Water-Data Report 2011

01646305 DEAD RUN AT WHANN AVENUE NEAR MCLEAN, VA

Potomac Basin
Middle Potomac-Catoctin Subbasin

LOCATION.--Lat 38°57'34.8", long 77°10'33.5" referenced to North American Datum of 1927, Fairfax County, VA, Hydrologic Unit 02070008, on right bank, at bottom of ridge at end of Whann Avenue.

DRAINAGE AREA.--2.05 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--January 2008 to current year.

GAGE.--Water-stage recorder. Datum of gage is 178.0 ft NAVD of 1988, from topographic map.

REMARKS.--Records fair.

Suggested citation: U.S. Geological Survey, 2012, Water-resources data for the United States, Water Year 2011: U.S. Geological Survey Water-Data Report WDR-US-2011, site 01646305, accessed at http://wdr.water.usgs.gov/wy2011/pdfs/01646305.2011.pdf

01646305 DEAD RUN AT WHANN AVENUE NEAR MCLEAN, VA—Continued

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

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	14	0.93	21	1.1	0.87	1.8	3.3	1.3	0.90	0.38	0.23	0.29
2	0.60	0.85	1.5	1.3	20	1.3	2.2	1.3	0.78	0.43	0.22	0.30
3	1.5	0.87	1.2	1.0	2.0	1.2	2.0	1.2	0.75	9.7	0.28	0.27
4	10	19	1.1	0.99	1.3	1.1	2.0	7.0	0.69	0.79	0.53	0.29
5	1.5	1.5	1.1	1.1	3.6	1.1	12	1.3	0.78	0.37	0.38	1.2
6	1.1	0.91	1.2	0.95	2.5	36	2.2	1.2	0.73	0.37	0.33	17
7	1.3	0.82	1.1	0.97	1.8	6.5	2.1	1.2	0.66	0.35	1.1	34
8	1.0	0.76	1.1	0.96	e1.5	1.9	7.7	1.2	0.65	1.1	0.36	175
9	0.95	0.77	1.1	0.90	e1.2	1.6	2.5	1.2	0.62	0.59	0.18	11
10	0.90	0.92	1.1	0.88	1.2	54	2.1	1.1	0.63	0.28	0.32	1.8
11	0.97	0.96	1.1	0.92	1.1	7.9	2.1	1.1	0.60	0.25	0.12	1.1
12	1.1	0.92	7.5	1.1	1.1	3.3	6.2	1.1	0.59	0.27	0.08	1.0
13	1.2	0.95	1.5	0.92	1.1	2.8	16	1.1	0.56	7.6	2.5	0.94
14	11	0.94	1.0	0.90	1.2	2.6	2.5	2.9	0.54	0.79	4.1	0.88
15	0.93	0.94	0.97	0.93	1.1	2.5	2.3	4.3	0.52	0.44	1.9	0.85
16	0.76	e2.6	1.0	0.93	1.1	11	26	1.9	2.0	0.41	0.22	0.84
17	0.78	6.2	1.1	0.91	1.2	2.6	9.1	2.8	5.9	0.40	0.11	0.81
18	0.79	1.4	1.1	2.4	1.3	2.5	3.1	8.3	0.78	0.41	9.4	0.79
19	0.77	1.3	1.1	1.2	1.2	2.3	2.5	1.6	0.56	0.40	3.0	0.79
20	0.87	1.2	0.92	0.82	1.2	2.2	2.0	2.1	4.4	0.38	0.46	1.2
21	0.85	1.2	0.91	0.78	1.3	5.9	1.5	1.2	0.73	0.39	5.4	0.76
22	0.83	1.3	0.92	0.68	2.3	2.3	4.6	1.1	0.70	0.36	0.34	0.87
23	0.89	1.3	0.93	0.67	1.2	3.6	5.1	1.6	0.54	0.34	0.14	4.3
24	0.94	1.2	0.96	0.67	1.1	3.6	1.6	1.2	0.49	0.34	0.15	0.86
25	0.98	1.4	0.97	0.76	3.3	2.3	1.5	1.1	0.45	0.37	3.3	0.71
26	1.0	1.3	0.98	e3.6	1.1	2.1	1.4	1.0	0.45	0.41	0.32	0.70
27	11	1.2	1.0	e2.6	1.0	2.1	1.4	1.9	0.53	0.33	16	0.68
28	1.1	1.3	1.0	1.6	11	2.1	4.7	1.3	0.52	0.33	20	22
29	0.85	1.3	1.2	1.2	---	2.0	1.4	1.0	0.46	0.27	0.46	1.8
30	1.0	1.5	1.1	1.1	---	2.3	1.3	0.91	0.43	0.27	0.33	0.85
31	0.96	---	1.1	0.97	---	2.6	---	0.87	---	0.23	0.34	---
Total	72.42	57.74	59.86	35.81	69.87	177.1	134.4	58.38	28.94	29.35	72.60	283.88
Mean	2.34	1.92	1.93	1.16	2.50	5.71	4.48	1.88	0.96	0.95	2.34	9.46
Max	14	19	21	3.6	20	54	26	8.3	5.9	9.7	20	175
Min	0.60	0.76	0.91	0.67	0.87	1.1	1.3	0.87	0.43	0.23	0.08	0.27
Cfsm	1.14	0.94	0.94	0.56	1.22	2.79	2.19	0.92	0.47	0.46	1.14	4.62
In.	1.31	1.05	1.09	0.65	1.27	3.21	2.44	1.06	0.53	0.53	1.32	5.15

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2008 - 2011, BY WATER YEAR (WY)

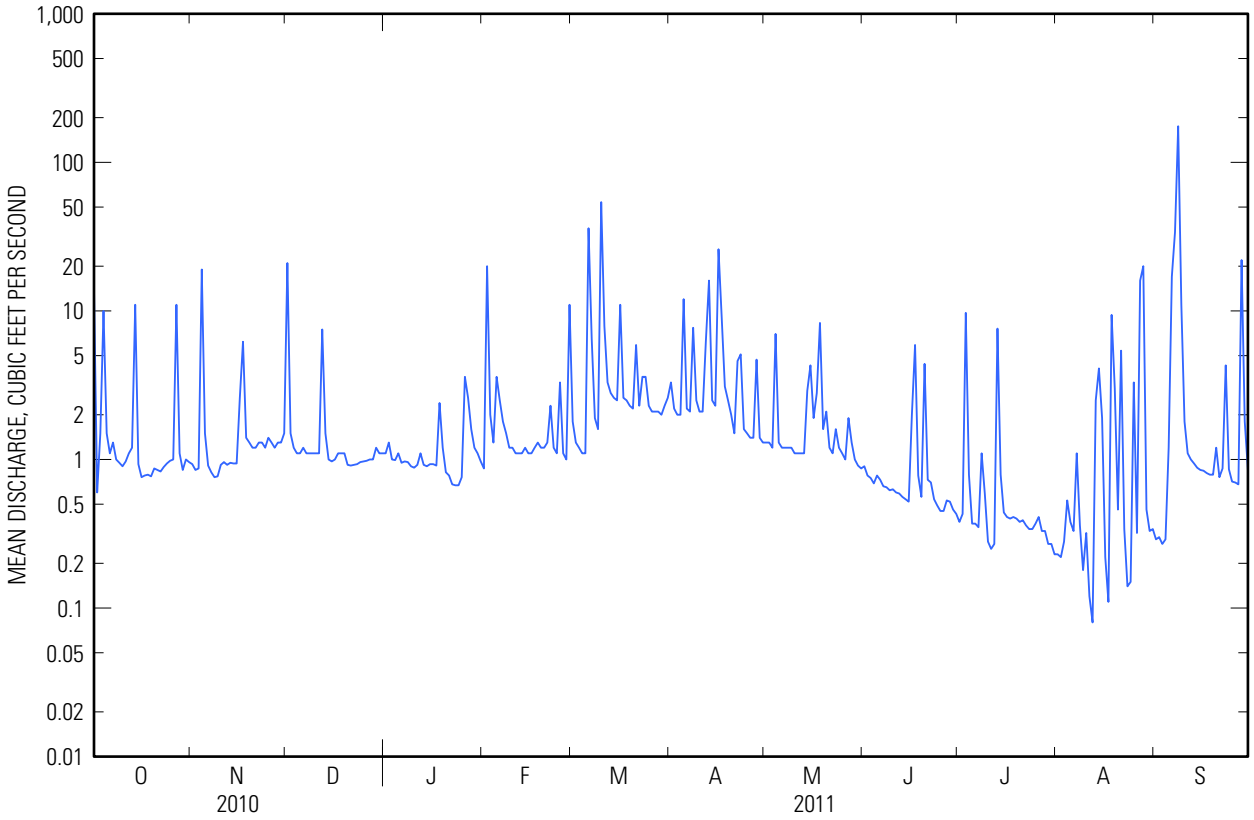
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	1.96	1.89	3.09	1.87	2.02	3.23	2.74	3.11	2.64	0.98	2.15	5.27
Max	2.76	2.64	5.09	2.26	2.81	5.71	4.48	4.52	5.61	1.29	5.06	9.46
(WY)	(2010)	(2010)	(2010)	(2010)	(2010)	(2011)	(2011)	(2008)	(2009)	(2010)	(2010)	(2011)
Min	0.79	1.09	1.93	1.16	1.02	1.32	1.79	1.88	0.95	0.62	0.29	1.21
(WY)	(2009)	(2009)	(2011)	(2011)	(2009)	(2009)	(2010)	(2011)	(2010)	(2008)	(2008)	(2009)

01646305 DEAD RUN AT WHANN AVENUE NEAR MCLEAN, VA—Continued

SUMMARY STATISTICS

	Calendar Year 2010		Water Year 2011		Water Years 2008 - 2011	
Annual total	903.92		1,080.35			
Annual mean	2.48		2.96		2.58	
Highest annual mean					2.96	2011
Lowest annual mean					1.94	2009
Highest daily mean	121	Aug 18	175	Sep 8	175	Sep 8, 2011
Lowest daily mean	0.11	Aug 10[a]	0.08	Aug 12	0.03	Aug 26, 2008[b]
Annual seven-day minimum	0.27	Sep 5	0.26	Jul 28	0.04	Aug 21, 2008
Maximum peak flow			1,170	Sep 8	1,630	Aug 18, 2010
Maximum peak stage			6.85	Sep 8	7.42	Aug 18, 2010
Instantaneous low flow			0.05	Aug 13	0.02	Aug 26, 2008[c]
Annual runoff (cfsm)	1.21		1.44		1.26	
Annual runoff (inches)	16.40		19.60		17.09	
10 percent exceeds	3.4		5.2		4.2	
50 percent exceeds	1.2		1.1		1.1	
90 percent exceeds	0.39		0.38		0.34	

[a] Also Aug. 11, 2010.
[b] Also Aug. 27, 2008.
[c] Also Aug. 9-12, 2010.



01646305 DEAD RUN AT WHANN AVENUE NEAR MCLEAN, VA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 2007 to current year.

PERIOD OF DAILY RECORD.--November 2007 to current year.

INSTRUMENTATION.--Water-quality monitor. Electronic data logger with 15-minute recording interval.

REMARKS.--

pH: Records excellent: Oct. 14 to Mar. 1, Mar. 31 to May 5, July 8, Aug. 16 to Sept. 29; Good: Oct. 1-14, Mar. 1-31, July 8 to Aug. 16; Fair: May 5 to June 7 Poor: June 7 to July 7.

SPECIFIC CONDUCTANCE: Records excellent: Oct 14 to Nov. 16, May 5 to June 7; Good: Nov. 16 to Dec. 13, Jan. 4 to Feb. 7, June 7 to July 7, Mar. 31 to May 5, July 8 to Sept. 29; Fair: Oct. 1-14, July 8 Feb. 7 to Mar. 31.

TURBIDITY: Records Excellent: Oct. 1 to Oct 14, Nov. 16 to Dec. 13, Jan. 4 to Mar. 31, Apr. 20 to June 7, July 8 to Sept. 29; Good: June 7 to July 7; Fair: Oct. 14 to Nov. 16, Mar. 31 to May 5; Poor: Dec. 13 to Jan. 4.

WATER TEMPERATURE: Records excellent.

EXTREMES FOR PERIOD OF DAILY RECORD.--

pH: Maximum, 8.9 standard units, Apr. 18, 2008, but may have been higher during periods of missing record; minimum, 5.6 standard units, May 31, 2008, but may have been lower during periods of missing record.

SPECIFIC CONDUCTANCE: Maximum, 13,400 microseimens/cm, Jan. 28, 2009, but may have been higher during periods of missing record; minimum, 18 microseimens/cm, Dec. 1, 2010, but may have been lower during periods of missing record.

TURBIDITY: Maximum, 1,710 Formazin Nephelometric Units, Apr. 20, 2008, but may have been higher during periods of missing record; minimum, 0.0 Formazin Nephelometric Units, on many days.

WATER TEMPERATURE: Maximum, 29.0°C, July 25, 2010, but may have been higher during periods of missing record; minimum, -0.2°C, Jan. 26, 2011, but may have been lower during periods of missing record.

EXTREMES FOR CURRENT YEAR.--

pH: Maximum, 8.2 standard units, Feb. 20, 22; minimum, 6.6 standard units, May 18, 19, Aug. 21, 22, Sept. 28.

SPECIFIC CONDUCTANCE: Maximum, 11,200 microsiemens/cm, Jan. 18; minimum, 38 microsiemens/cm, Sept. 8.

TURBIDITY: Maximum, 870 FNU, Mar. 6; minimum, 0.1 FNU, Oct. 31.

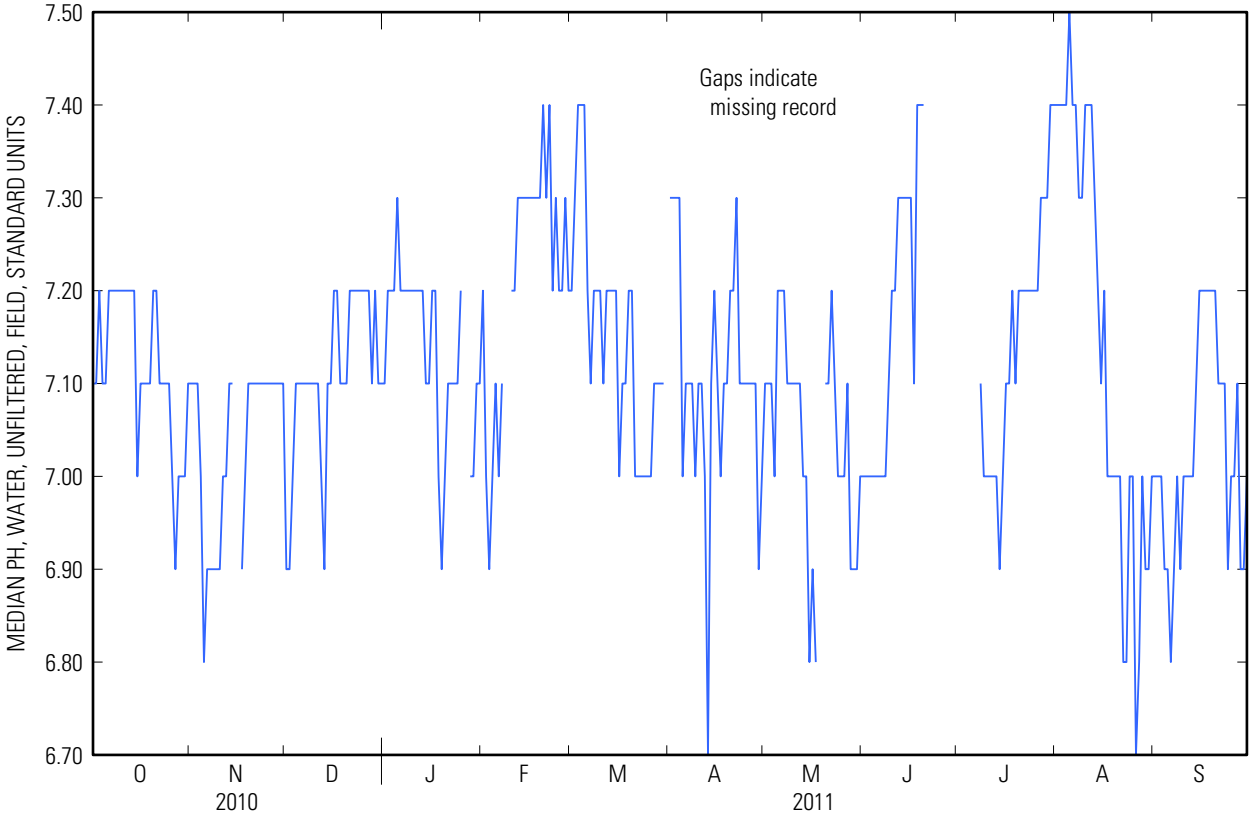
WATER TEMPERATURE: Maximum, 27.9°C, July 22; minimum, -0.2°C, Jan. 26.

01646305 DEAD RUN AT WHANN AVENUE NEAR MCLEAN, VA—Continued

pH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
DAILY MEDIAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	7.1	7.1	6.9	7.1	7.2	7.2	7.3	7.1	7.0	---	7.4	7.0
2	7.1	7.1	6.9	7.2	7.0	7.3	7.3	7.1	7.0	---	7.4	7.0
3	7.2	7.1	7.0	7.2	6.9	7.4	7.3	7.1	7.0	---	7.4	7.0
4	7.1	7.0	7.1	7.2	7.0	7.4	7.3	7.0	7.0	---	7.4	6.9
5	7.1	6.8	7.1	7.3	7.1	7.4	7.0	7.2	7.0	---	7.5	6.9
6	7.2	6.9	7.1	7.2	7.0	7.2	7.1	7.2	7.0	---	7.4	6.8
7	7.2	6.9	7.1	7.2	7.1	7.1	7.1	7.2	7.0	---	7.4	6.9
8	7.2	6.9	7.1	7.2	---	7.2	7.1	7.1	7.0	7.1	7.3	7.0
9	7.2	6.9	7.1	7.2	---	7.2	7.0	7.1	7.1	7.0	7.3	6.9
10	7.2	6.9	7.1	7.2	7.2	7.2	7.1	7.1	7.2	7.0	7.4	7.0
11	7.2	7.0	7.1	7.2	7.2	7.1	7.1	7.1	7.2	7.0	7.4	7.0
12	7.2	7.0	7.0	7.2	7.3	7.2	7.0	7.1	7.3	7.0	7.4	7.0
13	7.2	7.1	6.9	7.2	7.3	7.2	6.7	7.0	7.3	7.0	7.3	7.0
14	7.2	7.1	7.1	7.1	7.3	7.2	7.1	7.0	7.3	6.9	7.2	7.1
15	7.0	---	7.1	7.1	7.3	7.2	7.2	6.8	7.3	7.0	7.1	7.2
16	7.1	---	7.2	7.2	7.3	7.0	7.1	6.9	7.3	7.1	7.2	7.2
17	7.1	6.9	7.2	7.2	7.3	7.1	7.0	6.8	7.1	7.1	7.0	7.2
18	7.1	7.0	7.1	7.0	7.3	7.1	7.1	---	7.4	7.2	7.0	7.2
19	7.1	7.1	7.1	6.9	7.3	7.2	7.1	---	7.4	7.1	7.0	7.2
20	7.2	7.1	7.1	7.0	7.4	7.2	7.2	7.1	7.4	7.2	7.0	7.2
21	7.2	7.1	7.2	7.1	7.3	7.0	7.2	7.1	---	7.2	7.0	7.1
22	7.1	7.1	7.2	7.1	7.4	7.0	7.3	7.2	---	7.2	6.8	7.1
23	7.1	7.1	7.2	7.1	7.2	7.0	7.1	7.1	---	7.2	6.8	7.1
24	7.1	7.1	7.2	7.1	7.3	7.0	7.1	7.0	---	7.2	7.0	6.9
25	7.1	7.1	7.2	7.2	7.2	7.0	7.1	7.0	---	7.2	7.0	7.0
26	7.0	7.1	7.2	---	7.2	7.0	7.1	7.0	---	7.2	6.7	7.0
27	6.9	7.1	7.2	---	7.3	7.1	7.1	7.1	---	7.3	6.8	7.1
28	7.0	7.1	7.1	7.0	7.2	7.1	7.1	6.9	---	7.3	7.0	6.9
29	7.0	7.1	7.2	7.0	---	7.1	6.9	6.9	---	7.3	6.9	6.9
30	7.0	7.1	7.1	7.1	---	7.1	7.0	6.9	---	7.4	6.9	7.0
31	7.1	---	7.1	7.1	---	---	---	7.0	---	7.4	7.0	---
Mean	7.1	---	7.1	---	---	---	7.1	---	---	---	7.1	7.0
Max	7.2	---	7.2	---	---	---	7.3	---	---	---	7.5	7.2
Min	6.9	---	6.9	---	---	---	6.7	---	---	---	6.7	6.8
Med	7.1	---	7.1	---	---	---	7.1	---	---	---	7.1	7.0

01646305 DEAD RUN AT WHANN AVENUE NEAR MCLEAN, VA—Continued



01646305 DEAD RUN AT WHANN AVENUE NEAR MCLEAN, VA—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

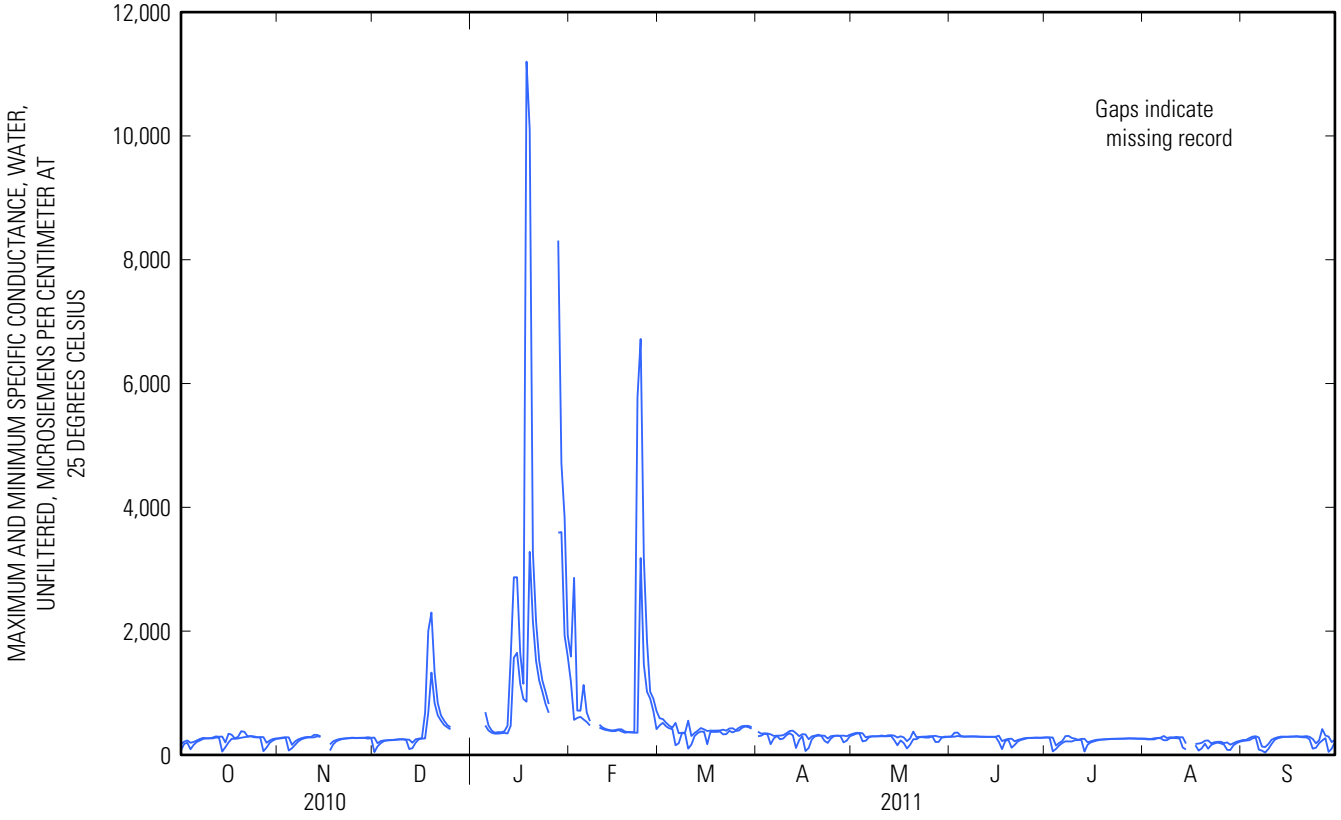
Day	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
	October		November		December		January		February		March	
1	179	74	271	264	280	46	---	---	1,590	1,180	592	478
2	214	179	281	271	189	138	---	---	2,860	566	579	518
3	234	196	285	281	224	189	---	---	717	598	521	463
4	196	91	284	71	234	223	---	---	714	615	473	430
5	210	163	163	108	237	234	691	476	1,130	572	440	419
6	234	210	219	163	241	237	476	395	684	532	518	156
7	259	234	252	219	244	240	395	358	546	475	350	188
8	275	259	270	252	250	244	358	344	---	---	358	350
9	269	266	285	270	255	249	368	344	---	---	358	352
10	270	267	291	281	255	249	367	350	488	442	553	101
11	280	267	289	282	249	246	381	355	443	418	305	167
12	299	280	325	284	246	95	471	347	418	403	354	304
13	294	280	322	301	197	109	1,570	471	404	393	391	354
14	297	54	301	292	252	197	2,870	1,570	396	384	434	378
15	202	125	---	---	263	252	2,870	1,650	402	385	413	375
16	343	202	---	---	272	262	1,650	1,150	414	402	387	173
17	326	261	170	71	682	267	1,150	904	413	379	393	374
18	266	261	220	170	2,000	682	11,200	860	379	360	392	372
19	293	266	242	220	2,300	1,330	10,100	3,280	370	365	394	372
20	383	278	257	242	1,330	836	3,280	2,160	369	362	395	378
21	373	287	264	257	836	639	2,160	1,520	365	360	408	332
22	301	293	269	264	639	554	1,520	1,200	5,780	358	392	336
23	305	300	273	268	554	484	1,200	1,020	6,720	3,180	427	389
24	300	286	279	273	484	446	1,020	822	3,180	1,460	431	364
25	286	283	275	271	446	414	822	681	1,840	1,020	399	387
26	288	283	276	272	---	---	---	---	1,020	910	439	394
27	288	60	277	273	---	---	---	---	910	710	465	439
28	196	119	279	273	---	---	8,310	3,590	710	417	470	459
29	233	196	286	263	---	---	4,710	3,600	---	---	469	448
30	258	233	277	273	---	---	3,840	1,930	---	---	449	425
31	266	258	---	---	---	---	1,930	1,590	---	---	---	---
Month	383	54	---	---	---	---	---	---	---	---	---	---

01646305 DEAD RUN AT WHANN AVENUE NEAR MCLEAN, VA—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Day	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
	April		May		June		July		August		September	
1	376	302	343	321	298	293	284	281	265	257	241	225
2	343	310	356	343	358	295	283	279	260	250	243	232
3	349	340	356	349	361	306	282	57	258	251	272	238
4	347	333	349	219	306	297	152	96	269	251	295	267
5	333	173	284	229	297	295	193	152	274	269	302	282
6	307	267	298	284	298	296	225	193	278	271	282	86
7	311	306	302	298	301	295	304	220	306	237	134	69
8	312	252	301	299	300	296	307	218	274	238	127	38
9	320	266	303	300	299	295	274	217	285	271	175	96
10	351	320	314	301	296	292	263	238	284	273	244	175
11	386	351	303	300	295	292	244	239	291	271	270	244
12	392	317	316	302	294	291	259	244	285	265	286	270
13	351	112	319	306	294	290	260	55	286	119	296	282
14	303	239	311	238	294	291	203	166	184	89	295	292
15	335	303	281	156	294	290	221	203	---	---	294	292
16	331	63	301	234	311	210	235	219	---	---	298	292
17	253	112	283	191	223	93	246	234	177	158	299	294
18	300	253	222	104	246	223	249	244	183	70	303	295
19	312	300	267	164	259	246	252	248	196	106	298	290
20	326	311	378	254	262	117	256	251	229	182	298	284
21	312	309	288	254	220	163	259	255	234	100	304	284
22	311	228	291	287	242	220	261	258	187	162	292	251
23	265	194	295	286	256	242	262	259	205	185	258	101
24	303	265	296	280	270	256	263	260	211	199	188	115
25	310	303	302	281	275	270	264	261	213	186	233	188
26	312	310	303	300	276	273	266	262	191	168	418	233
27	310	306	308	209	279	275	268	266	202	82	313	270
28	312	203	294	210	280	277	268	263	165	79	296	48
29	302	231	287	281	279	274	267	262	190	156	207	103
30	326	302	295	286	281	278	265	260	214	190	244	207
31	---	---	296	291	---	---	266	259	227	214	---	---
Month	392	63	378	104	361	93	307	55	---	---	418	38

01646305 DEAD RUN AT WHANN AVENUE NEAR MCLEAN, VA—Continued

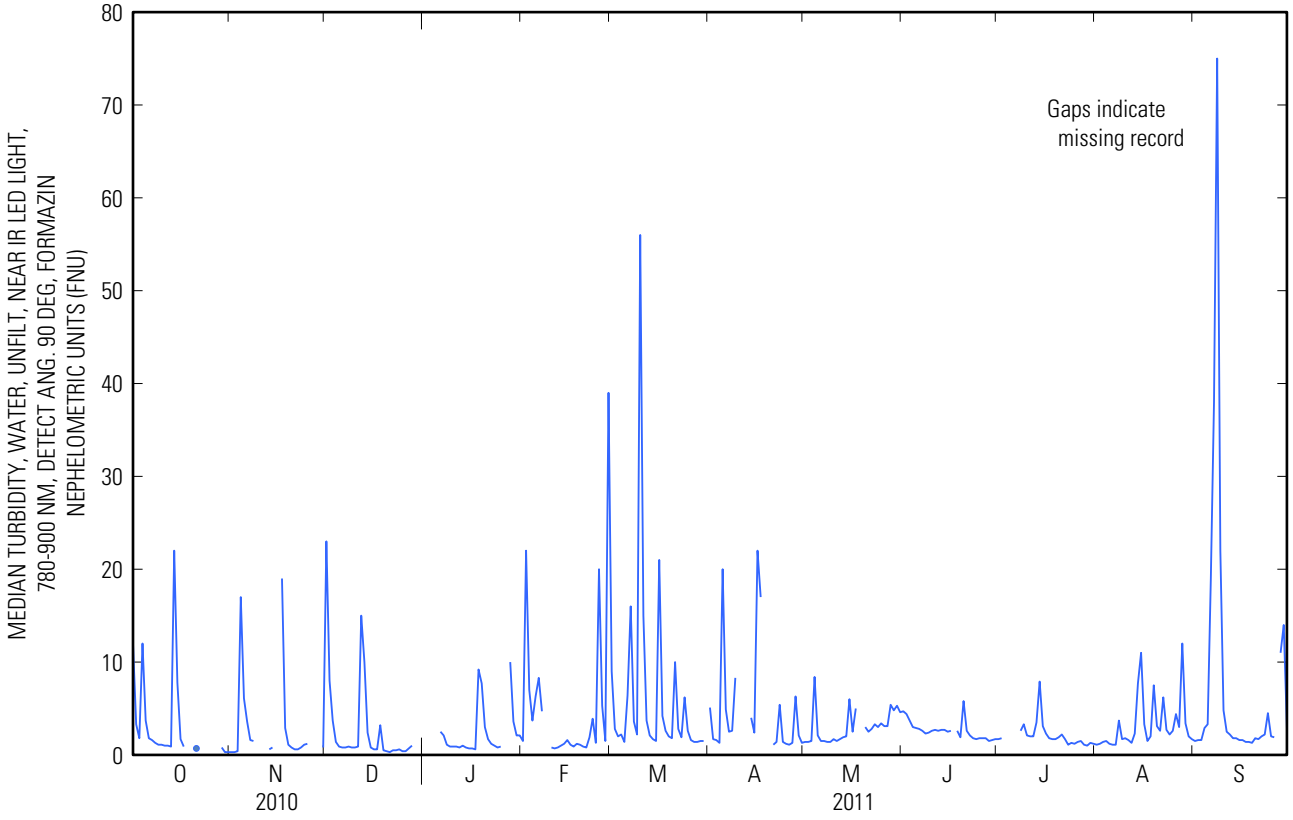


01646305 DEAD RUN AT WHANN AVENUE NEAR MCLEAN, VA—Continued

TURBIDITY, WATER, UNFILT, NEAR IR LED LIGHT, 780-900 NM, DETECT ANG. 90 DEG, FORMAZIN NEPHELOMETRIC UNITS (FNU)
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
DAILY MEDIAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	12	0.3	23	---	1.5	9.0	5.1	1.4	4.7	1.7	1.1	1.5
2	3.3	0.3	8.0	---	22	2.8	1.7	1.4	4.4	1.8	1.2	1.6
3	1.8	0.4	3.7	---	7.0	2.0	1.6	1.5	3.7	---	1.4	1.6
4	12	17	1.4	---	3.7	2.2	1.3	8.4	3.0	---	1.5	2.9
5	3.7	6.1	0.9	---	6.3	1.4	20	2.1	2.9	---	1.2	3.3
6	1.8	3.6	0.8	2.5	8.3	6.4	4.9	1.5	2.8	---	1.1	19
7	1.6	1.6	0.8	2.1	4.7	16	2.5	1.5	2.6	---	1.1	38
8	1.3	1.5	0.9	1.1	---	3.6	2.6	1.4	2.3	2.6	3.7	75
9	1.1	---	0.8	0.9	---	2.2	8.3	1.4	2.4	3.3	1.7	22
10	1.1	---	0.8	0.9	0.8	56	---	1.7	2.6	2.1	1.8	4.8
11	1.0	---	0.9	0.9	0.7	15	---	1.5	2.7	2.0	1.6	2.5
12	1.0	---	15	0.8	0.8	3.7	---	1.7	2.6	2.0	1.3	2.2
13	0.9	0.6	10	1.0	1.0	2.1	---	1.9	2.7	3.5	2.3	1.8
14	22	0.8	2.4	0.8	1.2	1.7	4.0	2.0	2.7	7.9	7.7	1.8
15	7.8	---	0.8	0.7	1.6	1.5	2.4	6.0	2.5	3.1	11	1.6
16	1.7	---	0.6	0.7	1.1	21	22	2.5	2.6	2.3	3.3	1.6
17	0.9	19	0.6	0.6	0.9	4.2	17	5.0	---	1.8	1.5	1.4
18	---	2.9	3.2	9.2	1.2	2.6	---	---	2.6	1.7	2.0	1.4
19	---	1.1	0.5	7.7	1.1	2.0	---	---	1.9	1.7	7.5	1.3
20	---	0.8	0.4	3.0	0.9	1.8	---	3.0	5.8	1.9	3.1	1.8
21	0.7	0.6	0.3	1.7	0.8	10	1.1	2.5	2.6	2.2	2.6	1.7
22	---	0.6	0.5	1.2	1.9	2.8	1.4	2.8	2.1	1.7	6.2	2.0
23	---	0.8	0.5	1.0	3.9	1.9	5.4	3.3	1.8	1.1	2.7	2.2
24	---	1.1	0.6	0.8	1.3	6.2	1.4	3.0	1.7	1.3	2.2	4.5
25	---	1.2	0.4	0.9	20	2.6	1.2	3.4	1.8	1.2	2.6	2.0
26	---	---	0.4	---	5.3	1.6	1.1	3.1	1.8	1.4	4.4	1.9
27	---	---	0.7	---	1.5	1.4	1.3	3.1	1.8	1.5	3.0	---
28	---	---	1.0	10	39	1.4	6.3	5.4	1.5	1.1	12	11
29	0.8	---	---	3.6	---	1.5	2.1	4.8	1.6	1.0	3.4	14
30	0.3	0.8	---	2.1	---	1.5	1.3	5.3	1.7	1.3	2.0	2.9
31	0.3	---	---	2.1	---	---	---	4.6	---	1.2	1.7	---
Mean	---	---	---	---	---	---	---	---	---	---	3.2	---
Max	---	---	---	---	---	---	---	---	---	---	12	---
Min	---	---	---	---	---	---	---	---	---	---	1.1	---
Med	---	---	---	---	---	---	---	---	---	---	2.2	---

01646305 DEAD RUN AT WHANN AVENUE NEAR MCLEAN, VA—Continued



01646305 DEAD RUN AT WHANN AVENUE NEAR MCLEAN, VA—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

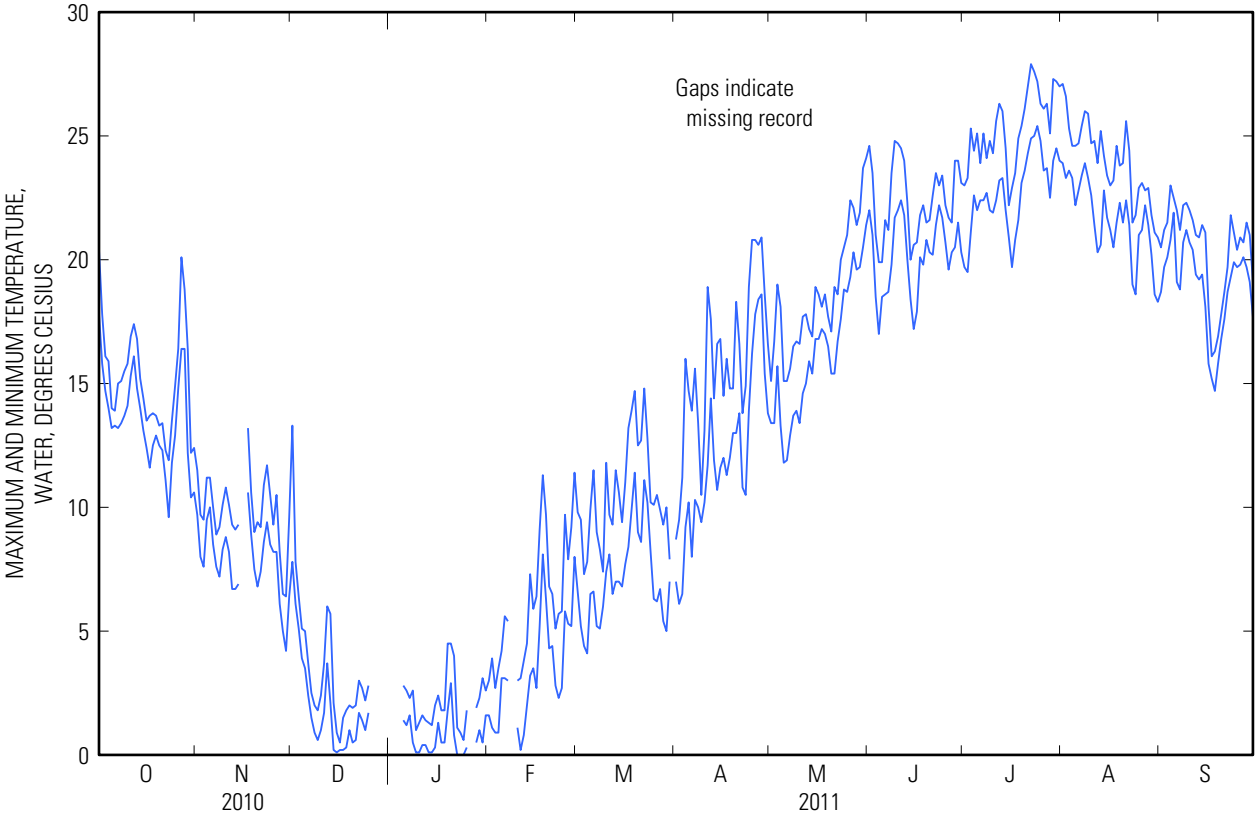
Day	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
	October		November		December		January		February		March	
1	20.4	17.8	11.5	9.7	13.3	7.8	---	---	3.0	1.6	9.8	6.6
2	17.8	15.8	9.7	8.0	7.8	6.1	---	---	3.9	1.1	9.5	5.2
3	16.1	14.7	9.5	7.6	6.4	5.1	---	---	2.7	0.9	7.3	4.4
4	15.9	14.0	11.2	9.5	5.1	3.9	---	---	3.5	0.9	7.8	4.1
5	14.0	13.2	11.2	10.0	5.0	3.5	2.8	1.4	4.2	3.1	9.9	6.5
6	13.9	13.3	10.0	8.5	3.7	2.4	2.6	1.2	5.6	3.1	11.5	6.6
7	15.0	13.2	8.9	7.6	2.5	1.5	2.3	1.6	5.4	3.0	9.0	5.2
8	15.1	13.4	9.2	7.2	2.0	0.9	2.6	0.5	---	---	8.3	5.1
9	15.5	13.7	10.1	8.3	1.8	0.6	1.0	0.1	---	---	7.4	6.0
10	15.8	14.1	10.8	8.8	2.4	1.0	1.3	0.1	3.0	1.1	11.8	7.4
11	16.9	15.3	10.1	8.2	3.7	1.7	1.6	0.4	3.1	0.2	9.7	8.1
12	17.4	16.1	9.3	6.7	6.0	3.7	1.4	0.4	3.8	0.8	9.3	6.5
13	16.8	14.8	9.1	6.7	5.7	2.1	1.3	0.1	4.5	2.0	11.5	7.0
14	15.2	14.0	9.3	6.9	2.1	0.2	1.2	0.1	7.3	3.2	10.6	7.0
15	14.4	13.1	---	---	0.9	0.1	2.0	0.3	5.9	3.5	9.4	6.8
16	13.5	12.4	---	---	0.5	0.2	2.4	1.3	6.4	2.7	11.0	7.7
17	13.7	11.6	13.2	10.6	1.5	0.2	1.8	0.5	9.1	5.2	13.2	8.4
18	13.8	12.5	10.6	8.9	1.8	0.3	1.8	0.5	11.3	8.1	13.9	9.9
19	13.7	12.9	9.0	7.5	2.0	1.0	4.5	1.8	9.7	6.3	14.7	11.4
20	13.3	12.5	9.4	6.8	1.9	0.5	4.5	2.9	6.8	4.3	12.5	9.0
21	13.4	12.3	9.2	7.4	2.0	0.6	4.0	0.8	6.5	4.4	12.7	8.6
22	12.3	11.1	10.9	8.6	3.0	1.7	1.1	0.0	5.1	2.8	14.8	11.1
23	11.9	9.6	11.7	9.4	2.7	1.4	0.9	0.0	5.7	2.3	12.8	10.2
24	13.5	11.8	10.5	8.5	2.2	1.0	0.6	0.0	5.8	2.7	10.2	8.2
25	14.9	12.9	9.3	8.2	2.8	1.7	1.8	0.3	9.7	5.8	10.1	6.3
26	16.4	14.8	10.5	8.2	---	---	---	---	7.9	5.3	10.5	6.2
27	20.1	16.4	8.2	6.1	---	---	---	---	9.2	5.2	9.9	6.7
28	18.8	16.4	6.5	5.0	---	---	1.9	0.5	11.4	8.0	9.3	5.4
29	16.4	12.2	6.4	4.2	---	---	2.3	1.0	---	---	10.0	5.0
30	12.2	10.4	9.6	6.4	---	---	3.1	0.5	---	---	7.9	7.0
31	12.4	10.6	---	---	---	---	2.6	1.6	---	---	---	---
Month	20.4	9.6	---	---	---	---	---	---	---	---	---	---

01646305 DEAD RUN AT WHANN AVENUE NEAR MCLEAN, VA—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Day	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
	April		May		June		July		August		September	
1	8.7	7.0	15.1	13.4	24.6	22.0	23.0	19.7	27.1	23.9	20.5	18.7
2	9.5	6.1	16.7	13.4	23.5	21.0	23.3	19.5	26.6	23.3	21.2	19.7
3	11.2	6.5	19.0	15.7	21.0	18.5	25.3	21.1	25.3	23.6	21.5	20.1
4	16.0	9.2	18.1	13.3	19.9	17.0	24.4	22.6	24.6	23.3	23.0	20.8
5	14.7	10.2	15.1	11.8	19.9	18.5	25.1	22.0	24.6	22.2	22.5	21.9
6	13.9	8.0	15.1	11.9	21.6	18.6	23.9	22.4	24.7	22.8	22.0	19.1
7	15.6	10.3	15.6	12.9	21.2	18.7	25.1	22.4	25.4	23.4	21.2	18.8
8	13.4	10.0	16.5	13.7	23.5	19.8	24.1	22.7	26.0	23.9	22.2	20.7
9	10.5	9.4	16.7	13.9	24.8	21.7	24.8	22.0	25.9	23.3	22.3	21.2
10	13.1	10.2	16.6	13.4	24.7	22.0	24.3	21.9	24.7	22.6	22.0	20.7
11	18.9	11.7	17.7	14.6	24.5	22.4	25.6	22.4	24.8	21.4	21.6	20.4
12	17.6	14.4	17.8	15.0	24.0	21.8	26.3	23.2	23.9	20.3	21.0	19.4
13	14.4	11.9	17.2	15.9	22.3	20.0	26.0	23.3	25.2	20.6	20.9	19.2
14	16.6	10.7	16.9	15.4	20.0	18.4	24.5	22.0	24.2	22.8	21.4	19.4
15	16.8	11.6	18.9	16.8	20.6	17.2	22.2	20.9	23.4	21.7	21.1	18.1
16	14.5	12.0	18.6	16.8	20.7	17.9	22.9	19.7	23.0	21.2	18.1	15.8
17	16.0	11.3	18.1	17.2	21.8	20.1	23.5	20.8	23.2	20.5	16.1	15.2
18	14.8	12.0	18.6	17.0	22.2	19.8	24.9	21.6	24.6	21.5	16.3	14.7
19	14.8	13.0	17.7	16.5	21.5	20.8	25.4	23.1	23.8	22.3	16.9	15.8
20	18.3	13.0	17.1	15.4	21.6	20.3	26.1	23.6	23.9	21.5	17.8	16.8
21	16.6	13.8	18.9	15.4	22.6	20.2	27.0	24.3	25.6	22.4	18.7	17.6
22	13.8	10.8	18.6	16.7	23.5	21.4	27.9	24.9	24.4	21.4	19.7	18.7
23	14.9	10.5	20.0	17.6	23.0	22.2	27.6	25.0	21.5	19.0	21.8	19.3
24	18.9	13.9	20.5	18.8	23.4	21.7	27.2	25.4	21.8	18.6	21.1	19.9
25	20.8	16.2	21.0	18.7	22.2	20.7	26.3	24.8	22.9	21.0	20.4	19.7
26	20.8	17.8	22.4	19.3	21.7	19.6	26.1	23.6	23.1	21.2	20.9	19.8
27	20.6	18.4	22.1	20.3	21.5	20.3	26.3	23.7	22.8	22.2	20.7	20.1
28	20.9	18.6	21.4	19.6	24.0	20.5	25.1	22.5	22.9	21.4	21.5	19.7
29	18.6	15.4	21.9	19.7	24.0	21.5	27.3	24.0	21.8	20.2	21.0	19.1
30	16.6	13.8	23.7	20.5	23.1	20.3	27.2	24.5	21.1	18.6	19.1	17.7
31	---	---	24.1	21.4	---	---	27.0	24.0	20.9	18.3	---	---
Month	20.9	6.1	24.1	11.8	24.8	17.0	27.9	19.5	27.1	18.3	23.0	14.7

01646305 DEAD RUN AT WHANN AVENUE NEAR MCLEAN, VA—Continued



01646305 DEAD RUN AT WHANN AVENUE NEAR MCLEAN, VA—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 1 of 4

[%, percent; FNU, Formazin nephelometric units; LED, light-emitting diode; N, nitrogen; P, phosphorus; ft, feet; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; mm, millimeters; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; --, no data; <, less than; E, estimated]

Date	Sample start time	Medium name	Sample type	Barometric pressure, mm Hg (00025)	Tempera-ture, air, °C (00020)	Discharge, instanta-neous, ft³/s (00061)	Dissolved oxygen, water, unfiltered, mg/L (00300)	Dissolved oxygen, water, unfiltered, % saturation (00301)
10-13-2010	**1030**	Surface water	Replicate	766	14.0	1.2	8.7	86
10-13-2010	***1045***	*QC sample - Surface water*	*Replicate*	--	--	--	--	--
11-09-2010	**1445**	Surface water	Regular	759	16.0	.79	10.2	91
12-01-2010	**0945**	Surface water	Regular	--	--	157	--	--
12-01-2010	**1045**	Surface water	Regular	--	--	141	--	--
12-01-2010	**1130**	Surface water	Regular	--	--	64	--	--
12-01-2010	**1215**	Surface water	Regular	--	--	40	--	--
12-01-2010	**1300**	Surface water	Regular	--	--	25	--	--
12-07-2010	**1030**	Surface water	Replicate	755	.5	1.2	12.7	92
12-07-2010	***1045***	*QC sample - Surface water*	*Replicate*	--	--	--	--	--
01-13-2011	**1515**	Surface water	Regular	767	.0	.91	15.6	110
02-02-2011	**0215**	Surface water	Regular	--	--	29	--	--
02-02-2011	**0300**	Surface water	Regular	--	--	53	--	--
02-02-2011	**0430**	Surface water	Regular	--	--	48	--	--
02-08-2011	**1415**	Surface water	Regular	760	4.0	1.5	13.4	105
03-06-2011	**1500**	Surface water	Regular	--	--	12	--	--
03-06-2011	**1545**	Surface water	Regular	--	--	179	--	--
03-06-2011	**1630**	Surface water	Regular	--	--	124	--	--
03-06-2011	**1730**	Surface water	Regular	--	--	150	--	--
03-06-2011	**1900**	Surface water	Regular	--	--	75	--	--
03-06-2011	**2115**	Surface water	Regular	--	--	67	--	--
03-06-2011	**2245**	Surface water	Regular	--	--	61	--	--
03-08-2011	**0930**	Surface water	Regular	770	8.0	1.9	13.8	109
04-12-2011	**0930**	Surface water	Replicate	747	13.0	2.3	8.5	87
04-12-2011	***0945***	*QC sample - Surface water*	*Replicate*	--	--	--	--	--
05-10-2011	**1015**	Surface water	Regular	759	14.0	1.2	9.8	95
06-14-2011	**1045**	Surface water	Replicate	756	27.0	.57	8.4	90
06-14-2011	***1100***	*QC sample - Surface water*	*Replicate*	--	--	--	--	--
07-12-2011	**1630**	Surface water	Regular	753	33.0	.27	8.0	100
07-13-2011	**1615**	Surface water	Regular	--	--	110	--	--
07-13-2011	**1700**	Surface water	Regular	--	--	43	--	--
07-13-2011	**1745**	Surface water	Regular	--	--	26	--	--
07-13-2011	**1830**	Surface water	Regular	--	--	15	--	--
08-09-2011	**1515**	Surface water	Regular	748	28.0	.17	6.6	83
09-06-2011	**0200**	Surface water	Regular	--	--	55	--	--
09-13-2011	**1515**	Surface water	Regular	758	29.0	.97	8.6	96

01646305 DEAD RUN AT WHANN AVENUE NEAR MCLEAN, VA—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
Part 2 of 4

[%, percent; FNU, Formazin nephelometric units; LED, light-emitting diode; N, nitrogen; P, phosphorus; ft, feet; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; mm, millimeters; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; --, no data; <, less than; E, estimated]

Date	Sample start time	pH, water, unfiltered, field, standard units (00400)	Specific conductance, water, unfiltered, µS/cm at 25°C (00095)	Temperature, water, °C (00010)	Turbidity, water, unfiltered, monochrome near infrared LED light, 780-900 nm, detection angle 90 +/- 2.5 degrees, FNU (63680)	Gage height, ft (00065)	Ammonia plus organic nitrogen, water, filtered, mg/L as N (00623)	Ammonia plus organic nitrogen, water, unfiltered, mg/L as N (00625)	Ammonia, water, filtered, mg/L as N (00608)
10-13-2010	**1030**	7.2	289	14.9	0.9	1.37	0.47	0.60	< .100
10-13-2010	***1045***	--	--	--	--	--	*.41*	*.64*	*< .100*
11-09-2010	**1445**	7.1	270	10.2	.2	1.28	.29	.30	< .100
12-01-2010	**0945**	--	--	--	--	4.31	.35	2.9	E .023
12-01-2010	**1045**	--	--	--	--	4.21	.40	2.2	E .052
12-01-2010	**1130**	--	--	--	--	3.53	.49	1.4	E .068
12-01-2010	**1215**	--	--	--	--	3.04	.59	1.2	E .077
12-01-2010	**1300**	--	--	--	--	2.65	.60	.96	E .078
12-07-2010	**1030**	7.1	243	1.7	.8	1.37	E .07	E .12	E .020
12-07-2010	***1045***	--	--	--	--	--	*E .08*	*E .10*	*E .013*
01-13-2011	**1515**	7.1	1,320	1.4	.7	1.33	E .07	E .12	E .029
02-02-2011	**0215**	--	--	--	--	2.77	.33	1.3	.033
02-02-2011	**0300**	--	--	--	--	3.33	1.1	3.2	.362
02-02-2011	**0430**	--	--	--	--	3.24	.64	1.8	.222
02-08-2011	**1415**	7.3	498	4.9	1.8	1.40	.27	.32	< .100
03-06-2011	**1500**	--	--	--	--	2.14	.53	.84	E .039
03-06-2011	**1545**	--	--	--	--	4.44	.63	4.3	E .068
03-06-2011	**1630**	--	--	--	--	4.10	.70	2.5	E .078
03-06-2011	**1730**	--	--	--	--	4.27	.70	1.8	E .078
03-06-2011	**1900**	--	--	--	--	3.66	.73	1.3	E .069
03-06-2011	**2115**	--	--	--	--	3.57	.78	1.1	E .046
03-06-2011	**2245**	--	--	--	--	3.50	.71	.94	E .037
03-08-2011	**0930**	6.9	394	5.5	4.0	1.43	.24	.29	< .100
04-12-2011	**0930**	7.1	306	15.7	4.7	1.47	.33	.55	< .100
04-12-2011	***0945***	--	--	--	--	--	*.82*	*1.0*	*< .100*
05-10-2011	**1015**	7.1	304	13.7	1.5	1.42	1.1	1.2	< .100
06-14-2011	**1045**	7.1	180	18.6	2.7	1.32	< .20	.32	E .019
06-14-2011	***1100***	--	--	--	--	--	*.42*	*.37*	*E .019*
07-12-2011	**1630**	7.2	160	26.3	1.1	1.26	.34	.53	< .100
07-13-2011	**1615**	--	--	--	--	3.99	.74	8.4	.207
07-13-2011	**1700**	--	--	--	--	3.12	.87	3.2	.196
07-13-2011	**1745**	--	--	--	--	2.64	.99	1.4	.142
07-13-2011	**1830**	--	--	--	--	2.20	.83	1.4	.113
08-09-2011	**1515**	7.0	269	25.9	.8	1.19	.26	.23	< .100
09-06-2011	**0200**	--	--	--	--	3.37	.43	1.2	< .100
09-13-2011	**1515**	7.0	294	20.8	1.5	1.68	.29	.32	< .100

01646305 DEAD RUN AT WHANN AVENUE NEAR MCLEAN, VA—Continued

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[%, percent; FNU, Formazin nephelometric units; LED, light-emitting diode; N, nitrogen; P, phosphorus; ft, feet; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; mm, millimeters; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; --, no data; <, less than; E, estimated]

Date	Sample start time	Nitrate plus nitrite, water, filtered, mg/L as N (00631)	Orthophosphate, water, filtered, mg/L as P (00671)	Phosphorus, suspended sediment, total, milligrams per liter as phosphorus (00667)	Phosphorus, water, filtered, mg/L as P (00666)	Phosphorus, water, unfiltered, mg/L as P (00665)	Total nitrogen, suspended sediment, total, milligrams per liter (00601)	Total nitrogen, water, filtered, mg/L (00602)	Total nitrogen, water, unfiltered, mg/L (00600)
10-13-2010	**1030**	2.82	E .032	< .030	E .018	E .023	E .13	3.3	3.4
10-13-2010	***1045***	*2.81*	*E .027*	*E .006*	*E .018*	*E .024*	*.23*	*3.2*	*3.4*
11-09-2010	**1445**	2.52	E .017	E .016	E .008	E .024	< .20	2.8	2.8
12-01-2010	**0945**	.386	E .041	.442	.063	.505	2.5	.74	3.3
12-01-2010	**1045**	.348	.110	.348	.122	.470	1.8	.75	2.5
12-01-2010	**1130**	.444	.109	.159	.123	.282	.96	.93	1.9
12-01-2010	**1215**	.489	.100	.109	.117	.226	.59	1.1	1.7
12-01-2010	**1300**	.540	.097	.086	.108	.194	.36	1.1	1.5
12-07-2010	**1030**	3.09	E .012	< .030	E .013	E .011	< .20	3.2	3.2
12-07-2010	***1045***	*3.15*	*E .012*	*< .030*	*E .011*	*E .014*	*< .20*	*3.2*	*3.3*
01-13-2011	**1515**	3.40	E .011	E .006	< .030	E .011	< .20	3.5	3.5
02-02-2011	**0215**	2.48	.013	.164	.021	.185	1.0	2.8	3.8
02-02-2011	**0300**	1.39	.036	.431	.039	.470	2.1	2.5	4.6
02-02-2011	**0430**	.628	.037	.244	.041	.285	1.1	1.3	2.4
02-08-2011	**1415**	2.33	E .013	E .010	E .022	.032	< .20	2.6	2.7
03-06-2011	**1500**	1.05	E .023	E .013	.045	.058	.32	1.6	1.9
03-06-2011	**1545**	.422	E .017	.116	.040	.156	3.7	1.1	4.8
03-06-2011	**1630**	.357	E .037	.147	.057	.204	1.8	1.1	2.9
03-06-2011	**1730**	.445	E .049	.039	.061	.100	1.1	1.1	2.2
03-06-2011	**1900**	.556	.063	.118	.066	.184	.59	1.3	1.9
03-06-2011	**2115**	.693	.053	.059	.067	.126	.30	1.5	1.8
03-06-2011	**2245**	.542	.052	.053	.065	.118	.23	1.2	1.5
03-08-2011	**0930**	2.43	E .016	E .014	E .014	E .028	E .06	2.7	2.7
04-12-2011	**0930**	2.13	< .050	E .022	< .030	E .025	.22	2.5	2.7
04-12-2011	***0945***	*2.10*	*< .050*	*E .014*	*< .030*	*E .015*	*E .20*	*2.9*	*3.1*
05-10-2011	**1015**	2.53	E .015	E .014	E .015	E .029	.10	3.6	3.7
06-14-2011	**1045**	2.02	E .011	E .011	E .028	.039	.32	2.0	2.3
06-14-2011	***1100***	*2.02*	*E .012*	*E .010*	*E .028*	*.038*	*< .02*	*2.4*	*2.4*
07-12-2011	**1630**	1.27	E .014	< .030	.036	.041	E .19	1.6	1.8
07-13-2011	**1615**	.621	E .026	.802	.068	.870	7.6	1.4	9.0
07-13-2011	**1700**	.635	.073	.289	.091	.380	2.3	1.5	3.8
07-13-2011	**1745**	.607	.059	.193	.082	.275	.46	1.6	2.1
07-13-2011	**1830**	.598	E .041	.121	.071	.193	.54	1.4	2.0
08-09-2011	**1515**	.769	E .016	E .013	E .022	.035	< .20	1.0	.99
09-06-2011	**0200**	.290	E .010	.110	.070	.180	.73	.72	1.4
09-13-2011	**1515**	2.45	E .017	E .007	E .016	E .023	< .20	2.7	2.8

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[%, percent; FNU, Formazin nephelometric units; LED, light-emitting diode; N, nitrogen; P, phosphorus; ft, feet; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; mm, millimeters; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; --, no data; <, less than; E, estimated]

Date	Sample start time	Suspended sediment, sieve diameter, percent smaller than 0.0625 mm (70331)	Suspended sediment concen-tration, mg/L (80154)
10-13-2010	1030	--	5
10-13-2010	*1045*	--	*1*
11-09-2010	1445	--	2
12-01-2010	0945	67	627
12-01-2010	1045	61	599
12-01-2010	1130	75	261
12-01-2010	1215	91	126
12-01-2010	1300	94	78
12-07-2010	1030	--	1
12-07-2010	*1045*	--	*1*
01-13-2011	1515	--	1
02-02-2011	0215	89	371
02-02-2011	0300	70	1,640
02-02-2011	0430	8	5,600
02-08-2011	1415	--	2
03-06-2011	1500	97	128
03-06-2011	1545	79	1,860
03-06-2011	1630	81	771
03-06-2011	1730	76	513
03-06-2011	1900	83	267
03-06-2011	2115	82	181
03-06-2011	2245	86	157
03-08-2011	0930	--	2
04-12-2011	0930	--	7
04-12-2011	*0945*	--	--
05-10-2011	1015	--	2
06-14-2011	1045	--	3
06-14-2011	*1100*	--	--
07-12-2011	1630	--	1
07-13-2011	1615	59	1,440
07-13-2011	1700	69	548
07-13-2011	1745	92	166
07-13-2011	1830	98	93
08-09-2011	1515	--	4
09-06-2011	0200	83	403
09-13-2011	1515	--	1