Water-Data Report 2011

04145000 SHIAWASSEE RIVER NEAR FERGUS, MI

Saginaw Basin
Shiawassee Subbasin

LOCATION.--Lat 43°15′17″, long 84°06′20″ referenced to North American Datum of 1927, in SE ¼ NW ¼ sec.22, T.10 N., R.3 E., Saginaw County, MI, Hydrologic Unit 04080203, on right bank at downstream side of bridge on Fergus Road, 1.2 mi east of Fergus, 1.8 mi upstream from Bear Creek, and 14 mi upstream from mouth.

DRAINAGE AREA.--637 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1939 to September 1984, October 1988 to September 1994 and October 2001 to September 2011 (discontinued). Monthly discharge only for some periods, published in WSP 1307.

REVISED RECORDS.--WSP 1337: 1940(M), 1941-42, 1943(M), 1944, 1945(M), 1946, 1947(M), 1948, 1950. WSP 1627: 1952, 1954(M), 1957.

GAGE.--Water-stage recorder. Datum of gage is 585.80 ft above sea level. Prior to Aug. 22, 1968, nonrecording gage at same site and datum. Prior to Oct. 1, 1970, at datum 2.00 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are poor. Some regulation at low stages by power plant at Shiawasseetown prior to February 1953; occasional regulation at low stages since. Gage-height telemeter at station.

Suggested citation: U.S. Geological Survey, 2012, Water-resources data for the United States, Water Year 2011: U.S. Geological Survey Water-Data Report WDR-US-2011, site 04145000, accessed at http://wdr.water.usgs.gov/wy2011/pdfs/04145000.2011.pdf

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	162	203	e239	e157	e161	e419	1,010	1,970	1,980	310	781	205
2	184	204	e237	e161	e157	e437	891	1,830	1,630	251	755	200
3	201	206	e245	e249	e148	e437	803	1,760	1,400	222	727	199
4	186	210	e233	e385	e141	e451	1,260	1,640	1,170	210	587	193
5	182	208	e217	e389	e140	e470	980	1,430	932	202	500	189
6	177	205	e203	e354	e147	e760	793	1,180	797	191	463	185
7	175	202	e184	e285	e158	e1,060	842	1,010	699	179	458	181
8	174	200	e172	e237	e164	e1,110	839	916	632	170	428	177
9	174	199	e176	e198	e164	e1,010	760	838	609	160	472	154
10	171	197	e186	e198	e170	e1,130	715	853	575	149	431	141
11	163	192	e186	e188	e169	e1,420	712	863	538	140	375	135
12	156	186	e178	e177	e170	e1,460	802	804	484	148	324	129
13	154	181	e151	e173	e164	e1,430	761	750	444	139	340	139
14	176	179	e161	e171	e162	e1,350	708	2,830	402	131	377	174
15	166	179	e178	e169	e167	e1,240	667	4,130	306	134	384	192
16	156	176	e169	e169	e175	e1,180	623	4,080	341	176	328	183
17	155	179	e160	e168	e202	e1,130	612	2,540	404	135	284	174
18	156	180	e158	e171	e283	e1,090	595	2,040	384	93	278	168
19	155	174	e155	e176	e592	e1,040	603	3,750	346	100	264	174
20	154	180	e161	e183	e737	1,010	1,650	3,990	325	104	258	187
21	161	189	e161	e173	e668	1,420	2,020	3,010	308	93	304	177
22	163	198	e163	e165	e563	1,660	1,470	2,250	944	107	261	182
23	161	252	e163	e160	e587	1,630	2,090	1,970	1,260	91	243	217
24	166	233	e163	e156	e543	2,160	2,260	1,840	913	84	263	238
25	188	226	e165	e147	e517	1,990	1,700	1,660	708	81	293	221
26	202	e229	e160	e141	e525	1,740	1,470	2,610	545	77	279	223
27	181	e227	e155	e146	e514	1,590	1,720	2,870	466	74	280	232
28	186	e227	e152	e155	e447	1,460	3,800	1,860	478	1,640	257	205
29	190	e231	e154	e161	---	1,290	4,230	1,710	455	1,950	237	205
30	207	e232	e157	e161	---	1,060	2,700	3,700	372	1,360	223	231
31	207	---	e157	e166	---	948	---	2,790	---	941	214	---
Total	5,389	6,084	5,499	6,089	8,735	36,582	40,086	65,474	20,847	9,842	11,668	5,610
Mean	174	203	177	196	312	1,180	1,336	2,112	695	317	376	187
Max	207	252	245	389	737	2,160	4,230	4,130	1,980	1,950	781	238
Min	154	174	151	141	140	419	595	750	306	74	214	129
Cfsm	0.27	0.32	0.28	0.31	0.49	1.85	2.10	3.32	1.09	0.50	0.59	0.29
In.	0.31	0.36	0.32	0.36	0.51	2.14	2.34	3.82	1.22	0.57	0.68	0.33

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2011, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	243	324	417	466	566	1,008	929	654	371	224	156	178
Max	1,921	1,286	1,274	1,358	1,843	2,047	2,564	2,532	1,212	1,135	669	1,271
(WY)	(1982)	(1993)	(1976)	(1993)	(1976)	(1976)	(1947)	(1956)	(1989)	(1994)	(1992)	(1975)
Min	40.6	58.9	62.9	80.5	76.4	140	253	155	86.1	42.1	42.2	42.1
(WY)	(1965)	(1965)	(1964)	(1940)	(1940)	(1964)	(1946)	(1958)	(1941)	(1965)	(1964)	(1964)

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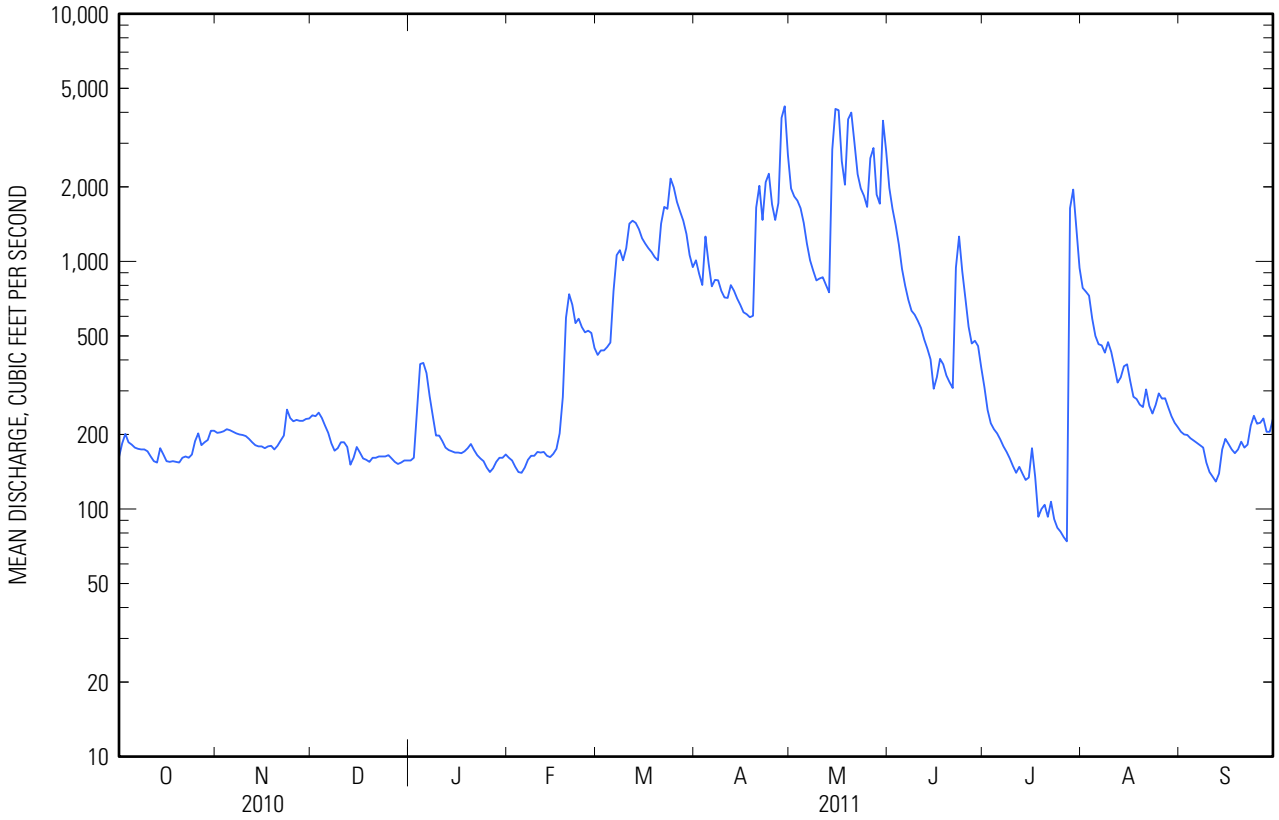
SUMMARY STATISTICS

	Calendar Year 2010		Water Year 2011		Water Years 1940 - 2011	
Annual total	132,660		221,905			
Annual mean	363		608		[a]464	
Highest annual mean					797	1993
Lowest annual mean					118	1964
Highest daily mean	3,160	May 14	4,230	Apr 29	7,290	Apr 6, 1947
Lowest daily mean	68	Aug 31	74	Jul 27	29	Aug 8, 1966
Annual seven-day minimum	70	Aug 27	87	Jul 21	35	Aug 4, 1966
Maximum peak flow			4,850	Apr 29	[b]7,500	Apr 6, 1947
Maximum peak stage			12.39	Apr 29	[c]15.44	Mar 29, 1960
Instantaneous low flow					27	Aug 8, 1966
Annual runoff (cfsm)	0.571		0.954		0.729	
Annual runoff (inches)	7.75		12.96		9.90	
10 percent exceeds	758		1,640		1,100	
50 percent exceeds	240		232		258	
90 percent exceeds	116		155		82	

[a] Does not include water year 1940.
[b] Including overflow by-passing gage.
[c] Backwater from ice, present datum.