

Water-Data Report 2012

403455095462401 Upper Hamburg Chute, NE Outlet

Missouri-Nishnabotna Basin
Keg-Weeping Water Subbasin

LOCATION.--Lat 40°34'55.4", long 95°46'24.4" referenced to North American Datum of 1983, Otoe County, NE, Hydrologic Unit 10240001, on left bank of chute on island 6.9 mi southeast of Nebraska City, at Missouri River mile 552.6.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--March to October 2012 (seasonal record only).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: March 28 to September 30, 2012 (seasonal records only).

TURBIDITY: March 28 to September 30, 2012 (seasonal records only).

INSTRUMENTATION.--Seasonal deployment of a continuous water-quality monitor. Measured parameters include water temperature, and turbidity. Turbidity measurements conform to ISO 7027 standards and were made using a Yellow Springs International (YSI) 6136 sensor.

REMARKS.--The water temperature and turbidity data are rated as excellent. Interruptions in the record are due to instrument malfunction or measured error outside of allowable limits.

EXTREMES FOR CURRENT YEAR.--These extremes may have been exceeded during non-measured periods of the record.

WATER TEMPERATURE: Maximum, 32.0°C, July 7 and July 26; minimum, 12.9°C April 13.

TURBIDITY: Maximum, 460 FNU, May 31; minimum, 15 FNU, July 16 and July 18.

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TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	October			November			December			January		
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
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12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
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28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
Month	---	---	---	---	---	---	---	---	---	---	---	---

403455095462401 Upper Hamburg Chute, NE Outlet—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	February			March			April			May		
1	---	---	---	---	---	---	---	---	---	17.5	15.5	16.5
2	---	---	---	---	---	---	---	---	---	19.2	17.1	18.2
3	---	---	---	---	---	---	---	---	---	20.8	19.1	20.0
4	---	---	---	---	---	---	---	---	---	22.6	20.4	21.4
5	---	---	---	---	---	---	---	---	---	23.6	21.6	22.5
6	---	---	---	---	---	---	---	---	---	23.9	22.6	23.2
7	---	---	---	---	---	---	---	---	---	22.6	21.3	22.0
8	---	---	---	---	---	---	---	---	---	21.3	19.8	20.7
9	---	---	---	---	---	---	---	---	---	19.9	18.9	19.4
10	---	---	---	---	---	---	---	---	---	19.4	18.3	18.8
11	---	---	---	---	---	---	---	---	---	19.7	18.5	19.0
12	---	---	---	---	---	---	---	---	---	19.1	18.4	18.8
13	---	---	---	---	---	---	14.3	12.9	13.6	19.4	18.2	18.8
14	---	---	---	---	---	---	---	---	---	19.7	18.7	19.1
15	---	---	---	---	---	---	---	---	---	19.9	18.6	19.2
16	---	---	---	---	---	---	---	---	---	20.6	19.1	19.8
17	---	---	---	---	---	---	---	---	---	20.9	19.6	20.2
18	---	---	---	---	---	---	---	---	---	21.2	19.9	20.5
19	---	---	---	---	---	---	---	---	---	21.4	20.3	20.8
20	---	---	---	---	---	---	---	---	---	21.2	20.5	20.7
21	---	---	---	---	---	---	---	---	---	21.3	20.0	20.6
22	---	---	---	---	---	---	---	---	---	21.6	20.5	20.9
23	---	---	---	---	---	---	---	---	---	21.4	20.1	20.8
24	---	---	---	---	---	---	16.6	14.4	15.5	22.2	20.8	21.4
25	---	---	---	---	---	---	18.3	15.9	17.0	21.8	21.3	21.5
26	---	---	---	---	---	---	18.9	17.2	18.1	22.3	20.9	21.6
27	---	---	---	---	---	---	18.3	17.3	17.9	22.9	21.4	22.1
28	---	---	---	---	---	---	17.5	16.0	16.9	23.2	21.9	22.5
29	---	---	---	---	---	---	16.2	15.7	15.9	23.5	22.0	22.8
30	---	---	---	---	---	---	16.6	15.7	16.1	23.3	22.3	22.8
31	---	---	---	---	---	---	---	---	---	22.3	20.6	21.4
Month	---	---	---	---	---	---	---	---	---	23.9	15.5	20.6

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TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	20.6	19.6	20.1	29.9	28.7	29.2	30.4	29.0	29.7	27.7	26.5	27.1
2	20.2	19.0	19.6	30.2	29.0	29.6	31.0	29.1	30.0	28.1	26.6	27.3
3	20.5	19.3	19.9	29.8	28.8	29.4	31.0	29.9	30.4	27.9	27.1	27.5
4	---	---	---	29.9	28.6	29.2	30.7	29.3	29.9	28.5	26.9	27.6
5	23.1	21.4	22.2	30.5	29.1	29.8	29.7	28.5	29.1	28.3	27.1	27.5
6	24.2	22.6	23.4	31.0	29.8	30.4	29.5	28.1	28.8	27.3	26.3	26.8
7	24.6	23.3	23.9	32.0	30.1	30.9	29.7	28.3	28.9	27.0	24.9	25.7
8	24.9	23.5	24.2	31.1	29.9	30.3	29.5	28.1	28.8	25.0	24.1	24.6
9	25.0	23.6	24.3	30.4	29.2	29.8	28.8	27.6	28.2	24.7	23.4	24.1
10	25.0	23.9	24.5	30.2	28.9	29.5	28.6	27.3	28.0	---	---	---
11	25.2	24.1	24.7	30.4	28.5	29.4	28.4	27.3	28.0	24.0	22.9	23.5
12	25.4	24.1	24.8	30.5	28.8	29.6	28.2	27.1	27.6	23.6	22.4	23.1
13	25.2	24.2	24.7	30.2	28.8	29.5	27.3	25.7	26.3	22.4	21.4	21.6
14	24.9	23.8	24.3	30.7	28.9	29.7	26.9	25.7	26.2	22.1	20.8	21.4
15	24.0	23.3	23.7	30.6	29.1	29.8	26.5	25.2	26.0	22.3	20.8	21.6
16	23.5	22.6	23.0	30.4	29.0	29.7	26.4	24.7	25.3	22.0	21.0	21.3
17	24.2	22.5	23.4	30.9	29.0	29.9	26.2	24.5	25.2	21.3	20.9	21.2
18	25.9	23.9	24.9	31.0	29.7	30.3	25.7	24.4	24.8	21.7	20.2	20.9
19	26.9	25.4	26.1	31.7	29.7	30.6	25.1	23.5	24.3	21.5	20.2	20.9
20	26.3	25.7	26.0	31.8	30.0	30.8	25.1	23.6	24.3	21.3	20.3	20.9
21	26.5	25.4	26.0	31.7	30.0	30.9	25.8	23.8	24.6	21.1	20.2	20.6
22	26.7	25.3	26.0	31.3	30.0	30.7	25.4	24.0	24.6	20.4	19.2	19.7
23	26.4	25.4	25.9	31.7	30.0	30.8	25.3	23.9	24.5	20.1	18.8	19.4
24	26.8	25.0	26.0	31.4	29.8	30.6	25.2	24.6	24.9	---	---	---
25	27.9	26.2	27.0	31.3	29.6	30.4	24.9	24.2	24.4	20.3	18.9	19.5
26	27.8	26.6	27.2	32.0	29.7	30.8	25.2	24.0	24.5	20.0	18.9	19.4
27	28.6	26.5	27.6	31.5	30.0	30.8	---	---	---	19.8	18.4	19.1
28	29.7	27.9	28.7	30.9	29.7	30.2	27.0	25.7	26.3	19.8	18.6	19.2
29	29.8	28.7	29.2	30.6	28.8	29.7	27.0	25.8	26.4	20.2	18.8	19.5
30	29.5	28.3	28.9	30.3	29.1	29.6	27.6	26.1	26.7	20.0	19.1	19.5
31	---	---	---	30.5	28.6	29.5	27.5	26.4	27.0	---	---	---
Month	---	---	---	32.0	28.5	30.0	---	---	---	---	---	---

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TURBIDITY, WATER, UNFILT, NEAR IR LED LIGHT, 780-900 NM, DETECT ANG. 90 DEG, FORMAZIN NEPHELOMETRIC UNITS
 WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

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	---	---	---	---	---	---	---	---	---	---	---	---

403455095462401 Upper Hamburg Chute, NE Outlet—Continued

TURBIDITY, WATER, UNFILT, NEAR IR LED LIGHT, 780-900 NM, DETECT ANG. 90 DEG, FORMAZIN NEPHELOMETRIC UNITS
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	February			March			April			May		
1	---	---	---	---	---	---	---	---	---	130	30	65
2	---	---	---	---	---	---	---	---	---	120	32	54
3	---	---	---	---	---	---	---	---	---	160	47	92
4	---	---	---	---	---	---	---	---	---	190	58	120
5	---	---	---	---	---	---	---	---	---	230	110	180
6	---	---	---	---	---	---	---	---	---	190	71	110
7	---	---	---	---	---	---	---	---	---	240	120	190
8	---	---	---	---	---	---	---	---	---	380	170	260
9	---	---	---	---	---	---	---	---	---	230	100	160
10	---	---	---	---	---	---	---	---	---	110	90	98
11	---	---	---	---	---	---	---	---	---	120	90	110
12	---	---	---	---	---	---	---	---	---	110	86	96
13	---	---	---	---	---	---	35	20	28	150	90	120
14	---	---	---	---	---	---	---	---	---	140	98	120
15	---	---	---	---	---	---	---	---	---	110	78	94
16	---	---	---	---	---	---	---	---	---	93	70	82
17	---	---	---	---	---	---	---	---	---	80	60	73
18	---	---	---	---	---	---	---	---	---	75	59	67
19	---	---	---	---	---	---	---	---	---	74	56	64
20	---	---	---	---	---	---	---	---	---	67	46	54
21	---	---	---	---	---	---	---	---	---	74	49	58
22	---	---	---	---	---	---	---	---	---	140	55	100
23	---	---	---	---	---	---	---	---	---	130	100	110
24	---	---	---	---	---	---	67	37	48	100	56	74
25	---	---	---	---	---	---	77	25	41	70	47	57
26	---	---	---	---	---	---	51	26	37	94	47	65
27	---	---	---	---	---	---	67	29	44	130	94	110
28	---	---	---	---	---	---	68	28	44	300	99	170
29	---	---	---	---	---	---	120	30	56	320	180	240
30	---	---	---	---	---	---	150	29	64	340	150	210
31	---	---	---	---	---	---	---	---	---	460	330	420
Month	---	---	---	---	---	---	---	---	---	460	30	120

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TURBIDITY, WATER, UNFILT, NEAR IR LED LIGHT, 780-900 NM, DETECT ANG. 90 DEG, FORMAZIN NEPHELOMETRIC UNITS
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	450	280	370	64	41	51	29	18	23	37	26	30
2	290	170	230	54	34	43	29	19	23	43	26	35
3	180	120	140	46	33	38	29	19	23	46	32	38
4	120	96	110	46	30	38	31	20	25	48	31	39
5	110	80	93	45	32	39	31	19	24	42	26	33
6	88	69	80	51	24	37	32	19	25	39	26	31
7	78	60	71	32	21	27	34	22	27	38	25	32
8	74	54	63	26	19	22	36	22	27	36	24	30
9	65	51	57	25	17	21	31	20	26	34	23	28
10	60	46	54	28	17	23	31	21	26	---	---	---
11	140	41	63	27	19	22	33	20	26	34	26	31
12	140	50	90	30	18	23	35	21	28	38	24	32
13	64	49	55	25	16	21	33	23	28	38	31	34
14	73	42	53	27	17	22	35	21	26	46	28	38
15	160	40	83	29	17	22	34	21	26	37	24	31
16	140	77	100	28	15	21	35	22	30	37	24	31
17	120	84	96	32	16	22	35	24	28	43	29	34
18	87	68	77	30	15	21	34	23	29	34	26	30
19	84	57	73	32	16	23	38	23	29	33	24	28
20	78	44	62	31	17	23	37	23	29	32	23	27
21	91	42	60	29	16	22	35	22	27	43	26	35
22	99	77	86	29	16	21	36	20	27	39	31	35
23	150	90	120	32	16	22	34	21	28	33	27	30
24	120	66	97	39	16	26	35	25	29	---	---	---
25	83	56	70	32	19	25	36	23	29	34	24	29
26	75	49	62	29	20	25	32	22	27	35	26	30
27	70	45	57	30	17	21	---	---	---	48	28	33
28	67	42	52	25	16	20	35	25	28	36	25	30
29	64	38	49	30	16	21	36	24	30	---	---	---
30	58	36	47	28	16	22	45	24	33	---	---	---
31	---	---	---	27	18	22	40	26	32	---	---	---
Month	450	36	91	64	15	26	---	---	---	---	---	---