---	---	---	---	---	---
16	7.7	7.6	7.6	---	---	---	---	---	---	---	---	---
17	7.7	7.6	7.7	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	7.8	7.7	7.7	---	---	---	---	---	---	---	---	---
21	7.8	7.7	7.8	---	---	---	---	---	---	---	---	---
22	7.8	7.6	7.7	---	---	---	---	---	---	---	---	---
23	7.8	7.6	7.7	---	---	---	---	---	---	---	---	---
24	7.8	7.7	7.8	---	---	---	---	---	---	---	---	---
25	7.8	7.8	7.8	---	---	---	---	---	---	---	---	---
26	7.8	7.7	7.8	---	---	---	---	---	---	---	---	---
27	7.8	7.6	7.7	---	---	---	---	---	---	---	---	---
28	7.7	7.6	7.6	---	---	---	---	---	---	---	---	---
29	7.6	7.5	7.6	---	---	---	---	---	---	---	---	---
30	7.7	7.6	7.6	---	---	---	---	---	---	---	---	---
31	7.8	7.6	7.7	---	---	---	---	---	---	---	---	---
Max	7.9	7.8	7.8	7.8	7.7	7.7	---	---	---	---	---	---
Min	7.5	7.1	7.3	7.8	7.7	7.7	---	---	---	---	---	---

01454700 LEHIGH RIVER AT GLENDON, PA—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	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	8.1	7.7	7.9
13	---	---	---	---	---	---	---	---	---	8.1	7.8	7.9
14	---	---	---	---	---	---	---	---	---	8.0	7.7	7.8
15	---	---	---	---	---	---	---	---	---	7.8	7.7	7.7
16	---	---	---	---	---	---	---	---	---	7.8	7.7	7.7
17	---	---	---	---	---	---	---	---	---	7.7	7.7	7.7
18	---	---	---	---	---	---	---	---	---	7.7	7.6	7.6
19	---	---	---	---	---	---	---	---	---	7.7	7.6	7.6
20	---	---	---	---	---	---	---	---	---	7.7	7.6	7.6
21	---	---	---	---	---	---	---	---	---	7.6	7.5	7.6
22	---	---	---	---	---	---	---	---	---	7.6	7.5	7.5
23	---	---	---	---	---	---	---	---	---	7.5	7.5	7.5
24	---	---	---	---	---	---	---	---	---	7.5	7.4	7.5
25	---	---	---	---	---	---	---	---	---	7.5	7.4	7.4
26	---	---	---	---	---	---	---	---	---	7.7	7.5	7.6
27	---	---	---	---	---	---	---	---	---	7.6	7.6	7.6
28	---	---	---	---	---	---	---	---	---	7.6	7.5	7.6
29	---	---	---	---	---	---	---	---	---	7.7	7.6	7.6
30	---	---	---	---	---	---	---	---	---	7.7	7.6	7.6
31	---	---	---	---	---	---	---	---	---	7.6	7.5	7.6
Max	---	---	---	---	---	---	---	---	---	8.1	7.8	7.9
Min	---	---	---	---	---	---	---	---	---	7.5	7.4	7.4

01454700 LEHIGH RIVER AT GLENDON, PA—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			September		
1	7.7	7.6	7.6	7.8	7.7	7.8	7.9	7.8	7.9	7.4	7.3	7.3
2	7.8	7.6	7.6	7.9	7.8	7.8	7.9	7.8	7.9	7.6	7.4	7.5
3	7.8	7.7	7.7	7.9	7.8	7.8	8.0	7.8	7.9	7.7	7.6	7.6
4	7.8	7.7	7.7	7.9	7.7	7.8	7.9	7.8	7.8	7.7	7.6	7.6
5	7.9	7.7	7.7	7.9	7.8	7.8	7.9	7.8	7.8	7.7	7.5	7.6
6	7.9	7.7	7.8	8.0	7.8	7.8	8.0	7.8	7.9	7.6	7.5	7.6
7	7.9	7.7	7.8	7.9	7.8	7.8	8.0	7.5	7.6	7.6	7.4	7.5
8	7.9	7.7	7.8	7.9	7.7	7.8	7.7	7.5	7.5	7.5	7.4	7.4
9	8.0	7.6	7.8	7.8	7.7	7.7	7.8	7.7	7.7	7.4	7.3	7.3
10	8.0	7.6	7.8	7.8	7.8	7.8	7.8	7.7	7.8	7.4	7.4	7.4
11	7.9	7.6	7.7	7.9	7.8	7.8	7.9	7.8	7.8	7.4	7.4	7.4
12	7.8	7.6	7.6	7.9	7.8	7.9	7.9	7.8	7.9	7.4	7.4	7.4
13	7.8	7.6	7.7	7.9	7.8	7.8	8.0	7.8	7.9	7.4	7.4	7.4
14	7.8	7.6	7.7	7.9	7.8	7.9	8.0	7.6	7.7	7.4	7.4	7.4
15	7.7	7.6	7.6	8.0	7.8	7.9	7.7	7.6	7.6	7.5	7.4	7.4
16	7.7	7.6	7.6	8.0	7.8	7.9	7.8	7.6	7.7	7.5	7.5	7.5
17	7.7	7.6	7.6	8.0	7.8	8.0	7.8	7.7	7.7	7.6	7.5	7.5
18	7.7	7.5	7.6	8.1	7.8	8.0	7.9	7.8	7.8	7.7	7.6	7.6
19	7.7	7.5	7.6	8.0	7.9	8.0	7.9	7.8	7.9	7.8	7.7	7.7
20	7.7	7.6	7.6	8.0	7.9	8.0	7.9	7.8	7.8	7.8	7.7	7.7
21	7.7	7.6	7.6	8.1	7.9	8.0	7.8	7.7	7.7	7.7	7.6	7.6
22	7.7	7.6	7.6	8.1	7.9	8.0	7.8	7.7	7.7	7.7	7.6	7.6
23	7.7	7.6	7.6	8.1	7.8	7.9	7.9	7.7	7.8	7.7	7.6	7.6
24	7.8	7.6	7.6	8.0	7.8	7.9	7.9	7.8	7.8	---	---	---
25	7.6	7.6	7.6	8.0	7.6	7.9	7.9	7.8	7.8	---	---	---
26	7.7	7.6	7.6	7.7	7.5	7.6	7.9	7.6	7.7	---	---	---
27	7.7	7.6	7.7	7.7	7.6	7.6	7.6	7.4	7.5	7.6	7.4	7.5
28	7.7	7.6	7.6	7.8	7.7	7.7	7.7	7.5	7.6	7.5	7.3	7.4
29	7.7	7.6	7.7	7.8	7.8	7.8	7.5	7.5	7.5	7.5	7.3	7.4
30	7.8	7.7	7.8	7.8	7.8	7.8	7.5	7.4	7.5	7.4	7.3	7.3
31	---	---	---	7.9	7.8	7.9	7.4	7.4	7.4	---	---	---
Max	8.0	7.7	7.8	8.1	7.9	8.0	8.0	7.8	7.9	7.8	7.7	7.7
Min	7.6	7.5	7.6	7.7	7.5	7.6	7.4	7.4	7.4	7.4	7.3	7.3

01454700 LEHIGH RIVER AT GLENDON, PA—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	19.9	16.6	18.0	10.6	9.2	9.6	---	---	---	---	---	---
2	16.6	15.5	15.9	---	---	---	---	---	---	---	---	---
3	15.5	14.5	15.1	---	---	---	---	---	---	---	---	---
4	15.2	14.3	14.8	---	---	---	---	---	---	---	---	---
5	14.4	14.1	14.2	---	---	---	---	---	---	---	---	---
6	14.7	14.3	14.5	---	---	---	---	---	---	---	---	---
7	14.9	14.2	14.6	---	---	---	---	---	---	---	---	---
8	15.0	14.4	14.7	---	---	---	---	---	---	---	---	---
9	15.4	14.4	14.8	---	---	---	---	---	---	---	---	---
10	14.9	13.8	14.2	---	---	---	---	---	---	---	---	---
11	15.1	13.7	14.3	---	---	---	---	---	---	---	---	---
12	15.5	15.0	15.2	---	---	---	---	---	---	---	---	---
13	15.4	14.4	14.7	---	---	---	---	---	---	---	---	---
14	14.6	13.1	13.6	---	---	---	---	---	---	---	---	---
15	13.1	12.0	12.3	---	---	---	---	---	---	---	---	---
16	12.2	11.6	11.9	---	---	---	---	---	---	---	---	---
17	12.4	11.2	11.8	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	12.1	11.5	11.7	---	---	---	---	---	---	---	---	---
21	11.8	11.4	11.6	---	---	---	---	---	---	---	---	---
22	11.7	10.9	11.2	---	---	---	---	---	---	---	---	---
23	10.9	10.3	10.7	---	---	---	---	---	---	---	---	---
24	11.3	10.9	11.0	---	---	---	---	---	---	---	---	---
25	12.8	11.3	11.9	---	---	---	---	---	---	---	---	---
26	13.9	12.8	13.3	---	---	---	---	---	---	---	---	---
27	15.3	13.9	14.8	---	---	---	---	---	---	---	---	---
28	15.3	14.6	14.9	---	---	---	---	---	---	---	---	---
29	14.7	12.7	13.6	---	---	---	---	---	---	---	---	---
30	12.7	11.2	11.5	---	---	---	---	---	---	---	---	---
31	11.2	10.3	10.6	---	---	---	---	---	---	---	---	---
Month	19.9	10.3	13.5	10.6	9.2	9.6	---	---	---	---	---	---

01454700 LEHIGH RIVER AT GLENDON, PA—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	---	---	---	---	---	---	---	---	---	13.9	13.1	13.4
2	---	---	---	---	---	---	---	---	---	13.5	12.8	13.1
3	---	---	---	---	---	---	---	---	---	15.1	13.2	14.0
4	---	---	---	---	---	---	---	---	---	15.3	13.8	14.9
5	---	---	---	---	---	---	---	---	---	13.8	12.2	12.8
6	---	---	---	---	---	---	8.7	7.6	7.9	13.8	12.3	13.0
7	---	---	---	---	---	---	7.6	7.0	7.3	14.3	13.1	13.7
8	---	---	---	---	---	---	7.2	6.9	7.0	14.6	13.3	13.9
9	---	---	---	---	---	---	8.9	6.7	7.6	15.6	13.8	14.6
10	---	---	---	---	---	---	9.9	8.9	9.4	15.9	14.6	15.2
11	---	---	---	---	---	---	11.9	9.6	10.5	16.3	14.7	15.5
12	---	---	---	---	---	---	12.1	11.6	12.0	17.4	15.3	16.3
13	---	---	---	---	---	---	11.6	9.2	10.2	17.1	16.0	16.4
14	---	---	---	---	---	---	10.5	8.7	9.5	16.3	14.7	15.2
15	---	---	---	---	---	---	11.3	10.5	10.9	14.9	14.1	14.4
16	---	---	---	---	---	---	10.7	9.2	9.8	15.0	14.8	14.9
17	---	---	---	---	---	---	10.1	9.2	9.6	14.8	14.5	14.6
18	---	---	---	---	---	---	10.2	9.8	9.9	15.0	14.3	14.6
19	---	---	---	---	---	---	9.8	9.0	9.3	16.0	14.7	15.2
20	---	---	---	---	---	---	9.8	9.1	9.3	15.7	15.0	15.3
21	---	---	---	---	---	---	10.9	9.7	10.3	16.3	14.6	15.3
22	---	---	---	---	---	---	10.6	9.0	9.8	16.4	15.4	16.2
23	---	---	---	---	---	---	9.4	8.7	9.0	15.4	14.5	14.7
24	---	---	---	---	---	---	11.7	9.3	10.2	15.9	14.4	15.2
25	---	---	---	---	---	---	14.0	11.7	13.1	17.4	15.7	16.4
26	---	---	---	---	---	---	16.3	14.0	15.1	18.8	17.2	17.9
27	---	---	---	---	---	---	16.5	15.7	16.1	18.9	18.2	18.6
28	---	---	---	---	---	---	16.4	15.4	15.8	19.6	18.3	18.9
29	---	---	---	---	---	---	15.4	12.5	13.9	19.5	18.6	19.0
30	---	---	---	---	---	---	13.2	11.7	12.3	20.6	18.8	19.5
31	---	---	---	---	---	---	---	---	---	21.4	19.9	20.5
Month	---	---	---	---	---	---	16.5	6.7	10.6	21.4	12.2	15.6

01454700 LEHIGH RIVER AT GLENDON, PA—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			September		
1	21.9	20.6	21.1	---	---	---	24.8	24.1	24.5	18.1	17.7	17.9
2	21.1	20.2	20.6	---	---	---	24.8	23.9	24.4	17.9	17.5	17.7
3	20.2	18.4	19.1	22.4	21.3	21.9	24.5	23.0	23.9	18.9	17.4	18.1
4	19.1	17.4	17.7	22.6	21.6	22.1	23.2	21.9	22.5	19.7	18.7	19.2
5	17.5	16.4	16.7	23.3	21.6	22.4	22.6	21.6	22.0	---	---	---
6	19.1	16.2	17.4	23.8	22.2	23.1	22.7	21.8	22.2	---	---	---
7	20.3	18.2	19.2	24.0	22.6	23.4	22.3	21.7	21.9	17.4	16.4	16.9
8	21.9	19.4	20.5	24.0	22.7	23.2	22.7	21.5	22.0	16.6	16.4	16.5
9	23.0	21.1	22.0	---	---	---	22.4	21.9	22.1	17.2	16.4	16.7
10	23.6	22.0	22.9	23.8	21.9	22.9	22.1	20.9	21.6	17.5	16.9	17.1
11	23.5	21.0	22.2	24.6	23.0	23.7	21.9	20.7	21.4	17.6	17.0	17.3
12	21.0	19.9	20.2	25.1	24.4	24.7	21.9	20.4	21.2	17.9	17.0	17.4
13	19.9	18.9	19.2	---	---	---	21.9	20.9	21.3	18.1	17.4	17.8
14	19.0	18.1	18.6	---	---	---	---	---	---	18.3	17.7	18.0
15	19.9	17.9	18.9	---	---	---	19.1	18.6	18.8	18.3	16.9	17.8
16	19.8	18.8	19.4	---	---	---	19.3	18.6	18.9	16.9	15.6	16.1
17	20.2	18.7	19.4	---	---	---	20.2	18.4	19.2	16.3	15.1	15.9
18	20.6	19.3	19.9	25.0	23.4	24.1	20.9	19.1	19.9	15.5	14.4	14.9
19	21.5	19.6	20.5	25.5	23.7	24.6	21.6	20.0	20.8	15.7	14.9	15.3
20	21.4	20.1	20.8	26.0	24.8	25.4	21.6	20.4	21.0	15.6	15.3	15.4
21	21.4	20.3	21.0	26.9	25.3	26.1	21.2	20.6	20.9	16.2	15.3	15.7
22	22.0	20.8	21.3	28.0	26.0	26.9	21.0	20.3	20.7	---	---	---
23	22.1	21.4	21.9	28.2	26.7	27.3	20.5	19.3	20.0	---	---	---
24	22.0	20.7	21.2	26.9	26.0	26.6	20.6	18.8	19.7	---	---	---
25	21.7	20.2	20.9	26.1	23.2	25.3	20.5	19.5	19.9	---	---	---
26	21.1	19.9	20.4	23.5	21.8	22.6	21.0	19.7	20.3	---	---	---
27	20.8	19.2	20.0	23.5	22.1	22.8	21.4	20.6	20.9	18.2	17.5	17.8
28	21.1	19.7	20.4	23.3	22.1	22.5	20.9	18.8	20.2	18.3	18.0	18.0
29	21.4	19.9	20.7	22.8	21.9	22.4	18.8	17.2	17.6	18.6	17.7	18.3
30	---	---	---	23.8	22.6	23.1	17.4	16.3	17.1	17.7	16.5	16.9
31	---	---	---	24.6	23.2	23.9	17.9	17.1	17.5	---	---	---
Month	23.6	16.2	20.1	28.2	21.3	24.0	24.8	16.3	20.8	19.7	14.4	17.1

01454700 LEHIGH RIVER AT GLENDON, PA—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	8.9	8.2	8.5	11.3	10.9	11.1	---	---	---	---	---	---
2	9.3	8.9	9.2	---	---	---	---	---	---	---	---	---
3	9.6	9.3	9.5	---	---	---	---	---	---	---	---	---
4	9.7	9.5	9.6	---	---	---	---	---	---	---	---	---
5	9.8	9.7	9.7	---	---	---	---	---	---	---	---	---
6	9.7	9.7	9.7	---	---	---	---	---	---	---	---	---
7	9.7	9.6	9.7	---	---	---	---	---	---	---	---	---
8	9.8	9.7	9.7	---	---	---	---	---	---	---	---	---
9	9.8	9.6	9.7	---	---	---	---	---	---	---	---	---
10	9.8	9.7	9.8	---	---	---	---	---	---	---	---	---
11	9.9	9.7	9.8	---	---	---	---	---	---	---	---	---
12	9.7	9.5	9.5	---	---	---	---	---	---	---	---	---
13	9.7	9.5	9.6	---	---	---	---	---	---	---	---	---
14	10.1	9.6	9.8	---	---	---	---	---	---	---	---	---
15	10.2	10.1	10.2	---	---	---	---	---	---	---	---	---
16	10.4	10.2	10.3	---	---	---	---	---	---	---	---	---
17	10.5	10.3	10.4	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	10.6	10.4	10.5	---	---	---	---	---	---	---	---	---
21	10.5	10.4	10.5	---	---	---	---	---	---	---	---	---
22	10.7	10.4	10.6	---	---	---	---	---	---	---	---	---
23	10.9	10.6	10.7	---	---	---	---	---	---	---	---	---
24	10.9	10.7	10.8	---	---	---	---	---	---	---	---	---
25	10.8	10.4	10.6	---	---	---	---	---	---	---	---	---
26	10.4	10.1	10.3	---	---	---	---	---	---	---	---	---
27	10.1	9.7	9.9	---	---	---	---	---	---	---	---	---
28	10.0	9.8	9.9	---	---	---	---	---	---	---	---	---
29	10.3	10.0	10.1	---	---	---	---	---	---	---	---	---
30	10.7	10.3	10.5	---	---	---	---	---	---	---	---	---
31	10.9	10.6	10.8	---	---	---	---	---	---	---	---	---
Month	10.9	8.2	10.0	11.3	10.9	11.1	---	---	---	---	---	---

01454700 LEHIGH RIVER AT GLENDON, PA—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	---	---	---	---	---	---	---	---	---	11.0	10.6	10.8
2	---	---	---	---	---	---	---	---	---	11.0	10.8	10.9
3	---	---	---	---	---	---	---	---	---	10.9	10.5	10.7
4	---	---	---	---	---	---	---	---	---	10.6	10.1	10.3
5	---	---	---	---	---	---	---	---	---	11.2	10.6	11.0
6	---	---	---	---	---	---	12.6	11.8	12.3	11.0	10.8	10.9
7	---	---	---	---	---	---	12.8	12.4	12.6	10.8	10.6	10.7
8	---	---	---	---	---	---	12.8	12.6	12.7	10.8	10.5	10.7
9	---	---	---	---	---	---	12.7	12.4	12.6	10.8	10.4	10.6
10	---	---	---	---	---	---	12.4	11.8	12.0	10.6	10.2	10.4
11	---	---	---	---	---	---	11.9	11.4	11.7	---	---	---
12	---	---	---	---	---	---	11.4	10.8	11.0	---	---	---
13	---	---	---	---	---	---	11.7	11.1	11.4	10.3	9.9	10.1
14	---	---	---	---	---	---	12.1	11.7	11.9	10.3	10.0	10.1
15	---	---	---	---	---	---	11.9	11.4	11.7	10.5	10.2	10.3
16	---	---	---	---	---	---	11.8	11.4	11.7	10.4	9.9	10.1
17	---	---	---	---	---	---	11.7	11.2	11.5	10.4	10.1	10.3
18	---	---	---	---	---	---	11.7	11.3	11.5	10.4	10.3	10.4
19	---	---	---	---	---	---	11.9	11.6	11.8	10.3	10.1	10.2
20	---	---	---	---	---	---	11.9	11.7	11.8	10.4	10.0	10.2
21	---	---	---	---	---	---	11.7	11.5	11.6	10.5	10.2	10.4
22	---	---	---	---	---	---	12.2	11.5	11.8	10.3	9.9	10.1
23	---	---	---	---	---	---	12.1	11.9	12.0	10.5	10.2	10.3
24	---	---	---	---	---	---	11.9	11.3	11.7	10.4	10.0	10.2
25	---	---	---	---	---	---	11.3	10.7	10.9	10.1	9.9	10.1
26	---	---	---	---	---	---	10.7	10.2	10.4	9.9	9.6	9.7
27	---	---	---	---	---	---	10.2	9.9	10.0	9.8	9.4	9.6
28	---	---	---	---	---	---	10.1	9.5	9.9	9.7	9.5	9.6
29	---	---	---	---	---	---	10.8	9.8	10.3	9.8	9.5	9.7
30	---	---	---	---	---	---	11.2	10.8	11.0	9.8	9.4	9.5
31	---	---	---	---	---	---	---	---	---	9.5	9.2	9.3
Month	---	---	---	---	---	---	12.8	9.5	11.5	11.2	9.2	10.2

01454700 LEHIGH RIVER AT GLENDON, PA—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			September		
1	9.4	9.1	9.2	9.0	8.6	8.8	8.4	7.9	8.1	9.6	9.5	9.6
2	9.5	9.1	9.3	8.9	8.5	8.7	8.4	7.8	8.0	9.7	9.5	9.6
3	9.8	9.5	9.6	9.0	8.5	8.6	8.2	7.8	8.0	9.6	9.3	9.5
4	10.0	9.8	9.9	8.7	8.2	8.5	8.4	8.0	8.2	9.4	9.1	9.2
5	10.4	9.9	10.2	8.8	8.3	8.6	8.8	8.2	8.4	---	---	---
6	10.4	9.9	10.2	8.7	8.3	8.5	8.8	8.3	8.4	---	---	---
7	9.9	9.5	9.7	8.5	8.2	8.4	8.7	8.1	8.5	---	---	---
8	9.6	9.2	9.4	8.6	8.1	8.3	8.7	8.6	8.6	---	---	---
9	9.2	8.8	9.0	8.5	8.1	8.3	8.7	8.4	8.5	---	---	---
10	9.1	8.7	8.8	8.7	8.0	8.4	8.8	8.5	8.7	---	---	---
11	8.9	8.6	8.8	8.6	7.9	8.3	8.9	8.6	8.7	---	---	---
12	9.6	8.9	9.2	8.3	7.7	8.0	9.0	8.5	8.7	---	---	---
13	9.8	9.4	9.6	8.4	7.7	7.9	9.1	8.5	8.7	---	---	---
14	9.8	9.6	9.7	8.6	7.8	8.2	9.1	8.5	8.9	---	---	---
15	9.8	9.7	9.7	8.9	8.0	8.3	9.4	9.1	9.3	---	---	---
16	9.7	9.3	9.5	8.8	8.1	8.4	9.5	9.3	9.4	---	---	---
17	9.8	9.2	9.5	8.8	8.1	8.3	9.5	9.4	9.5	---	---	---
18	9.7	9.3	9.5	8.7	8.0	8.2	9.5	9.2	9.3	---	---	---
19	9.6	9.0	9.3	8.5	7.8	8.2	9.2	8.9	9.1	---	---	---
20	9.2	8.6	8.8	8.4	7.7	8.0	9.2	8.9	9.1	---	---	---
21	8.9	8.5	8.6	8.4	7.6	7.9	9.2	9.0	9.1	---	---	---
22	8.9	8.4	8.7	8.1	7.3	7.7	9.2	8.8	9.0	---	---	---
23	8.8	8.3	8.5	8.2	7.1	7.6	9.3	9.1	9.2	---	---	---
24	9.2	8.6	9.0	8.2	7.3	7.7	9.4	9.3	9.4	---	---	---
25	9.3	9.0	9.2	8.3	7.5	7.9	9.3	9.1	9.2	---	---	---
26	9.6	9.3	9.5	8.5	7.6	8.3	9.3	9.0	9.2	---	---	---
27	9.6	9.5	9.6	8.4	8.0	8.3	9.1	8.9	9.0	---	---	---
28	9.6	9.2	9.4	8.5	8.0	8.3	9.0	8.4	8.7	---	---	---
29	9.3	8.8	9.1	8.6	8.2	8.3	9.6	8.9	9.4	---	---	---
30	8.9	8.6	8.8	8.5	8.0	8.2	9.9	9.5	9.7	---	---	---
31	---	---	---	8.5	7.9	8.2	9.8	9.6	9.7	---	---	---
Month	10.4	8.3	9.3	9.0	7.1	8.2	9.9	7.8	8.9	9.7	9.1	9.5