03414500 EAST FORK OBEY RIVER NEAR JAMESTOWN, TN

LOCATION.--Lat 36°24'58", long 85°01'35", Fentress County, Hydrologic Unit 05130105, on right bank at bridge 200 ft upstream from bridge on State Highway 52, 0.5 mi upstream from Poplar Cove Creek, 5.3 mi west of Jamestown, and at mile 12.7.

DRAINAGE AREA.--202 mi^2, includes 6.0 mi^2 without surface drainage.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1942 to September 1991. October 1991 to September 1992, miscellaneous water-quality measurements. October 1992 to September 2000, crest-stage partial record station. October 2000 to current year. Prior to February 1943 monthly discharges only, published in WSP 1306.

REVISED RECORDS.--WSP 1276: 1944, 1946(M). WSP 1506: Drainage area.

GAGE.--Water-stage encoder and satellite telemeter at station. Datum of gage is 680.30 ft, Sandy Hook datum. Feb. 24 to April 7, 1943, nonrecording gage 200 ft upstream at same datum.

REMARKS.--No estimated daily discharges. Records good. Periodic observation of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 44,800 ft^3/s, May 27, 1973, gage height, 30.46 ft, from rating curve extended above 32,000 ft^3/s, on basis of slope-area measurement of peak flow; minimum, 3.6 ft^3/s, Sept. 26-28, 1948; minimum gage height, 0.55 ft, Sept. 12-17, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1929 reached a stage of about 30.7 ft, from flood profile by U.S. Army Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 8,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb 6	0700	*35,100	*27.52	Sep 17	1100	20,700	21.25
Mar 6	0530	13,700	17.33				

Minimum discharge, 33 ft^3/s, Aug. 20, 21.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	130	70	522	548	335	261	841	304	691	127	189	93
2	117	67	407	739	299	641	640	312	388	115	140	79
3	108	65	335	760	344	825	524	365	298	112	113	71
4	99	63	319	632	369	637	441	307	422	104	95	60
5	92	74	399	1,150	4,780	604	369	267	416	99	89	54
6	87	113	527	1,260	19,400	6,990	317	241	291	255	87	49
7	83	113	511	834	2,950	1,900	284	205	208	463	75	51
8	78	102	453	643	1,400	1,040	263	174	226	403	64	347
9	73	97	392	550	996	750	242	150	228	237	56	702
10	70	90	556	458	795	586	219	132	207	159	51	430
11	68	86	901	384	663	477	201	121	173	125	47	255
12	67	85	679	343	576	410	467	142	133	112	69	192
13	65	107	543	325	524	351	1,270	153	124	103	82	149
14	66	127	571	304	471	307	1,570	127	117	121	66	118
15	91	115	596	285	433	280	1,430	116	123	138	57	99
16	102	217	523	258	389	294	923	107	153	109	49	89
17	88	527	680	238	356	336	674	169	259	90	44	10,300
18	79	472	658	592	336	486	532	180	219	94	40	2,400
19	74	1,590	664	885	317	507	443	147	148	84	36	918
20	69	1,430	580	661	306	515	375	130	118	72	34	559
21	65	780	493	534	302	1,420	324	112	103	62	39	379
22	63	539	448	450	282	987	287	97	88	58	42	252
23	60	415	474	376	258	709	261	105	80	131	41	178
24	58	426	1,110	324	245	563	272	91	341	109	51	137
25	56	510	878	676	234	464	274	77	339	323	141	112
26	57	438	660	1,170	224	397	823	72	723	362	121	97
27	77	374	533	844	240	345	778	100	435	1,290	86	86
28	101	745	451	654	242	305	564	133	276	621	66	78
29	97	959	390	537	247	281	447	127	194	347	55	72
30	84	683	592	469	---	1,850	365	113	146	216	138	68
31	75	---	632	399	---	1,230	---	850	---	192	150	---
TOTAL	2,499	11,479	17,477	18,282	38,313	26,748	16,420	5,726	7,667	6,833	2,413	18,474
MEAN	80.6	383	564	590	1,321	863	547	185	256	220	77.8	616
MAX	130	1,590	1,110	1,260	19,400	6,990	1,570	850	723	1,290	189	10,300
MIN	56	63	319	238	224	261	201	72	80	58	34	49
CFSM	0.41	1.95	2.88	3.01	6.74	4.40	2.79	0.94	1.30	1.12	0.40	3.14
IN.	0.47	2.18	3.32	3.47	7.27	5.08	3.12	1.09	1.46	1.30	0.46	3.51

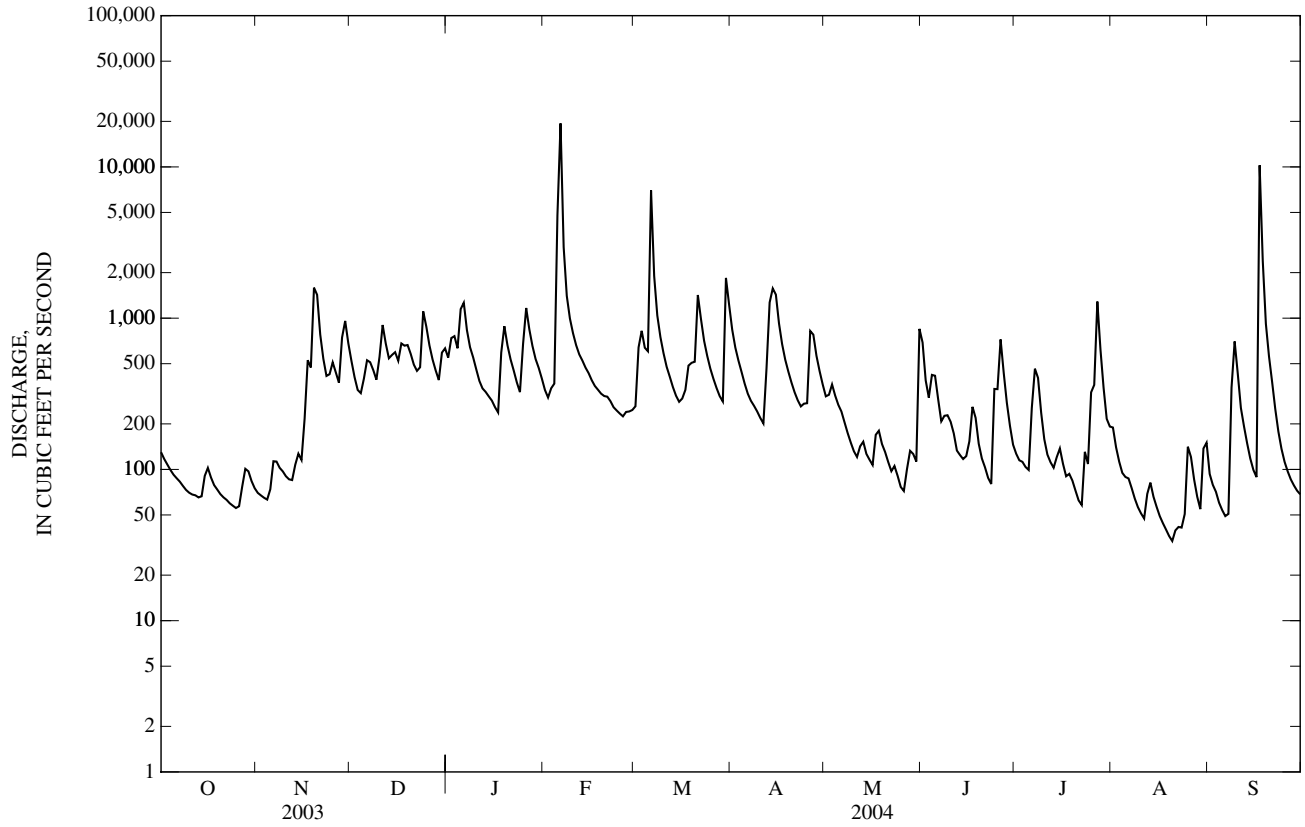
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 2004, BY WATER YEAR (WY)

MEAN	95.6	293	631	778	876	867	616	433	181	117	74.2	97.8
MAX	589	973	2,066	2,253	2,240	2,897	1,369	1,909	682	961	722	616
(WY)	(1990)	(1958)	(1991)	(1950)	(2003)	(1975)	(1977)	(1984)	(1989)	(1967)	(1982)	(2004)
MIN	4.76	8.05	22.1	43.6	161	206	139	66.7	10.9	9.73	10.0	7.18
(WY)	(1948)	(1954)	(1964)	(1981)	(1968)	(1983)	(1986)	(1962)	(1988)	(1944)	(1962)	(1953)

03414500 EAST FORK OBEY RIVER NEAR JAMESTOWN, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1943 - 2004	
ANNUAL TOTAL	221,881		172,331			
ANNUAL MEAN	608		471		420	
HIGHEST ANNUAL MEAN					743	1973
LOWEST ANNUAL MEAN					218	1986
HIGHEST DAILY MEAN	17,700	Feb 16	19,400	Feb 6	23,200	Dec 30, 1969
LOWEST DAILY MEAN	21	Aug 30	34	Aug 20	3.6	Sep 26, 1948
ANNUAL SEVEN-DAY MINIMUM	23	Aug 24	39	Aug 17	3.9	Sep 22, 1948
MAXIMUM PEAK FLOW			35,100	Feb 6	a44,800	May 27, 1973
MAXIMUM PEAK STAGE			27.52	Feb 6	a30.46	May 27, 1973
INSTANTANEOUS LOW FLOW			b33	Aug 20	3.6	Sep 26, 1948
ANNUAL RUNOFF (CFSM)	3.10		2.40		2.14	
ANNUAL RUNOFF (INCHES)	42.11		32.71		29.09	
10 PERCENT EXCEEDS	977		803		941	
50 PERCENT EXCEEDS	266		265		159	
90 PERCENT EXCEEDS	58		68		15	

a From rating curve extended above 32,000 ft^3/s, on basis of slope-area measurement.
b Also occurred Aug. 21.



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WATER-QUALITY DATA

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Suspended sediment concentration mg/L (80154)
OCT					
01...	1320	135	189	15.0	3
DEC					
09...	1400	373	125	9.0	9
APR					
07...	0715	301	141	10.0	10
MAY					
24...	1335	86	195	21.5	2

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