

Water-Data Report 2013

04044724 AU TRAIN RIVER AT FOREST LAKE, MI

Southeastern Lake Superior Basin
Betsy-Chocolay Subbasin

LOCATION.--Lat 46°20'27", long 86°51'00" referenced to North American Datum of 1927, in SE ¼ NE ¼ sec.31, T.46 N., R.20 W., Alger County, MI, Hydrologic Unit 04020201, on left bank 800 ft downstream from Upper Peninsula Power Co. powerhouse, 0.6 mi downstream from Au Train Dam, and 0.6 mi northwest of Forest Lake.

DRAINAGE AREA.--81 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1993 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 650 ft above NGVD 1929, from topographic map.

REMARKS.--Records good. Flow regulated by powerplant 800 ft upstream and by Au Train Basin, capacity 12,342 acre-ft, 0.6 mi upstream. Gage-height telemeter at station.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
DAILY MEAN VALUES

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	62	41	56	57	76	75	58	799	150	69	57	56
2	62	41	56	58	76	75	58	873	150	69	57	57
3	62	42	56	58	76	75	59	862	150	69	57	57
4	62	42	55	59	76	74	62	757	149	69	57	57
5	50	42	55	60	76	72	67	646	149	69	57	57
6	41	42	55	62	76	70	68	545	149	69	57	56
7	41	42	e56	e66	76	70	69	475	147	69	57	56
8	41	41	e55	66	76	68	88	411	146	67	57	56
9	41	41	e55	67	76	66	92	346	145	65	57	56
10	41	45	e55	68	76	65	92	319	145	65	57	56
11	41	50	56	68	75	69	98	300	146	64	57	56
12	41	51	57	68	76	69	105	283	146	64	56	56
13	41	56	56	67	76	69	108	291	141	64	56	56
14	42	59	56	68	76	70	107	277	139	64	56	56
15	42	59	56	68	76	70	105	243	139	63	56	56
16	42	58	56	69	76	71	105	221	138	63	56	56
17	42	57	56	69	76	71	116	212	129	62	56	56
18	42	57	56	69	76	71	125	198	114	62	56	56
19	42	57	56	69	76	71	126	184	114	62	56	54
20	42	56	56	69	76	71	125	176	110	62	56	53
21	41	56	57	69	75	71	125	172	110	60	55	53
22	41	56	57	69	75	68	126	167	100	59	56	53
23	41	56	57	69	75	63	126	162	94	58	56	53
24	41	56	57	69	74	62	126	166	92	58	56	53
25	43	56	57	69	74	63	126	161	77	58	56	53
26	42	56	56	69	74	61	126	155	69	58	41	53
27	42	56	56	69	75	60	127	153	69	57	55	53
28	42	56	56	69	75	59	126	151	69	57	55	53
29	41	56	56	91	---	58	222	151	69	57	55	53
30	41	56	56	95	---	58	567	150	69	57	55	53
31	42	---	56	76	---	58	---	148	---	57	54	---
Total	1,377	1,539	1,736	2,119	2,116	2,093	3,630	10,154	3,614	1,946	1,725	1,649
Mean	44.4	51.3	56.0	68.4	75.6	67.5	121	328	120	62.8	55.6	55.0
Max	62	59	57	95	76	75	567	873	150	69	57	57
Min	41	41	55	57	74	58	58	148	69	57	41	53
Cfsm	0.55	0.63	0.69	0.84	0.93	0.83	1.49	4.04	1.49	0.77	0.69	0.68
In.	0.63	0.71	0.80	0.97	0.97	0.96	1.67	4.66	1.66	0.89	0.79	0.76

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2013, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	64.6	68.8	73.4	80.4	80.8	101	175	156	87.0	69.1	72.8	67.3
Max	142	136	120	124	127	133	281	428	151	110	192	109
(WY)	(2003)	(1994)	(2002)	(2002)	(1996)	(1999)	(2001)	(1996)	(2002)	(2010)	(2002)	(1998)
Min	16.7	17.1	27.4	48.6	44.4	55.3	80.7	46.5	51.3	30.7	45.5	41.1
(WY)	(2012)	(2012)	(1999)	(1999)	(2007)	(2011)	(2012)	(2000)	(1994)	(1998)	(1994)	(2006)

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SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1994 - 2013	
Annual total	24,069		33,698			
Annual mean	65.8		92.3		91.4	
Highest annual mean					131	2002
Lowest annual mean					60.9	2012
Highest daily mean	144	Mar 12	873	May 2	873	May 2, 2013
Lowest daily mean	21	May 1	41	Oct 6	2.5	Oct 26, 2000
Annual seven-day minimum	41	Oct 6	41	Oct 6	16	Oct 1, 2011
Maximum peak flow			925	May 2	925	May 2, 2013
Maximum peak stage			6.44	May 2	6.44	May 2, 2013
Annual runoff (cfs)	0.812		1.14		1.13	
Annual runoff (inches)	11.05		15.48		15.32	
10 percent exceeds	104		149		140	
50 percent exceeds	62		62		70	
90 percent exceeds	42		44		43	

