Water-Data Report 2013

03112000 WHEELING CREEK AT ELM GROVE, WV

Upper Ohio-Beaver Basin
Upper Ohio-Wheeling Subbasin

LOCATION.--Lat 40°02′40″, long 80°39′40″ referenced to North American Datum of 1927, Ohio County, WV, Hydrologic Unit 05030106, on right bank at highway bridge at Elm Grove, 500 ft downstream from Little Wheeling Creek, and at mile 7.8.

DRAINAGE AREA.--281 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1940 to September 1997 (daily discharge and peaks), October 1997 to current year (daily discharge and annual maxima). Monthly discharge only for October 1940, published in WSP 1907.

REVISED RECORDS.--WSP 1305: 1941(M). WDR WV-97-1: Drainage area.

GAGE.--Water-stage recorder with satellite telemeter. Datum of gage is 667.09 ft above NAVD 88 (667.59 ft above NGVD 29).

REMARKS.--Records good except those for periods of estimated daily discharges, which are poor. The flow from 205 mi^2 upstream from station is partially controlled, but not diverted, by seven floodwater-detention reservoirs with a total combined detention capacity of 24,148 acre-ft. Cumulative detention as construction progressed 1975 to 1995.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,080 ft^3/s, Jan. 31, gage height, 5.42 ft; minimum discharge, 16 ft^3/s, Oct. 14, 15, gage height, 1.29 ft.

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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	36	1,220	30	329	2,490	920	357	126	74	147	101	53
2	32	649	32	314	1,040	713	308	112	68	274	89	51
3	29	385	34	280	731	599	267	101	75	273	94	86
4	35	260	39	280	596	510	240	91	84	140	112	82
5	31	197	67	252	518	442	229	83	68	94	94	56
6	27	156	77	248	452	480	224	77	90	101	70	41
7	24	133	170	248	386	510	203	76	257	86	57	33
8	22	112	1,560	238	e375	535	188	83	215	78	56	28
9	21	95	999	251	e365	511	175	89	138	101	138	26
10	20	86	1,140	342	e410	470	164	134	108	852	559	24
11	20	76	2,300	476	536	437	169	293	107	1,040	392	50
12	19	74	1,130	811	681	479	182	256	101	666	247	139
13	18	83	661	706	577	436	188	180	184	840	198	61
14	17	81	477	635	519	388	161	134	383	773	150	46
15	19	70	374	575	495	350	149	125	267	397	115	39
16	23	60	317	743	466	332	148	117	170	246	85	37
17	23	57	472	944	412	306	249	108	140	183	67	38
18	23	54	1,840	718	339	388	251	95	127	174	59	33
19	25	50	1,080	564	e319	743	227	137	144	156	62	26
20	25	49	749	484	e295	621	219	182	113	206	61	78
21	25	47	1,490	405	e275	512	189	125	81	397	55	542
22	25	44	1,050	325	e265	435	166	99	63	331	47	1,110
23	24	42	706	292	e255	374	155	206	55	237	363	535
24	22	42	588	e270	e250	335	160	485	48	404	886	261
25	22	40	589	e250	e255	369	173	322	41	436	331	146
26	21	37	584	e240	302	404	152	212	110	251	171	97
27	21	37	589	e235	1,040	512	135	163	198	182	118	69
28	34	36	488	e270	1,190	503	136	142	225	206	100	54
29	152	32	445	554	---	451	148	129	448	211	91	45
30	2,060	31	397	1,230	---	405	139	105	269	153	77	40
31	2,580	---	338	3,650	---	373	---	84	---	120	62	---
Total	5,475	4,335	20,812	17,159	15,834	14,843	5,851	4,671	4,451	9,755	5,107	3,926
Mean	177	144	671	554	566	479	195	151	148	315	165	131
Max	2,580	1,220	2,300	3,650	2,490	920	357	485	448	1,040	886	1,110
Min	17	31	30	235	250	306	135	76	41	78	47	24
Cfsm	0.63	0.51	2.39	1.97	2.01	1.70	0.69	0.54	0.53	1.12	0.59	0.47
In.	0.72	0.57	2.76	2.27	2.10	1.96	0.77	0.62	0.59	1.29	0.68	0.52

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 2013, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	88.5	207	386	527	602	739	568	425	237	142	97.3	100
Max	636	2,085	1,369	1,951	1,249	1,670	1,336	1,107	1,004	885	1,424	1,484
(WY)	(2012)	(1986)	(1991)	(2005)	(1975)	(1963)	(1961)	(1967)	(1981)	(1956)	(1980)	(2004)
Min	0.53	1.89	5.45	21.4	85.0	126	115	66.0	16.1	3.90	2.06	0.88
(WY)	(1964)	(1964)	(1964)	(1967)	(1964)	(1969)	(1971)	(1986)	(1962)	(1962)	(1957)	(1966)

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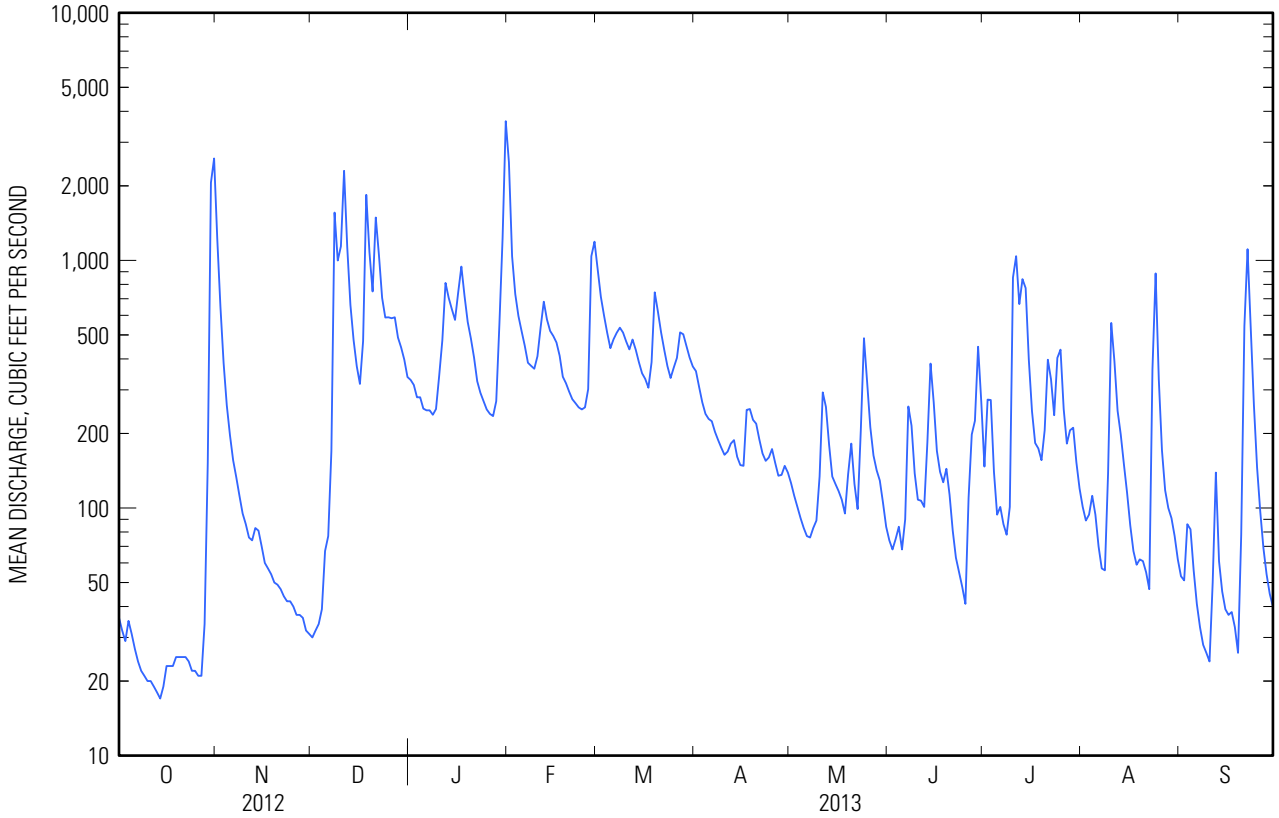
SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1941 - 2013	
Annual total	101,827.0		112,219			
Annual mean	278		307		342	
Highest annual mean					653	2004
Lowest annual mean					112	1954
Highest daily mean	3,420	Jan 27	3,650	Jan 31	13,100	Dec 30, 1942
Lowest daily mean	4.3	Aug 31	17	Oct 14	0.10	Sep 26, 1964[a]
Annual seven-day minimum	5.6	Aug 26	19	Oct 9	0.24	Sep 21, 1964
Maximum peak flow			4,080	Jan 31	[b]22,300	Sep 17, 2004
Maximum peak stage			5.42	Jan 31	[c]13.83	Sep 17, 2004
Instantaneous low flow			16	Oct 14[d]	0.10	Oct 7, 1963[e]
Annual runoff (cfsm)	0.990		1.09		1.22	
Annual runoff (inches)	13.48		14.86		16.54	
10 percent exceeds	739		672		834	
50 percent exceeds	92		182		140	
90 percent exceeds	13		34		11	

[a] Also Sept. 27, 1964.
[b] From rating curve extended above 15,000 ft³/s on basis of slope-area measurements at gage heights 13.20 ft and 13.65 ft.
[c] From high-water mark in well.
[d] Also Oct. 15.
[e] Also Sept. 26, 27, 1964.