Water-Data Report 2011

03109500 Little Beaver Creek near East Liverpool, OH

Upper Ohio-Beaver Basin
Upper Ohio Subbasin

LOCATION.--Lat 40°40′33″, long 80°32′27″ referenced to North American Datum of 1927, Columbiana County, OH, Hydrologic Unit 05030101, on the right bank at downstream side of Grimms Bridge, 1.5 mi upstream from Island Run, 4 mi upstream from mouth and 4 mi north of East Liverpool.

DRAINAGE AREA.--496 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--May 1915 to current year.

REVISED RECORDS.--WSP 873: 1937(M). WSP 1305: 1916-18(M), 1921-22(M), 1924-30(M), 1933(M), 1936(M). WSP 1907: 1950(P), Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 702.77 ft NGVD 1912. Prior to Sept. 22, 1926, nonrecording gage at same site and datum

REMARKS.--Record fair except for periods of estimated record, which is poor. Water-quality and sediment data formerly collected at this site. Satellite telemeter at this station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 5,000 ft^3/s and (or) maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb 28	1500	*13,000	*12.97
Mar 6	1300	5,840	9.29
Mar 10	2300	8,460	10.81
Apr 16	2200	6,700	9.82
May 14	0200	8,590	10.88

Minimum discharge, 58 ft^3/s, Oct. 2, gage height, 2.30 ft.

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 03109500, accessed at http://wdr.water.usgs.gov/wy2011/pdfs/03109500.2011.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	72	88	3,570	e531	e276	7,360	518	1,060	389	140	81	83
2	62	83	2,240	e1,060	e697	3,080	525	1,020	340	134	75	88
3	74	78	902	586	e1,020	1,730	506	1,750	307	129	78	87
4	97	75	606	438	e678	1,380	650	3,040	288	126	83	84
5	108	76	486	e331	e608	2,540	2,930	1,850	275	194	82	111
6	139	77	413	e268	e489	5,160	2,220	1,370	257	190	76	142
7	165	77	367	e260	e442	3,590	1,410	1,170	289	133	71	124
8	144	76	331	e241	e419	2,210	1,180	1,040	392	127	71	109
9	109	74	298	e241	e323	2,180	1,400	854	287	205	92	122
10	88	71	279	e244	e302	6,130	1,070	734	240	166	166	109
11	77	69	273	e239	e286	7,320	901	713	239	127	117	119
12	72	68	388	e239	e277	4,250	1,050	724	228	130	85	222
13	68	67	1,170	e237	e294	3,360	3,200	4,300	219	128	73	200
14	63	69	625	e230	e362	2,310	2,530	6,120	198	108	99	124
15	64	70	434	e227	e719	1,830	1,510	4,700	183	94	213	117
16	65	73	e390	e224	e655	1,770	3,270	4,270	179	87	178	119
17	72	114	e330	e221	e937	1,620	4,980	2,730	199	82	125	116
18	72	147	e287	e252	2,080	1,260	2,550	2,770	187	81	94	95
19	70	119	e299	e300	1,360	1,050	1,940	3,240	172	645	240	85
20	68	98	e290	e314	823	881	2,820	2,140	367	520	292	102
21	65	87	e264	e294	847	839	2,390	1,640	359	225	146	106
22	64	82	e264	e268	875	779	e1,570	1,260	248	160	153	117
23	64	87	e256	e258	723	759	1,940	1,090	277	174	137	171
24	64	96	e249	e247	648	1,040	1,870	998	461	152	107	464
25	67	505	e234	e250	2,010	778	2,760	1,020	415	130	288	277
26	76	1,550	e232	e234	2,050	660	3,360	913	285	119	401	249
27	218	892	e232	e234	1,550	598	2,190	816	222	100	191	1,600
28	247	418	e234	e227	8,570	541	1,720	674	191	88	135	964
29	144	294	e229	e227	---	499	1,430	579	167	119	113	381
30	109	465	e226	e224	---	474	1,190	502	151	139	97	265
31	95	---	e226	e224	---	507	---	438	---	96	84	---
Total	2,962	6,145	16,624	9,370	30,320	68,485	57,580	55,525	8,011	5,048	4,243	6,952
Mean	95.5	205	536	302	1,083	2,209	1,919	1,791	267	163	137	232
Max	247	1,550	3,570	1,060	8,570	7,360	4,980	6,120	461	645	401	1,600
Min	62	67	226	221	276	474	506	438	151	81	71	83
Med	72	82	298	244	688	1,620	1,790	1,090	253	130	107	119
Cfsm	0.19	0.41	1.08	0.61	2.18	4.45	3.87	3.61	0.54	0.33	0.28	0.47
In.	0.22	0.46	1.25	0.70	2.27	5.14	4.32	4.16	0.60	0.38	0.32	0.52

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1916 - 2011, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	188	324	553	729	852	1,128	914	660	401	259	190	173
Max	1,380	2,102	2,012	3,993	1,957	2,506	2,187	1,876	1,784	1,554	1,567	2,156
(WY)	(1955)	(1986)	(1991)	(1937)	(1956)	(2008)	(1940)	(1929)	(1989)	(1990)	(1980)	(2004)
Min	25.7	38.2	50.7	63.9	50.8	241	202	79.9	40.8	29.6	22.0	17.4
(WY)	(1964)	(1931)	(1931)	(1931)	(1934)	(1969)	(1946)	(1934)	(1934)	(1930)	(1930)	(1932)

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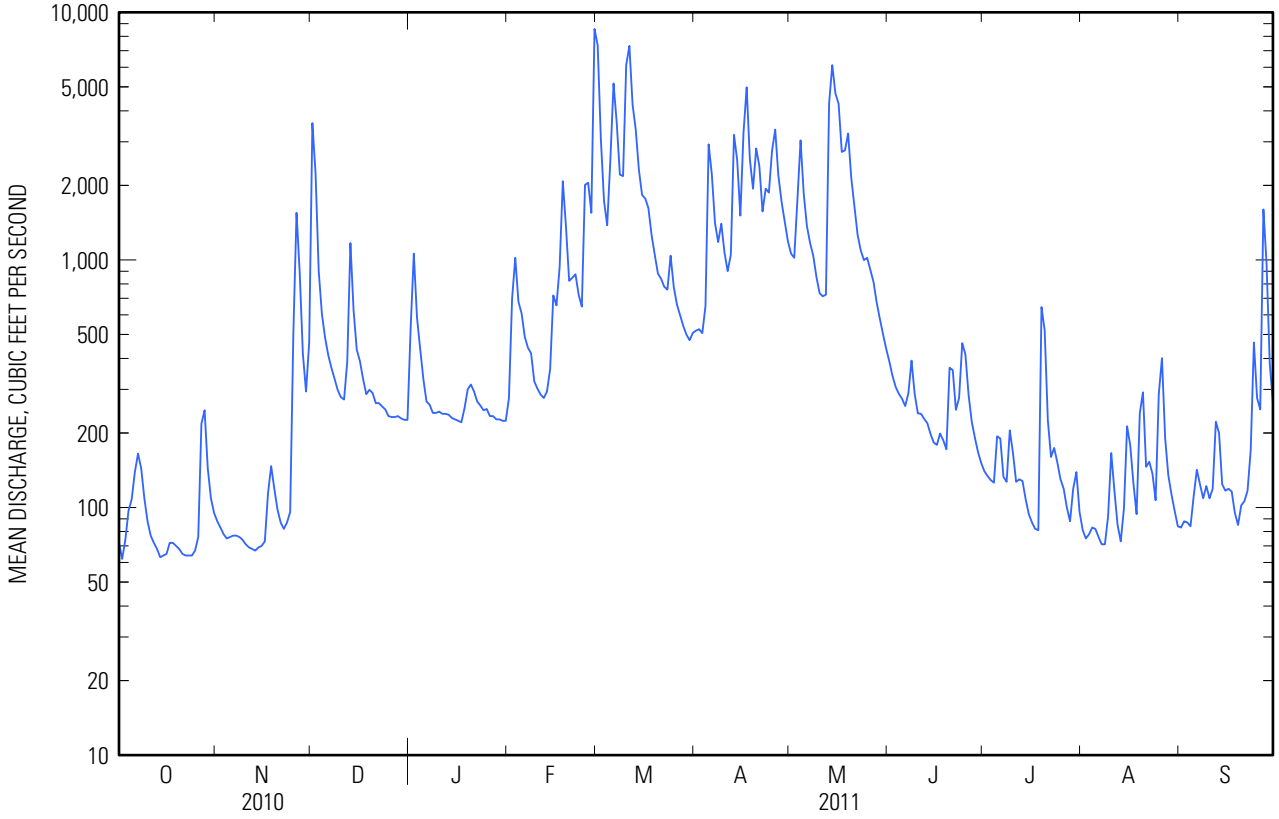
SUMMARY STATISTICS

	Calendar Year 2010		Water Year 2011		Water Years 1916 - 2011	
Annual total	177,389		271,265			
Annual mean	486		743		529	
Highest annual mean					1,047	2004
Lowest annual mean					207	1931
Highest daily mean	6,360	Mar 23	8,570	Feb 28	18,900	Jan 25, 1937
Lowest daily mean	44	Sep 26	62	Oct 2	12	Aug 22, 1918
Annual seven-day minimum	50	Sep 21	66	Oct 19	12	Sep 13, 1932
Maximum peak flow			13,000	Feb 28	25,000	Jul 19, 1941
Maximum peak stage			12.97	Feb 28	17.40	Jul 19, 1941
Instantaneous low flow			58	Oct 2	12	Sep 15, 1918
Annual runoff (cfsm)	0.98		1.50		1.07	
Annual runoff (inches)	13.30		20.34		14.50	
10 percent exceeds	1,110		2,100		1,240	
50 percent exceeds	277		264		258	
90 percent exceeds	68		77		53