Water-Data Report 2010

04157000 SAGINAW RIVER AT SAGINAW, MI

Saginaw Basin
Saginaw Subbasin

LOCATION.--Lat 43°24′46″, long 83°57′47″ referenced to North American Datum of 1927, in NW ¼ SE ¼ sec.26, T.12 N., R.4 E., Saginaw County, MI, Hydrologic Unit 04080206, on right bank 1,000 ft downstream from bridge on Rust Avenue in Saginaw, 1.9 mi downstream from Tittabawassee River, and 20.3 mi upstream from mouth.

DRAINAGE AREA.--6,060 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--1904, 1908-9, 1912-13, 1916, 1918-19, 1929-30, and 1942 (flood discharge for certain periods only) in WSP 1084; December 1942 to September 1991 and October 1994 to September 1996, daily discharges greater than 10,000 ft^3/s only; no daily discharges greater than 10,000 ft^3/s water years 1944, 1949, 1953, 1955, 1958, 1961, 1963, 1964, 1966. Continuous-record station October 1991 to July 1994, and October 1996 to current year. Gage-height records for flood seasons 1910-20 are contained in reports of National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 565.05 ft, International Great Lakes datum. Prior to Oct. 1, 1972, nonrecording gage at site 1.9 mi downstream at same datum. Auxiliary water-stage recorder, Saginaw River at Essexville (04157065).

REMARKS.--Records fair except for estimated daily discharges, which are poor. Minimum flows affected by wind direction and seiche on Saginaw Bay, 20.3 mi downstream. Considerable diversion through metropolitan area of Saginaw. Gage-height telemeter at station.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	e2,260	9,230	e3,290	e2,900	e3,350	e2,440	e4,390	e3,710	e5,550	e5,800	e1,370	e1,510
2	e2,300	e8,850	e3,120	e2,890	e3,280	e2,520	e3,730	e4,830	e6,030	e2,400	e1,580	e1,700
3	e2,470	e6,560	e3,190	e2,740	e3,050	e2,760	e3,670	e4,330	e7,780	e1,940	e1,770	e1,570
4	e1,860	e6,670	e2,980	e3,060	e2,740	e2,890	e3,520	e5,260	e7,900	e1,760	e1,740	e1,210
5	e1,900	e6,200	e2,760	e3,130	e2,380	e3,070	e3,320	e5,030	e6,460	e1,640	e1,580	e1,120
6	e2,230	e6,700	e2,690	e3,130	e2,250	e2,830	e6,550	e5,140	e7,340	e1,550	e1,350	e1,150
7	e2,340	e4,200	e3,050	e3,020	e2,150	e3,070	9,030	e5,750	10,900	e1,890	e1,250	e1,330
8	e2,340	e3,820	e2,850	e2,890	e2,080	e3,480	10,700	e5,710	10,900	e2,110	e1,200	e1,370
9	e2,570	e2,940	e3,380	e2,690	e2,250	e5,680	12,000	e8,260	e8,050	e2,070	e1,280	e1,430
10	e2,450	e3,550	e3,450	e2,470	e2,400	e8,430	13,100	e7,880	e8,050	e1,730	e1,540	e1,460
11	e2,180	e3,010	e2,810	e2,650	e2,530	10,200	12,100	e6,920	e8,550	e1,620	e1,330	e1,400
12	e2,290	e3,210	e2,300	e2,620	e2,510	12,200	10,200	e8,870	e5,850	e2,060	e2,430	e1,370
13	e2,480	e3,090	e2,560	e2,710	e2,060	15,800	e8,540	10,700	e7,870	e2,130	e2,790	e1,250
14	e2,510	e2,500	e3,260	e2,800	e2,070	e17,000	e8,010	16,100	e5,870	e2,240	e1,840	e1,230
15	e2,330	e2,400	e3,930	e2,850	e2,200	e15,000	e6,910	21,900	e7,030	e2,360	e1,590	e1,210
16	e1,980	e2,710	e3,850	e2,790	e2,240	e14,000	e6,860	20,300	e4,820	e2,390	e2,010	e1,740
17	e1,810	e2,800	e3,560	e2,560	e2,400	e13,000	e6,190	16,600	e5,450	e2,280	e1,980	e1,690
18	e1,770	e2,840	e3,610	e2,610	e2,400	12,000	e6,710	13,700	e5,030	e2,230	e1,710	e1,470
19	e1,750	e2,740	e2,980	e2,750	e2,400	10,900	e6,710	11,300	e4,170	e2,230	e1,650	e1,500
20	e2,130	e2,680	e2,520	e2,610	e2,020	10,500	e6,450	e8,900	e6,010	e2,180	e1,550	e1,540
21	e2,080	e2,330	e2,510	e2,770	e2,040	9,040	e5,690	e7,750	e5,970	e2,130	e1,230	e1,710
22	e2,110	e2,310	e2,390	e2,770	e2,340	e8,320	e6,140	e7,750	e4,620	e2,060	e1,180	e2,610
23	e2,850	e2,830	e2,340	e3,010	e2,370	e8,090	e5,380	e7,420	e4,790	e2,550	e1,530	e2,070
24	e3,700	e3,080	e2,330	e2,580	e2,600	e7,540	e4,820	e7,050	e5,300	e2,640	e1,580	e1,730
25	e3,710	e2,870	e2,580	e4,550	e2,580	e5,850	e6,290	e7,380	e5,220	e2,520	e1,550	e1,350
26	e5,000	e2,420	e3,200	e6,250	e2,560	e6,670	e6,310	e6,780	e5,020	e2,260	e1,550	e1,290
27	e4,030	e2,890	e3,560	e5,450	e2,200	e5,330	e8,450	e6,670	e5,740	e2,050	e1,150	e1,620
28	e4,130	e3,260	e4,090	e4,550	e2,190	e6,900	e6,630	e6,510	e5,440	e1,770	e1,040	e1,880
29	e4,090	e2,920	e4,160	e4,060	---	e7,020	e5,890	e6,150	e6,370	e1,520	e1,030	e1,850
30	e5,600	e3,070	e3,960	e3,000	---	e6,060	e3,850	e4,180	e5,610	e1,340	e1,010	e1,640
31	e4,560	---	e3,830	e3,050	---	e4,420	---	e4,450	---	e1,270	e1,170	---
Total	85,810	114,680	97,090	97,910	67,640	243,010	208,140	263,280	193,690	66,720	47,560	46,000
Mean	2,768	3,823	3,132	3,158	2,416	7,839	6,938	8,493	6,456	2,152	1,534	1,533
Max	5,600	9,230	4,160	6,250	3,350	17,000	13,100	21,900	10,900	5,800	2,790	2,610
Min	1,750	2,310	2,300	2,470	2,020	2,440	3,320	3,710	4,170	1,270	1,010	1,120
Cfsm	0.46	0.63	0.52	0.52	0.40	1.29	1.14	1.40	1.07	0.36	0.25	0.25
In.	0.53	0.70	0.60	0.60	0.42	1.49	1.28	1.62	1.19	0.41	0.29	0.28

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2010, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	2,548	3,598	4,347	5,238	6,200	9,416	8,215	6,593	4,027	2,425	1,944	2,044
Max	5,065	11,430	9,877	10,950	13,270	14,310	16,440	17,180	6,578	7,758	4,133	5,202
(WY)	(2007)	(1993)	(2007)	(1993)	(2009)	(1997)	(1993)	(2004)	(2004)	(1994)	(1992)	(1992)
Min	934	1,210	1,419	1,348	1,086	3,263	3,631	2,595	1,998	1,039	960	767
(WY)	(2004)	(2000)	(2003)	(2003)	(2003)	(2003)	(2000)	(1999)	(1999)	(2001)	(2003)	(2003)

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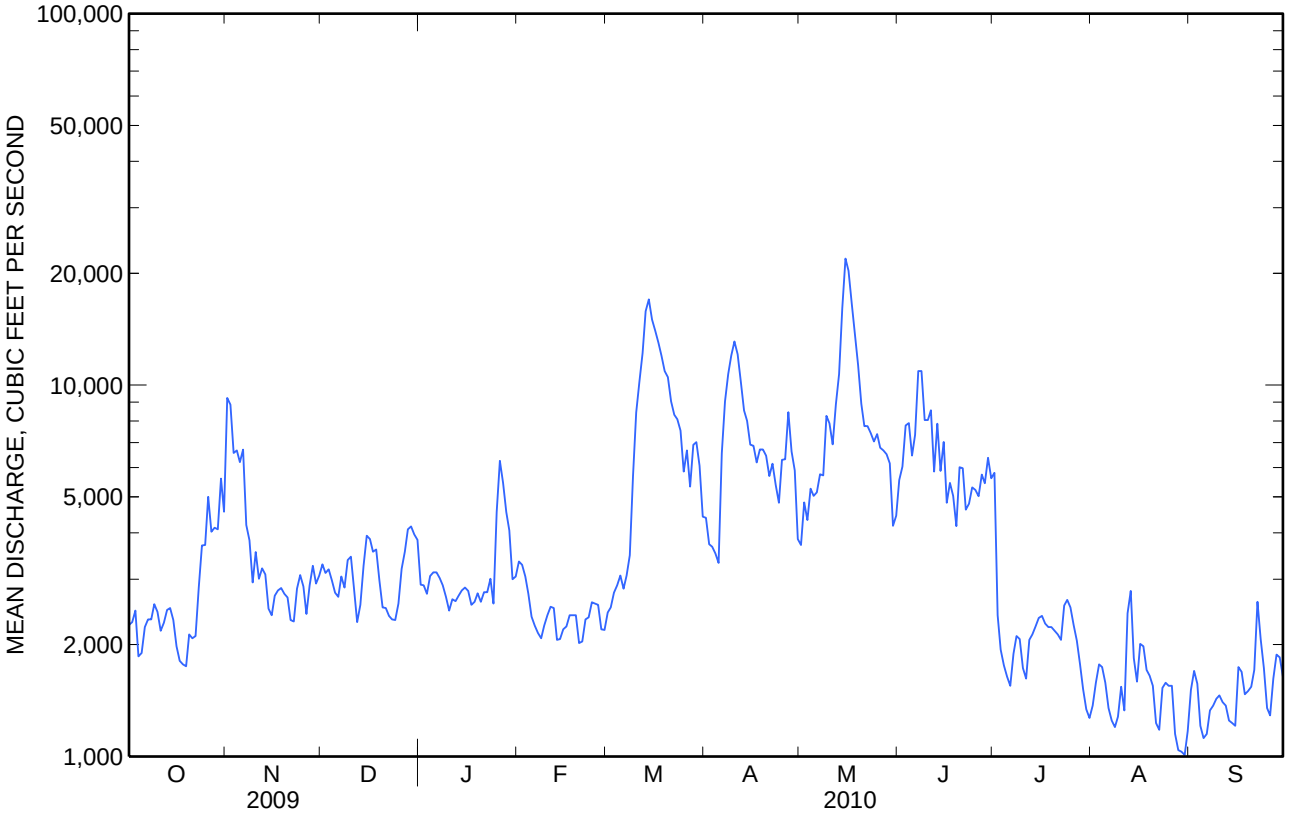
SUMMARY STATISTICS

	Calendar Year 2009		Water Year 2010		Water Years 1992 - 2010	
Annual total	2,373,800		1,531,530			
Annual mean	6,504		4,196		[a]4,701	
Highest annual mean					6,865	2009
Lowest annual mean					2,112	2003
Highest daily mean	35,500	Feb 15	21,900	May 15	[b]37,500	Mar 8, 2004
Lowest daily mean	1,270	Sep 19	1,010	Aug 30	-1,980	Jun 19, 1992
Annual seven-day minimum	1,400	Sep 14	1,210	Aug 26	557	Aug 7, 2001
Maximum peak flow			22,900	May 15	[c]68,000	Mar 29, 1904
Maximum peak stage			15.79	May 15	[c]24.90	Mar 29, 1904
Annual runoff (cfsm)	1.07		0.692		0.776	
Annual runoff (inches)	14.57		9.40		10.54	
10 percent exceeds	15,000		8,160		9,420	
50 percent exceeds	3,770		2,870		3,240	
90 percent exceeds	1,870		1,550		1,140	

[a] Does not include water years 1995, 1996.

[b] Prior to 1992, highest daily mean, 67,800 ft³/s, Mar. 29, 1904.

[c] Includes water years 1904-91.