

03535400 BEAVER CREEK AT SOLWAY, TN

LOCATION.--Lat 35°57'53", long 84°10'43", Knox County, Hydrologic Unit 06010207, at bridge on Solway Road, 1.1 mi southwest of Solway and 5.9 mi southeast of intersection of State Highways 95 and 62 in Oak Ridge.

DRAINAGE AREA.--86.8 mi².

PERIOD OF RECORD.--August 1961 to September 1964, low-flow partial-record site, August 1998 to April 1999, flood crest-stage partial-record site, April 1999 to current year.

GAGE.--Data logger.

REMARKS.--Records good. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,200 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 11	0030	*2,030	*10.85				

Minimum discharge, 22 ft³/s, Sept. 24.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60	70	962	102	94	179	224	256	64	41	45	32
2	55	65	1,040	95	88	154	637	165	78	41	49	31
3	54	59	610	92	140	135	788	136	82	43	43	31
4	72	263	309	88	142	125	481	120	76	52	40	31
5	56	202	234	86	117	118	267	109	65	53	39	30
6	50	147	284	91	106	113	214	106	60	48	39	28
7	49	123	1,070	102	99	108	192	97	82	126	43	29
8	48	115	1,120	360	102	131	208	88	151	155	44	28
9	45	105	1,190	396	108	140	181	84	165	82	55	27
10	44	92	1,510	243	113	118	162	78	98	61	47	27
11	43	84	1,560	208	104	110	143	75	79	56	41	27
12	44	453	949	386	94	103	147	71	75	52	38	27
13	79	562	615	716	98	101	639	66	74	56	37	27
14	79	396	388	572	196	101	1,090	84	73	174	68	27
15	56	192	279	441	254	94	931	100	67	195	61	25
16	49	158	234	281	193	89	437	74	68	141	42	29
17	44	139	209	221	161	102	256	64	59	126	38	37
18	45	127	192	186	142	114	209	59	55	115	41	36
19	170	116	177	162	129	99	182	55	54	101	70	31
20	244	110	163	154	149	91	160	689	53	96	48	30
21	148	98	148	144	446	88	145	531	52	80	42	28
22	94	96	140	134	488	88	143	181	49	77	39	27
23	76	166	174	122	338	119	150	139	48	65	37	26
24	67	888	185	113	227	130	128	119	47	61	35	26
25	66	932	149	108	194	106	117	102	45	56	35	26
26	62	670	133	104	168	96	108	91	44	53	33	29
27	64	282	126	100	151	96	109	83	42	50	33	38
28	66	238	119	96	164	449	105	77	51	48	32	34
29	115	202	109	89	---	718	175	72	51	50	33	31
30	99	243	110	111	---	359	322	69	43	47	34	29
31	79	---	103	111	---	215	---	66	---	44	31	---
TOTAL	2,322	7,393	14,591	6,214	4,805	4,789	9,050	4,106	2,050	2,445	1,312	884
MEAN	74.9	246	471	200	172	154	302	132	68.3	78.9	42.3	29.5
MAX	244	932	1,560	716	488	718	1,090	689	165	195	70	38
MIN	43	59	103	86	88	88	105	55	42	41	31	25
CFSM	0.86	2.84	5.42	2.31	1.98	1.78	3.48	1.53	0.79	0.91	0.49	0.34
IN.	1.00	3.17	6.25	2.66	2.06	2.05	3.88	1.76	0.88	1.05	0.56	0.38

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2005, BY WATER YEAR (WY)

MEAN	45.8	117	189	185	319	221	206	152	89.8	104	54.0	69.2
MAX	74.9	246	471	387	786	417	390	344	154	227	131	144
(WY)	(2005)	(2005)	(2005)	(2002)	(2003)	(2002)	(2003)	(2003)	(1999)	(1999)	(2003)	(2004)
MIN	20.6	24.5	34.9	126	113	113	84.4	43.5	40.1	37.8	27.0	25.6
(WY)	(2001)	(2002)	(2000)	(2000)	(2002)	(2001)	(2001)	(2001)	(2001)	(2000)	(2000)	(1999)

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SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1998 - 2005	
ANNUAL TOTAL	69,727		59,961		144	
ANNUAL MEAN	191		164		235	
HIGHEST ANNUAL MEAN					84.5	
LOWEST ANNUAL MEAN					17	
HIGHEST DAILY MEAN	1,820	Feb 7	1,560	Dec 11	3,580	Feb 17, 2003
LOWEST DAILY MEAN	37	Sep 6	25	Sep 15	17	Oct 20, 2000
ANNUAL SEVEN-DAY MINIMUM	43	Aug 23	27	Sep 9	18	Sep 14, 2000
MAXIMUM PEAK FLOW			2,030	Dec 11	4,520	Feb 17, 2003
MAXIMUM PEAK STAGE			10.85	Dec 11	15.79	Feb 17, 2003
INSTANTANEOUS LOW FLOW			22	Sep 24	a16	Sep 16, 2000
ANNUAL RUNOFF (CFSM)	2.19		1.89		1.66	
ANNUAL RUNOFF (INCHES)	29.88		25.70		22.60	
10 PERCENT EXCEEDS	336		359		271	
50 PERCENT EXCEEDS	119		99		78	
90 PERCENT EXCEEDS	51		37		27	

a Also occurred Oct. 18, 19, 2000.

