

Water-Data Report 2012

432139084024201 SHIAWASSEE RIVER AT JAMES TOWNSHIP MI



Division of Biological Resources
Water Resources Branch

Water-Data Report 2012

432139084024201 SHIAWASSEE RIVER AT JAMES TOWNSHIP MI

LOCATION: Lat. 43°21'38" N, long. 84°02'18"W, approximately 4 miles southwest of Saginaw, MI, Saginaw County. Gage is located on Shiawassee National Wildlife Refuge

DRAINAGE AREA: 2,599 square miles

SURFACE WATER RECORDS

PERIOD OF RECORD: Regional Office data analysis May 19 to present.

GAGE SITE: Design Analysis H522+ datalogger in communication with KPSI submersible pressure transducer and GOES antenna, powered through Solar Controller voltage regulator with 12V battery and solar panel. Gage installed in metal enclosure 15' above ground on tree. Stage data collected at 15 minute intervals. Weekly gage height data available online, NWS Id is JTSM4. Datum of gage is in North American Vertical Datum of 1988.

NATIONAL WILDLIFE REFUGE: Shiawassee NWR

REMARKS: Stage records coded FAIR for 2012 calendar year.

EXTREMES FOR PERIOD OF RECORD: Maximum gage height, 580.57 ft, October 30, 2012; minimum gage height 576.39 ft, November 25, 2012.

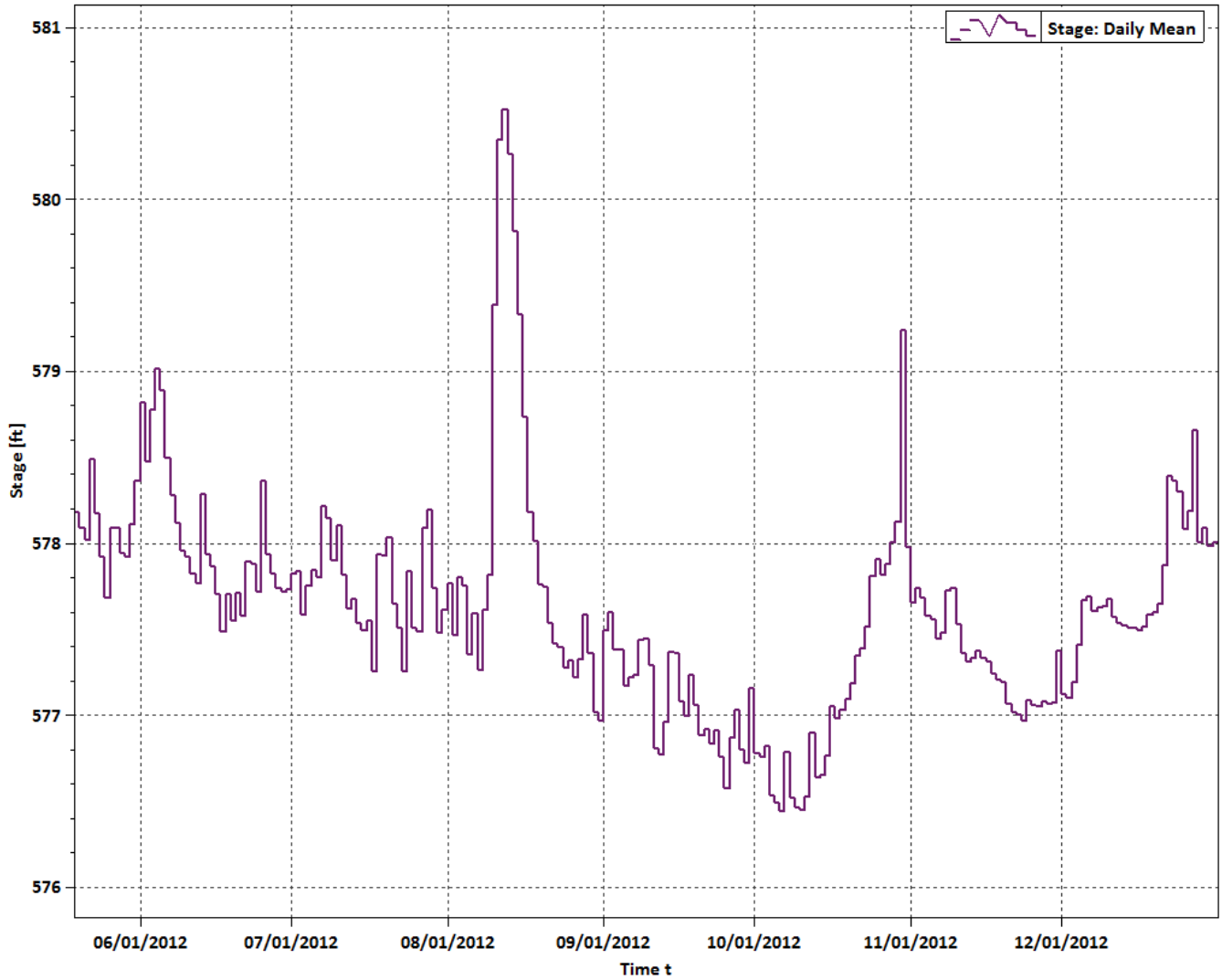
EXTREMES FOR CURRENT YEAR: Maximum gage height, 580.57 ft, October 30; minimum gage height 576.39 ft, November 25.

Water-Data Report 2012
432139084024201 SHIAWASSEE RIVER AT JAMES TOWNSHIP MI

GAGE HEIGHT, FEET
CALENDAR YEAR 2012
DAILY MEAN VALUES

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	---	---	---	---	---	578.82	577.82	577.77	577.49	576.78	577.65	577.12
2	---	---	---	---	---	578.47	577.83	577.46	577.60	576.75	577.74	577.10
3	---	---	---	---	---	578.78	577.58	577.80	577.38	576.82	577.68	577.19
4	---	---	---	---	---	579.01	577.75	577.75	577.38	576.53	577.58	577.40
5	---	---	---	---	---	578.89	577.84	577.35	577.17	576.49	577.56	577.67
6	---	---	---	---	---	578.49	577.80	577.59	577.22	576.44	577.44	577.69
7	---	---	---	---	---	578.28	578.21	577.26	577.23	576.78	577.48	577.60
8	---	---	---	---	---	578.12	578.14	577.61	577.43	576.52	577.72	577.63
9	---	---	---	---	---	577.96	577.90	577.82	577.44	576.46	577.74	577.63
10	---	---	---	---	---	577.92	578.10	579.39	577.29	576.44	577.53	577.67
11	---	---	---	---	---	577.82	577.82	580.35	576.81	576.52	577.36	577.57
12	---	---	---	---	---	577.76	577.62	580.52	576.77	576.90	577.31	577.54
13	---	---	---	---	---	578.28	577.67	580.26	576.96	576.64	577.33	577.52
14	---	---	---	---	---	577.93	577.54	579.82	577.36	576.65	577.37	577.51
15	---	---	---	---	---	577.86	577.49	579.33	577.36	576.76	577.33	577.50
16	---	---	---	---	---	577.70	577.55	578.73	577.08	577.05	577.31	577.49
17	---	---	---	---	---	577.49	577.25	578.18	576.99	576.98	577.24	577.51
18	---	---	---	---	---	577.70	577.93	578.01	577.23	577.03	577.20	577.58
19	---	---	---	---	578.18	577.55	577.92	577.76	577.06	577.10	577.19	577.60
20	---	---	---	---	578.09	577.71	578.03	577.74	576.88	577.18	577.06	577.65
21	---	---	---	---	578.02	577.57	577.64	577.54	576.92	577.35	577.01	577.87
22	---	---	---	---	578.48	577.89	577.50	577.42	576.83	577.39	577.00	578.39
23	---	---	---	---	578.17	577.87	577.26	577.39	576.91	577.51	576.97	578.36
24	---	---	---	---	577.92	577.71	577.83	577.28	576.76	577.81	577.09	578.30
25	---	---	---	---	577.68	578.36	577.50	577.32	576.57	577.91	577.06	578.08
26	---	---	---	---	578.09	577.93	577.49	577.22	576.87	577.81	577.05	578.19
27	---	---	---	---	578.09	577.82	578.09	577.32	577.03	577.88	577.08	578.66
28	---	---	---	---	577.94	577.74	578.19	577.59	576.79	578.00	577.06	578.00
29	---	---	---	---	577.92	577.72	577.74	577.36	576.72	578.12	577.07	578.09
30	---	---	---	---	578.11	577.73	577.48	577.02	577.16	579.24	577.37	577.98
31	---	---	---	---	578.36	---	577.61	576.97	---	577.98	---	578.00
Mean	---	---	---	---	---	578.03	577.75	578.03	577.09	577.16	577.32	577.74
Max	---	---	---	---	---	579.01	578.21	580.52	577.60	579.24	577.74	578.66
Min	---	---	---	---	---	577.49	577.25	576.97	576.57	576.44	576.97	577.10

Water-Data Report 2012
432139084024201 SHIAWASSEE RIVER AT JAMES TOWNSHIP MI



Water-Data Report 2012
432139084024201 SHIAWASSEE RIVER AT JAMES TOWNSHIP MI

WATER QUALITY RECORDS

PERIOD OF RECORD: Regional Office data analysis May 19 to present.

INSTRUMENTATION: Design Analysis H522+ datalogger in communication with KPSI submersible pressure transducer and GOES antenna, powered through Solar Controller voltage regulator with 12V battery and solar panel. Gage installed in metal enclosure 15' above ground on tree. Water temperature data are collected at hourly intervals.

REMARKS: Records coded FAIR for 2012 calendar year.

Water-Data Report 2012
432139084024201 SHIAWASSEE RIVER AT JAMES TOWNSHIP MI

WATER TEMPERATURE [°C]

Day	January			February			March			April			May			June		
	min	max	mean	min	max	mean	min	max	mean	min	max	mean	min	max	mean	min	max	mean
1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	15.06	19.32	17.25
2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	14.66	16.58	15.72
3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	15.27	18.80	16.38
4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	16.57	19.60	17.92
5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	17.14	19.55	18.43
6	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	17.41	20.29	18.67
7	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	17.97	21.68	19.42
8	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	19.43	22.62	20.76
9	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	20.40	24.89	21.92
10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	22.36	26.74	23.72
11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	23.88	26.75	24.80
12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	23.34	25.94	24.45
13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	21.09	25.69	23.10
14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	20.52	25.26	22.32
15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	21.67	25.92	23.30
16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	22.85	26.44	24.50
17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	23.26	26.15	24.39
18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	22.32	25.36	23.85
19	---	---	---	---	---	---	---	---	---	---	---	---	21.16	22.14	21.75	23.17	27.25	24.78
20	---	---	---	---	---	---	---	---	---	---	---	---	20.16	23.94	21.65	25.64	29.58	27.15
21	---	---	---	---	---	---	---	---	---	---	---	---	21.59	23.66	22.50	26.11	29.65	27.87
22	---	---	---	---	---	---	---	---	---	---	---	---	19.77	22.67	21.01	25.49	27.54	26.35
23	---	---	---	---	---	---	---	---	---	---	---	---	19.48	23.18	21.18	24.20	28.00	25.84
24	---	---	---	---	---	---	---	---	---	---	---	---	20.85	23.60	22.06	25.11	28.33	26.31
25	---	---	---	---	---	---	---	---	---	---	---	---	21.53	25.20	22.89	22.01	27.12	24.92
26	---	---	---	---	---	---	---	---	---	---	---	---	22.39	25.07	23.34	22.48	25.83	23.99
27	---	---	---	---	---	---	---	---	---	---	---	---	21.37	24.11	22.58	23.27	26.61	24.95
28	---	---	---	---	---	---	---	---	---	---	---	---	21.18	24.58	22.54	24.62	28.59	26.21
29	---	---	---	---	---	---	---	---	---	---	---	---	22.15	24.91	23.26	26.00	28.68	27.49
30	---	---	---	---	---	---	---	---	---	---	---	---	21.02	24.47	22.10	25.85	28.49	27.16
31	---	---	---	---	---	---	---	---	---	---	---	---	18.18	21.74	19.28			
Monthly Average	---	---	---	---	---	---	---	---	---	---	---	---	20.83	23.79	22.01	21.64	25.11	23.13

Water-Data Report 2012
432139084024201 SHIAWASSEE RIVER AT JAMES TOWNSHIP MI

WATER TEMPERATURE [°C]

Day	July			August			September			October			November			December		
	min	max	mean	min	max	mean	min	max	mean	min	max	mean	min	max	mean	min	max	mean
1	26.18	29.65	27.28	24.43	27.66	26.08	24.45	28.07	25.69	14.22	16.93	15.27	5.30	6.93	5.84	2.02	2.57	2.16
2	26.55	29.42	27.67	24.43	28.48	25.95	23.29	25.41	24.21	15.03	16.41	15.61	5.85	6.72	6.31	2.59	5.28	3.80
3	26.71	29.78	27.88	25.38	28.16	26.02	23.07	24.83	23.75	15.67	16.38	15.96	5.17	6.41	5.81	3.86	5.88	4.64
4	26.94	30.69	28.07	26.24	30.77	27.94	23.87	27.44	25.05	15.75	17.01	16.20	5.02	6.11	5.43	6.04	8.17	7.39
5	28.11	30.78	29.18	26.50	30.30	28.09	24.07	25.88	24.93	15.85	17.04	16.47	3.87	5.98	4.67	4.92	7.77	5.86
6	29.38	31.65	30.18	25.10	27.77	26.17	23.23	25.87	24.38	12.53	15.67	13.60	3.94	5.27	4.54	3.63	5.04	4.15
7	29.36	32.69	31.19	24.55	27.81	26.03	22.31	26.04	23.83	11.33	12.40	11.94	3.73	5.28	4.45	3.65	4.65	3.96
8	27.52	31.78	29.26	25.38	27.38	26.04	20.35	22.35	21.27	10.92	12.02	11.27	4.33	5.78	4.89	2.94	4.58	3.75
9	26.27	29.55	27.62	23.04	27.06	25.49	19.92	21.24	20.49	10.22	11.34	10.75	4.96	6.39	5.48	2.29	3.51	2.89
10	25.73	28.70	26.90	20.89	22.93	21.95	19.07	21.18	20.16	9.87	11.19	10.79	5.91	6.57	6.16	1.96	2.89	2.45
11	25.34	28.52	26.87	17.08	21.68	17.90	19.17	21.19	20.06	8.84	9.77	9.17	6.41	9.10	6.95	1.54	2.64	2.01
12	25.98	29.01	27.22	17.19	18.92	17.73	19.34	21.64	20.38	7.99	10.17	9.01	7.94	9.14	8.56	1.41	2.66	1.82
13	26.34	28.66	27.39	18.01	18.84	18.41	20.91	22.61	21.73	8.39	10.16	9.22	6.26	7.74	6.84	0.89	2.55	1.58
14	26.85	30.46	28.31	18.56	20.55	19.15	18.89	22.81	20.81	8.33	11.44	9.33	4.59	7.26	5.57	0.91	2.55	1.54
15	27.82	30.99	29.22	19.48	21.73	20.28	17.97	21.06	19.34	10.73	12.65	11.41	3.80	5.74	4.65	1.12	2.42	1.58
16	28.24	30.68	29.07	20.38	21.47	20.83	17.75	20.65	19.07	9.37	11.17	10.18	3.33	5.55	4.37	2.05	3.35	2.54
17	27.95	31.64	29.45	19.70	22.19	20.69	17.56	20.50	18.85	10.48	13.21	11.22	3.33	5.25	4.26	3.00	3.47	3.15
18	28.48	31.48	29.11	19.17	22.12	20.59	18.08	20.26	19.09	12.24	13.70	12.70	3.38	4.98	4.18	2.73	4.06	3.25
19	25.70	29.44	27.28	19.07	22.48	20.74	15.12	18.34	16.42	11.20	12.45	11.64	3.50	5.13	4.27	3.17	3.96	3.50
20	23.28	25.60	24.27	19.40	22.69	20.75	15.38	17.75	16.49	11.11	11.92	11.46	4.14	5.15	4.69	2.71	3.79	3.05
21	23.83	26.61	24.88	19.66	23.07	21.03	15.44	17.67	16.33	9.92	12.73	11.07	4.71	5.44	5.17	2.21	3.53	2.84
22	25.04	27.76	26.00	20.28	23.94	21.56	14.35	16.69	15.61	10.18	12.35	11.08	4.92	6.21	5.53	1.62	2.13	1.84
23	26.66	29.54	27.31	20.74	24.59	22.35	13.20	15.80	14.45	11.77	12.73	12.08	4.91	7.37	6.43	0.99	1.85	1.35
24	26.43	29.46	27.30	21.74	25.71	23.40	12.19	13.67	13.11	12.42	14.66	13.10	2.72	4.74	3.49	0.31	0.95	0.55
25	25.30	27.55	26.27	22.74	26.94	24.40	13.03	14.72	13.68	14.28	16.24	14.93	2.68	3.44	3.14	-0.08	0.76	0.25
26	24.63	27.14	25.72	23.57	27.01	25.29	14.05	16.07	14.64	14.38	15.93	15.09	1.84	2.79	2.28	-0.31	0.41	0.04
27	24.89	27.61	25.94	24.50	27.48	25.79	14.28	16.14	15.14	12.18	14.66	13.08	0.98	2.31	1.54	-0.33	0.17	-0.21
28	23.45	26.21	24.41	24.02	27.30	25.49	14.96	17.71	15.91	9.35	12.43	10.49	0.87	2.31	1.60	-0.34	-0.01	-0.20
29	23.55	26.72	25.10	22.66	26.28	24.54	14.98	17.76	16.23	7.33	9.69	8.29	1.19	2.49	1.72	-0.24	-0.03	-0.15
30	23.98	28.62	25.73	22.35	26.05	24.01	15.90	18.30	16.96	5.00	7.48	6.08	1.89	2.59	2.15	-0.29	-0.07	-0.21
31	24.63	29.03	26.44	22.44	27.33	24.07				5.27	6.80	5.77				-0.30	-0.05	-0.20
Monthly Average	26.17	29.27	27.37	21.89	25.05	23.19	18.21	20.66	19.27	11.04	12.86	11.75	4.05	5.54	4.70	1.83	2.95	2.29

Water-Data Report 2012
432139084024201 SHIAWASSEE RIVER AT JAMES TOWNSHIP MI

SUMMARY STATISTICS

	Calendar Year 2012	Period of Record (2012)
Minimum Daily Value [°C]	-0.34 (Dec 28)	-0.34 (Dec 28, 2012)
Maximum Daily Value [°C]	32.69 (Jul 7)	32.69 (Jul 7, 2012)
Median of Daily Mean [°C]	18.85	---

