

Water-Data Report 2011

04149000 FLINT RIVER NEAR FOSTERS, MI

Saginaw Basin
Flint Subbasin

LOCATION.--Lat 43°18'30", long 83°57'13" referenced to North American Datum of 1927, in SE ¼ SE ¼ sec.35, T.11 N., R.4 E., Saginaw County, MI, Hydrologic Unit 04080204, on left bank 20 ft downstream from bridge on State Highway 13, 2.0 mi west of Fosters, and 6.5 mi downstream from Silver Creek.

DRAINAGE AREA.--1,153 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1939 to September 1984, October 1987 to September 1992, October 2001 to September 2011 (discontinued). Gage-height records for flood seasons collected in this vicinity 1910-20, 1922-27 are contained in reports of the National Weather Service.

REVISED RECORDS.--WSP 954: 1941. WSP 1337: 1940, 1942, 1943-44(M), 1945, 1946-47(M), 1948-50. WDR MI-78: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 600 ft above sea level, from topographic map. Prior to Oct. 1, 1969, nonrecording gage at site 2.2 mi upstream at datum 582.22 ft above sea level. Oct. 1, 1969 to Sept. 30, 1992, water-stage recorder at datum 5.00 ft higher.

REMARKS.--Records fair. Prior to Oct. 1, 1992, records include flow of Birch Run. Some regulation by reservoirs upstream from the City of Flint. Gage-height telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 1904 reached a stage of 18.4 ft, from National Weather Service data, site and datum then in use.

04149000 FLINT RIVER NEAR FOSTERS, MI—Continued

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	278	292	585	e509	e269	1,130	1,830	4,580	2,920	558	1,170	210
2	283	797	515	e876	e227	983	2,030	4,420	2,500	520	1,020	211
3	514	1,450	490	848	e235	871	1,980	3,770	2,170	451	1,130	211
4	399	988	456	789	e329	956	3,110	3,070	1,590	414	1,060	221
5	314	559	433	765	e338	1,790	3,540	2,320	1,350	386	687	278
6	294	463	417	e723	e217	3,250	2,890	1,910	1,210	302	571	233
7	291	366	e404	e639	e235	2,750	2,990	1,500	927	318	591	229
8	280	325	e374	e547	e235	2,470	2,770	1,260	931	276	726	229
9	254	272	e318	e508	e329	2,510	2,410	1,120	902	268	1,170	216
10	218	248	e272	e471	e355	3,360	2,170	1,050	762	292	1,140	208
11	215	253	e250	e419	e269	3,880	2,090	1,020	728	277	769	193
12	217	240	e250	e359	e244	3,440	2,020	988	681	292	637	192
13	223	231	e286	e346	e278	3,210	1,580	898	600	273	532	185
14	327	229	e270	e319	e278	2,980	1,400	1,930	526	252	613	173
15	320	226	e307	e292	e338	2,820	1,340	4,740	499	215	628	206
16	262	227	e313	e298	e398	2,830	1,270	7,220	568	190	503	219
17	226	225	e270	e303	e614	3,060	1,250	5,470	676	186	429	203
18	196	282	e245	e295	e1,700	2,950	1,060	5,050	481	189	337	195
19	219	280	e238	e335	e1,850	2,790	978	7,490	452	232	311	205
20	223	278	e234	e367	e1,580	2,690	2,770	9,440	431	237	305	297
21	238	304	e233	e284	e1,500	3,270	4,390	6,300	430	212	643	244
22	332	348	e239	e281	e1,490	3,880	2,860	4,620	1,040	203	603	235
23	280	520	e262	e279	e1,380	3,370	3,180	3,960	1,380	209	433	232
24	227	496	e264	e279	1,320	3,590	4,010	3,180	1,000	211	401	230
25	318	397	e217	e275	1,170	3,230	2,880	2,610	957	214	394	229
26	435	498	e218	e266	1,030	2,790	1,980	4,200	854	208	358	223
27	498	486	e218	e267	991	2,450	1,410	4,560	775	218	286	261
28	350	422	e226	e267	1,030	2,230	3,830	3,350	766	2,020	277	312
29	267	414	e248	e272	---	1,890	6,120	2,560	644	4,910	274	275
30	293	428	e267	e276	---	1,810	4,760	4,720	600	2,860	237	274
31	295	---	e270	e276	---	1,780	---	3,880	---	1,590	213	---
Total	9,086	12,544	9,589	13,030	20,229	81,010	76,898	113,186	29,350	18,983	18,448	6,829
Mean	293	418	309	420	722	2,613	2,563	3,651	978	612	595	228
Max	514	1,450	585	876	1,850	3,880	6,120	9,440	2,920	4,910	1,170	312
Min	196	225	217	266	217	871	978	898	430	186	213	173
Cfsm	0.25	0.36	0.27	0.36	0.63	2.27	2.22	3.17	0.85	0.53	0.52	0.20
In.	0.29	0.40	0.31	0.42	0.65	2.61	2.48	3.65	0.95	0.61	0.60	0.22

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	374	516	705	751	945	1,867	1,604	1,081	624	360	318	356
Max	2,781	1,433	2,311	2,348	3,249	4,351	4,963	4,160	2,039	1,470	1,331	1,781
(WY)	(1982)	(1991)	(1976)	(1973)	(1976)	(1976)	(1947)	(1956)	(1943)	(1957)	(1975)	(1975)
Min	75.4	85.5	78.2	93.1	98.3	219	404	166	106	71.6	56.0	50.3
(WY)	(1964)	(1965)	(1964)	(1940)	(1940)	(1964)	(1946)	(1958)	(1941)	(1941)	(1941)	(1941)

04149000 FLINT RIVER NEAR FOSTERS, MI—Continued

SUMMARY STATISTICS

	Calendar Year 2010		Water Year 2011		Water Years 1940 - 2011	
Annual total	227,275		409,182			
Annual mean	623		1,121		791	
Highest annual mean					1,460	1976
Lowest annual mean					180	1964
Highest daily mean	5,660	May 14	9,440	May 20	18,200	Apr 7, 1947
Lowest daily mean	148	Aug 28	173	Sep 14	28	Aug 6, 1941
Annual seven-day minimum	155	Aug 26	196	Sep 11	35	Aug 1, 1941
Maximum peak flow			10,100	May 20	^a 19,000	Apr 7, 1947
Maximum peak stage			20.45	May 20	^b 21.59	May 24, 2004
Instantaneous low flow					^c 27	Aug 6, 1941
Annual runoff (cfs)	0.540		0.972		0.686	
Annual runoff (inches)	7.33		13.20		9.32	
10 percent exceeds	1,310		3,140		1,830	
50 percent exceeds	414		435		422	
90 percent exceeds	192		222		133	

^a Including flow by-passing gage.

^b Present site and datum; peak stage at previous site and datum, 18.60 ft, Feb. 2, 1968.

^c Observed.

