Water-Data Report 2013

05289800 MINNEHAHA CREEK AT HIAWATHA AVE. IN MINNEAPOLIS,MN

Upper Mississippi Basin
Twin Cities Subbasin

LOCATION.--Lat 44°54′56″, long 93°12′45″ referenced to North American Datum of 1927, in NE ¼ SW ¼ NE ¼ sec.18, T.28 N., R.23 W., Hennepin County, MN, Hydrologic Unit 07010206, on right bank, 60 ft. downstream from Hiawatha Ave., and 0.5 miles upstream from mouth.

DRAINAGE AREA.--176 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--November 2006 to current year.

GAGE.--Water-stage recorder. Datum of gage is 786.69 ft above sea level (NGVD of 1929).

REMARKS.--Daily-mean discharges are rated fair to poor except those for estimated daily-mean discharges, which are rated poor. Discharges above approximately 200 ft^3/s (or 14.7 ft of stage) are based on rating extension and may be fair to poor. Discharge from 2.00 cfs and lower are Poor due to uncertainty of the low end of the rating. All discharges below 0.10 cfs are marked as <0.10 except for days around where the flow was measured.

EXTREMES OUTSIDE PERIOD OF RECORD.--Measured discharge on October 5, 2005 was 559 ft^3/s and was obtained during a recession. Approximate peak stage on October 5, 2005 was 16.5 ft (from highwater mark). Indirect measurement of discharge at Cedar Ave. bridge from peak on July 23, 1987 was 1,030 cfs and was probably higher at gage location.

05289800 MINNEHAHA CREEK AT HIAWATHA AVE. IN MINNEAPOLIS,MN—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
DAILY MEAN VALUES
[e, estimated; <, less than]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	0.00	0.29	0.00	<0.10	<0.10	<0.10	31	28	86	250	184	31
2	0.00	<0.10	<0.10	<0.10	<0.10	<0.10	28	27	72	240	177	30
3	0.00	0.00	<0.10	<0.10	<0.10	<0.10	29	23	65	234	167	29
4	0.00	0.00	<0.10	<0.10	<0.10	e0.05	32	23	61	227	159	28
5	0.00	0.00	0.00	<0.10	<0.10	<0.10	26	21	61	221	185	26
6	0.00	e1.9	<0.10	<0.10	<0.10	<0.10	23	17	68	215	185	29
7	0.00	e1.0	<0.10	<0.10	<0.10	<0.10	23	15	61	211	240	31
8	0.00	e0.44	0.00	<0.10	<0.10	<0.10	61	15	59	207	202	28
9	0.00	e0.72	<0.10	e0.12	<0.10	<0.10	52	17	78	230	182	26
10	0.00	e1.6	<0.10	e0.51	<0.10	<0.10	47	19	78	215	165	26
11	0.00	e2.5	<0.10	e1.7	<0.10	<0.10	43	18	72	202	153	26
12	0.00	e0.95	<0.10	e0.91	<0.10	<0.10	42	16	97	195	143	24
13	0.00	e0.39	<0.10	e0.13	<0.10	<0.10	32	15	91	413	136	21
14	0.00	e0.52	<0.10	<0.10	<0.10	<0.10	31	15	75	391	132	20
15	0.00	e0.31	e1.5	<0.10	<0.10	<0.10	41	16	71	316	121	34
16	0.00	e0.14	e0.81	<0.10	<0.10	<0.10	34	16	78	282	112	29
17	0.00	<0.10	e0.20	<0.10	<0.10	<0.10	32	16	89	260	106	23
18	0.00	<0.10	<0.10	<0.10	<0.10	<0.10	45	81	84	255	96	21
19	0.00	<0.10	<0.10	<0.10	<0.10	<0.10	46	131	80	251	90	24
20	0.00	<0.10	<0.10	<0.10	<0.10	<0.10	43	131	85	248	85	25
21	0.00	<0.10	<0.10	<0.10	<0.10	<0.10	43	112	215	247	81	20
22	0.00	<0.10	<0.10	<0.10	<0.10	<0.10	56	87	244	238	73	17
23	0.00	<0.10	<0.10	<0.10	<0.10	e0.11	74	78	220	227	66	16
24	0.00	<0.10	<0.10	<0.10	<0.10	e0.20	66	78	212	223	63	16
25	e8.0	<0.10	<0.10	<0.10	<0.10	e0.60	48	86	218	217	58	13
26	6.8	0.01	<0.10	<0.10	<0.10	e2.0	40	77	227	215	48	9.5
27	3.1	<0.10	e0.13	e0.12	<0.10	4.9	36	73	224	209	41	7.5
28	1.7	<0.10	<0.10	e0.14	<0.10	11	30	70	229	205	37	7.7
29	1.2	<0.10	<0.10	e0.12	---	14	28	72	278	202	41	10
30	1.2	<0.10	<0.10	<0.10	---	37	25	142	268	195	35	8.4
31	0.74	---	<0.10	<0.10	---	48	---	102	---	189	32	---
Total	22.74	12.17	5.04	6.05	2.80	119.96	1,187	1,637	3,846	7,430	3,595	656.1
Mean	0.73	0.41	0.16	0.20	0.10	3.87	39.6	52.8	128	240	116	21.9
Max	8.0	2.5	1.5	1.7	0.10	48	74	142	278	413	240	34
Min	0.00	0.00	0.00	0.10	0.10	0.05	23	15	59	189	32	7.5
Ac-ft	45	24	10	12	5.6	238	2,350	3,250	7,630	14,740	7,130	1,300
Cfsm	0.00	0.00	0.00	0.00	0.00	0.02	0.22	0.30	0.73	1.36	0.66	0.12
In.	0.00	0.00	0.00	0.00	0.00	0.03	0.25	0.35	0.81	1.57	0.76	0.14

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2006 - 2013, BY WATER YEAR (WY)

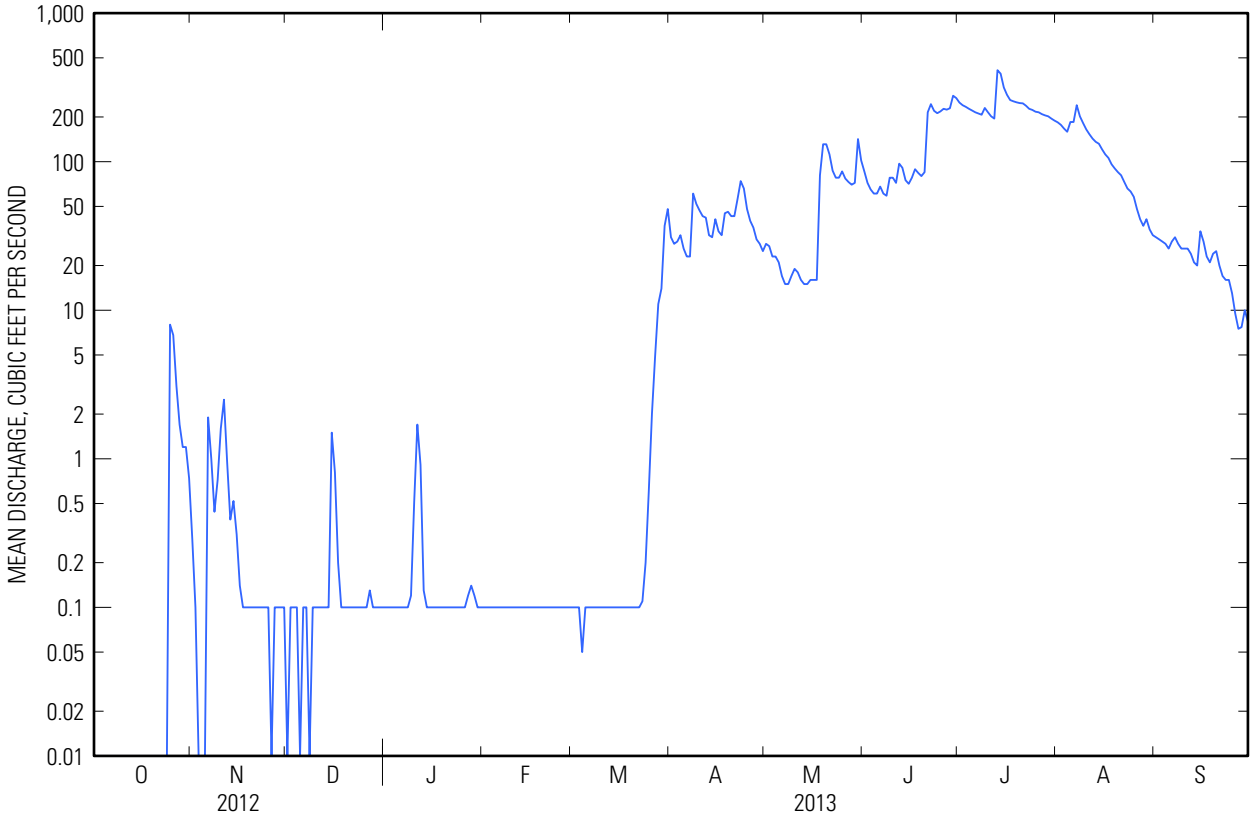
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	31.8	10.2	5.86	2.68	1.93	18.5	64.1	106	99.2	77.8	59.0	28.4
Max	109	31.1	33.2	9.28	6.00	47.9	248	317	261	240	131	114
(WY)	(2011)	(2011)	(2006)	(2006)	(2011)	(2011)	(2011)	(2011)	(2011)	(2013)	(2011)	(2010)
Min	0.73	0.41	0.13	0.04	0.10	3.87	8.85	10.0	3.79	0.10	12.1	0.07
(WY)	(2013)	(2013)	(2009)	(2009)	(2010)	(2013)	(2009)	(2009)	(2009)	(2009)	(2012)	(2012)

05289800 MINNEHAHA CREEK AT HIAWATHA AVE. IN MINNEAPOLIS,MN—Continued

SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 2006 - 2013	
Annual total	6,548.40		18,519.86			
Annual mean	17.9		50.7		40.7	
Highest annual mean					114	2011
Lowest annual mean					5.06	2009
Highest daily mean	229	May 24	413	Jul 13	426	May 22, 2011
Lowest daily mean	0.00	Sep 6	[a]0.00	Oct 1	[b]0.00	Aug 3, 2007
Annual seven-day minimum	0.00	Sep 21	0.00	Oct 1	0.00	Aug 3, 2007
Maximum peak flow			540	Jul 13	635	Sep 23, 2010
Maximum peak stage			16.52	Jul 13	16.74	Jul 16, 2011
Instantaneous low flow			[c]0.00	Oct 1	[b]0.00	Aug 2, 2007
Annual runoff (ac-ft)	12,990		36,730		29,500	
Annual runoff (cfsm)	0.102		0.288		0.231	
Annual runoff (inches)	1.38		3.91		3.14	
10 percent exceeds	57		206		114	
50 percent exceeds	3.1		10		9.0	
90 percent exceeds	0.00		0.10		0.10	

[a] Also occurred Oct 2-24, Nov 3-5, Dec 1 and Dec 8.
[b] Many days, several years.
[c] Many days.



05289800 MINNEHAHA CREEK AT HIAWATHA AVE. IN MINNEAPOLIS,MN—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 2011 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Water years 2011 to current year.
WATER TEMPERATURE: Water years 2011 to current year.

INSTRUMENTATION.--Water-quality monitor, 2011 water year to current year, which provides continuous recordings. Sensor is located at gage.

REMARKS.--Conductance and temperature at the sensor were compared independently with a calibrated meter every one to five months. Conductance variations were within 10% (corrections applied only over 3%).

The degree of accuracy of the records presented here are explained at: Link to documentation

Specific conductance record is rated excellent except.

Variation of temperature between meter and recorded values were within +/- 0.2 C (no corrections applied).

Water temperature record is rated excellent for the recorder period.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 3,160 µS/cm, Feb. 14, 2011; minimum, 164 µS/cm, July 13, 2012.
WATER TEMPERATURE: Maximum, 32.5 C, July 5, 2012; minimum, -0.2 C, many days, most winters.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 581 µS/cm, June 19; minimum, 262 µS/cm, July 13.
WATER TEMPERATURE: Maximum recorded, 29.4 C, Aug. 28; minimum, 15.0 C, Sept 29 (lower during the winter period).

05289800 MINNEHAHA CREEK AT HIAWATHA AVE. IN MINNEAPOLIS,MN—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		October			November			December			January	
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
Month	---	---	---	---	---	---	---	---	---	---	---	---

05289800 MINNEHAHA CREEK AT HIAWATHA AVE. IN MINNEAPOLIS,MN—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

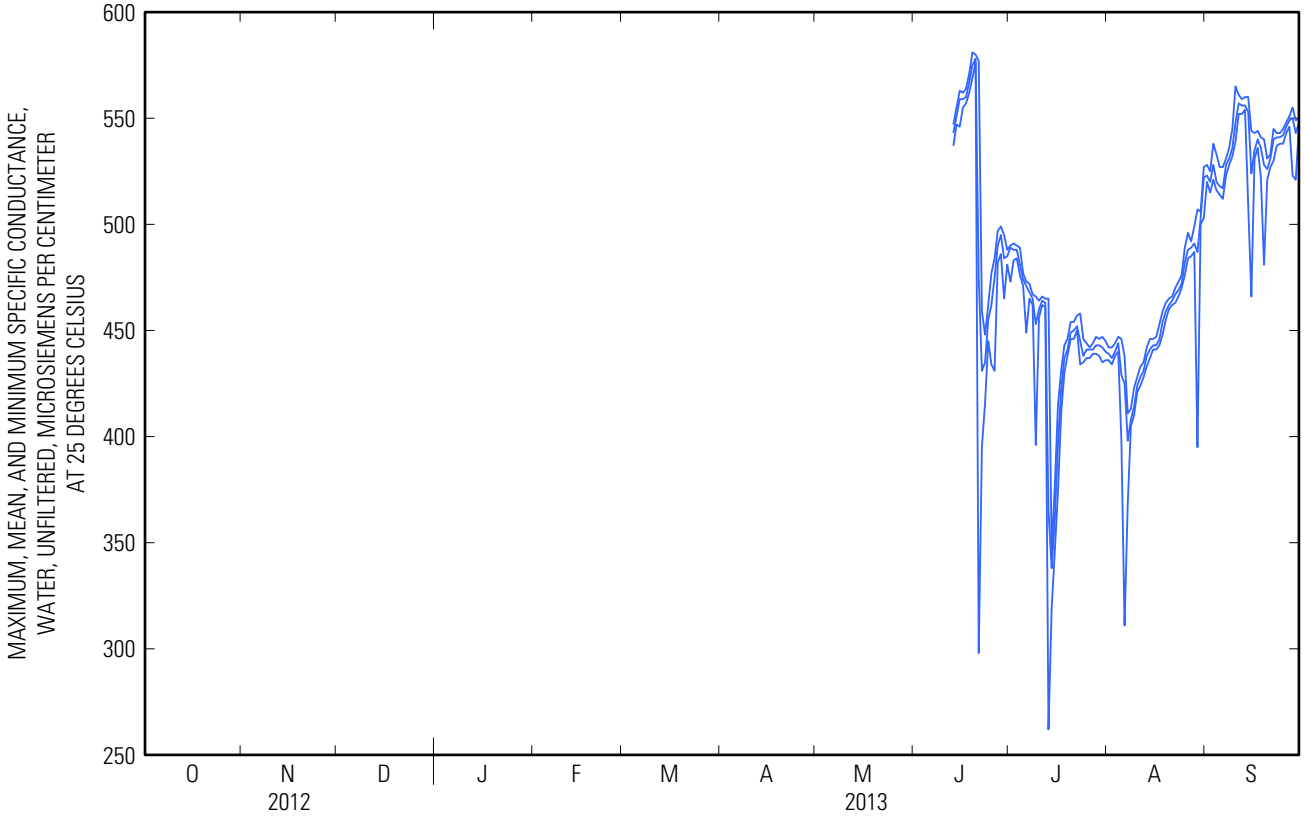
Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		February			March			April			May	
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---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

05289800 MINNEHAHA CREEK AT HIAWATHA AVE. IN MINNEAPOLIS,MN—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		June			July			August			September	
1	---	---	---	490	473	489	442	436	439	528	520	523
2	---	---	---	491	483	488	442	434	437	525	515	520
3	---	---	---	490	484	488	444	438	440	538	521	528
4	---	---	---	489	476	481	447	440	444	533	516	520
5	---	---	---	477	471	474	446	398	429	527	514	518
6	---	---	---	473	449	471	438	311	425	527	512	517
7	---	---	---	472	465	468	411	368	398	531	523	528
8	---	---	---	467	462	465	413	405	408	536	528	531
9	---	---	---	466	396	453	423	410	414	545	532	536
10	---	---	---	464	456	460	428	421	424	565	539	548
11	---	---	---	466	462	464	433	424	428	561	552	557
12	---	---	---	465	461	463	435	428	431	559	552	556
13	547	537	543	465	262	365	442	433	438	560	554	556
14	555	547	551	346	319	338	446	437	441	560	509	553
15	563	546	559	377	346	361	446	441	443	544	466	524
16	562	555	559	415	374	397	447	441	443	543	531	535
17	564	557	560	431	411	422	453	443	446	544	536	540
18	571	562	567	443	430	437	459	448	454	541	522	536
19	581	569	575	446	438	441	463	455	459	540	481	528
20	580	576	578	454	446	449	465	460	462	531	521	526
21	577	298	475	454	446	450	466	462	464	533	527	531
22	459	395	431	457	450	452	470	463	467	545	530	540
23	448	416	435	458	434	445	473	466	469	543	537	541
24	462	445	455	446	435	438	476	470	472	543	538	541
25	477	434	462	444	437	441	489	476	482	545	538	542
26	484	431	475	442	437	441	496	484	488	548	543	546
27	497	482	490	444	439	441	492	485	489	551	546	549
28	499	486	495	447	439	443	499	487	491	555	523	550
29	495	465	484	446	438	443	507	395	487	549	521	543
30	488	481	485	447	435	442	506	500	503	550	546	548
31	---	---	---	445	436	440	527	503	522	---	---	---
Month	---	---	---	491	262	444	527	311	453	565	466	537

05289800 MINNEHAHA CREEK AT HIAWATHA AVE. IN MINNEAPOLIS,MN—Continued



05289800 MINNEHAHA CREEK AT HIAWATHA AVE. IN MINNEAPOLIS,MN—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		October			November			December			January	
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
Month	---	---	---	---	---	---	---	---	---	---	---	---

05289800 MINNEHAHA CREEK AT HIAWATHA AVE. IN MINNEAPOLIS,MN—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

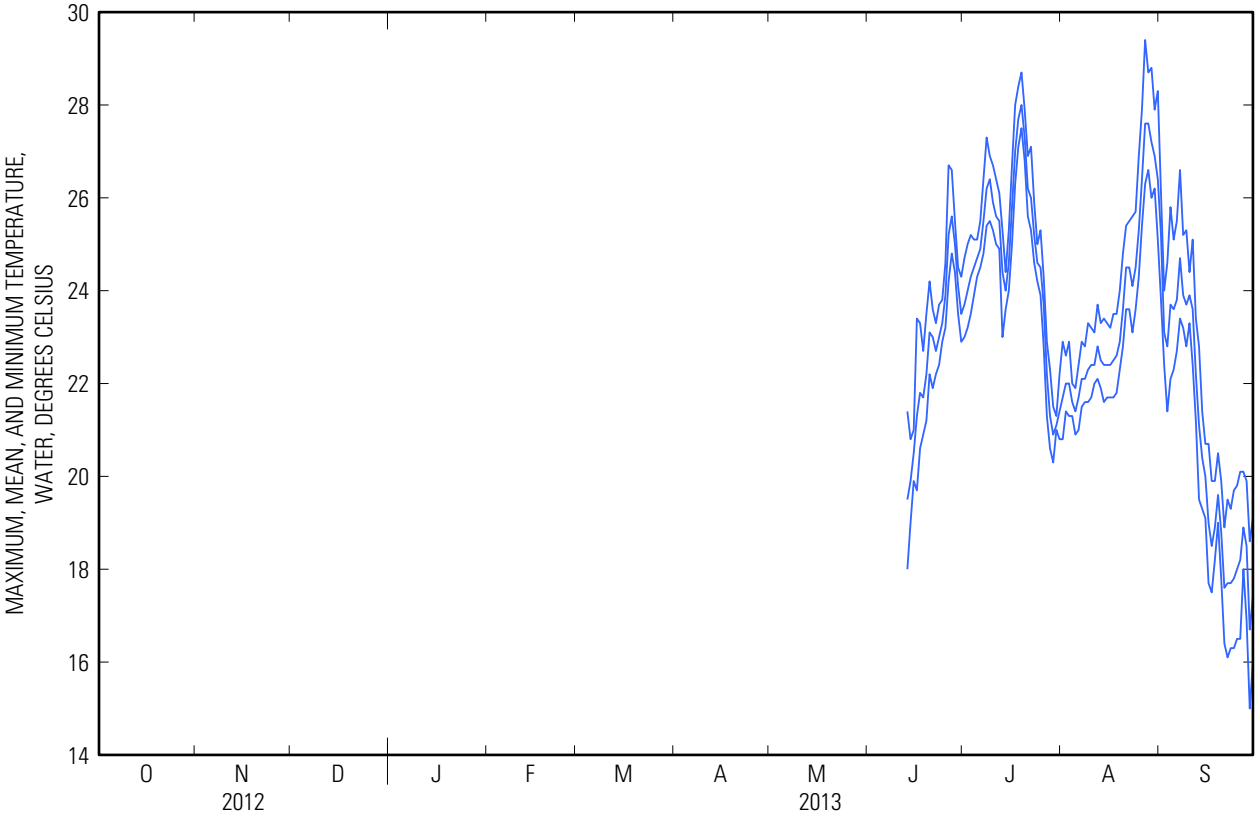
Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		February			March			April			May	
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---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

05289800 MINNEHAHA CREEK AT HIAWATHA AVE. IN MINNEAPOLIS,MN—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		June			July			August			September	
1	---	---	---	24.7	23.0	23.7	22.9	20.8	21.7	26.1	23.8	25.2
2	---	---	---	25.0	23.2	24.0	22.6	21.4	22.0	24.0	22.4	23.1
3	---	---	---	25.2	23.5	24.3	22.9	21.3	22.0	24.6	21.4	22.8
4	---	---	---	25.1	23.9	24.5	22.0	21.3	21.6	25.8	22.1	23.7
5	---	---	---	25.1	24.3	24.7	21.9	20.9	21.4	25.1	22.3	23.6
6	---	---	---	25.5	24.5	24.9	22.4	21.0	21.7	25.5	22.7	23.8
7	---	---	---	26.4	24.8	25.5	22.9	21.5	22.1	26.6	23.4	24.7
8	---	---	---	27.3	25.4	26.2	22.8	21.6	22.1	25.2	23.2	23.9
9	---	---	---	26.9	25.5	26.4	23.3	21.6	22.3	25.3	22.8	23.7
10	---	---	---	26.7	25.3	25.9	23.2	21.7	22.4	24.4	23.3	23.9
11	---	---	---	26.4	25.0	25.6	23.1	22.0	22.4	25.1	22.4	23.6
12	---	---	---	26.1	24.9	25.5	23.7	22.1	22.8	23.4	21.2	22.2
13	21.4	18.0	19.5	25.3	23.0	24.4	23.3	21.9	22.5	22.8	19.5	21.1
14	20.8	19.0	19.9	24.4	23.6	24.0	23.4	21.6	22.4	21.4	19.3	20.4
15	21.0	19.9	20.5	25.3	24.0	24.6	23.3	21.7	22.4	20.7	19.1	20.0
16	23.4	19.7	21.3	26.7	25.0	25.8	23.2	21.7	22.4	20.7	17.7	19.0
17	23.3	20.6	21.8	28.0	26.3	27.0	23.5	21.7	22.5	19.9	17.5	18.5
18	22.7	20.9	21.7	28.4	27.1	27.7	23.5	21.8	22.6	19.9	18.2	18.9
19	23.5	21.2	22.2	28.7	27.5	28.0	24.0	22.3	22.9	20.5	19.0	19.6
20	24.2	22.2	23.1	27.9	26.8	27.3	24.8	22.8	23.6	19.9	17.8	18.8
21	23.6	21.9	23.0	26.9	25.6	26.2	25.4	23.6	24.5	18.9	16.4	17.6
22	23.3	22.2	22.7	27.1	25.3	26.0	25.5	23.6	24.5	19.5	16.1	17.7
23	23.7	22.4	23.0	25.9	24.6	25.2	25.6	23.1	24.1	19.3	16.3	17.7
24	23.8	22.9	23.3	25.0	24.2	24.6	25.7	23.6	24.5	19.7	16.3	17.8
25	24.6	23.2	23.9	25.3	23.9	24.5	26.9	24.3	25.3	19.8	16.5	18.0
26	26.7	24.2	25.2	24.3	22.8	23.7	27.9	25.4	26.4	20.1	16.5	18.2
27	26.6	24.8	25.6	22.9	21.3	22.2	29.4	26.3	27.6	20.1	18.0	18.9
28	25.5	24.4	25.0	22.3	20.6	21.3	28.7	26.6	27.6	19.9	16.9	18.5
29	24.5	23.5	24.1	21.5	20.3	20.9	28.8	26.0	27.2	18.6	15.0	16.7
30	24.3	22.9	23.5	21.3	21.0	21.1	27.9	26.2	26.9	19.1	16.0	17.4
31	---	---	---	22.2	20.8	21.4	28.3	25.1	26.4	---	---	---
Month	---	---	---	28.7	20.3	24.7	29.4	20.8	23.6	26.6	15.0	20.6

05289800 MINNEHAHA CREEK AT HIAWATHA AVE. IN MINNEAPOLIS,MN—Continued



05289800 MINNEHAHA CREEK AT HIAWATHA AVE. IN MINNEAPOLIS,MN—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
Part 1 of 3
[N, nitrogen; P, phosphorus; mg/L, milligrams per liter; mm, millimeters; °C, degrees Celsius; µS/cm, microsiemens per centimeter; --, no data; <, less than]

Sample date-time	Medium name	Sample type	pH, water, unfiltered, field, standard units (00400)	Specific conduc-tance, water, unfiltered, µS/cm at 25°C (00095)	Number of sampling points, count (00063)	Sample purpose (71999)	Sampler type (84164)
06-21-2013 0758	Surface water	Regular	--	--	--	--	--
06-21-2013 0758	Surface water	Composite (time)	7.7	462	1	Routine	Sampler point auto
08-06-2013 2016	Surface water	Composite (time)	--	410	1	Routine	Sampler point auto

WATER-QUALITY DATA
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
Part 2 of 3
[N, nitrogen; P, phosphorus; mg/L, milligrams per liter; mm, millimeters; °C, degrees Celsius; µS/cm, microsiemens per centimeter; --, no data; <, less than]

Sample date-time	Sampling method (82398)	Purpose, site visit (50280)	Type of quality assurance data associated with sample (99111)	Suspended solids, water, unfiltered, mg/L (00530)	Ammonia plus organic nitrogen, water, unfiltered, mg/L as N (00625)	Ammonia, water, filtered, mg/L as N (00608)	Nitrate plus nitrite, water, filtered, mg/L as N (00631)	Nitrite, water, filtered, mg/L as N (00613)
06-21-2013 0758	--	--	--	--	--	--	--	--
06-21-2013 0758	Point sample	Other surface-water	No assoc QA data	24	1.4	< .010	.087	.008
08-06-2013 2016	Point sample	Other surface-water	No assoc QA data	42	1.2	< .010	< .040	< .001

WATER-QUALITY DATA
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
Part 3 of 3
[N, nitrogen; P, phosphorus; mg/L, milligrams per liter; mm, millimeters; °C, degrees Celsius; µS/cm, microsiemens per centimeter; --, no data; <, less than]

Sample date-time	Orthophos-phate, water, filtered, mg/L as P (00671)	Phos-phorus, water, filtered, mg/L as P (00666)	Phosphorus, water, unfiltered, mg/L as P (00665)	Suspended sediment, sieve diameter, percent smaller than 0.0625 mm (70331)	Suspended sediment concen-tration, mg/L (80154)
06-21-2013 0758	--	--	--	61	15
06-21-2013 0758	< .004	.03	.15	--	30
08-06-2013 2016	.006	.02	.12	--	50