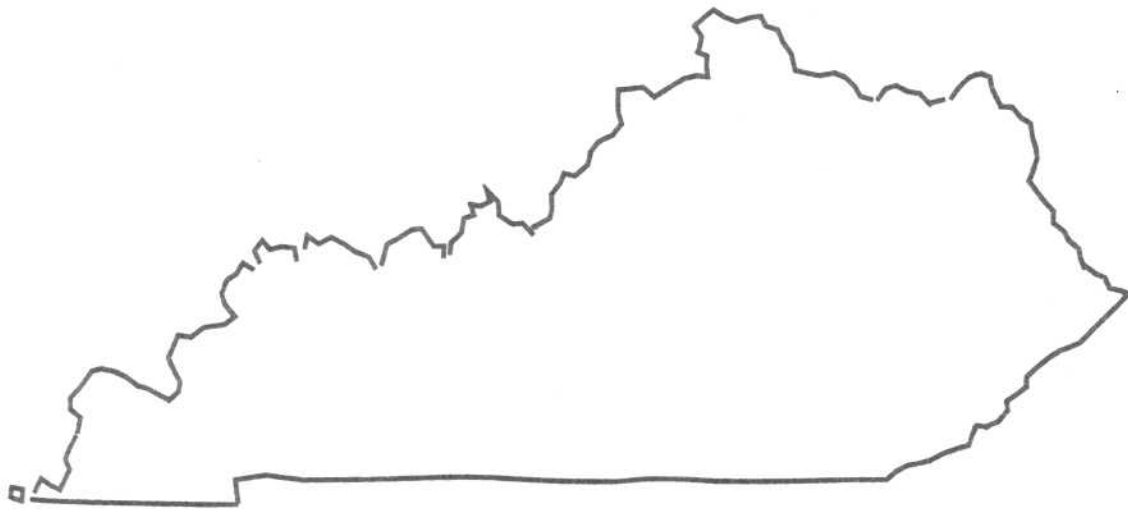


# Water Resources Data Kentucky Water Year 1998

Water-Data Report KY-98-1



U.S. Department of the Interior  
U.S. Geological Survey



Prepared in cooperation with the  
Commonwealth of Kentucky  
and with other agencies

## GREEN RIVER BASIN

03308500 GREEN RIVER AT MUNFORDVILLE, KY

LOCATION.--Lat 37°16'05", long 85°53'10", Hart County, Hydrologic Unit 05110001, on right bank at downstream side of pier of bridge on U.S. Highway 31W at Munfordsville, and at mile 225.9.

DRAINAGE AREA.--1,673 mi<sup>2</sup>, of which about 180 mi<sup>2</sup> does not contribute directly to surface runoff.

PERIOD OF RECORD.--February 1915 to December 1922, October 1927 to September 1931, December 1936 to February 1937 (in WSP 838), October 1937 to current year. Monthly discharge only October 1937 to March 1938, published in WSP 1305. Gage-height records collected at same site since 1924 are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 1555: 1916(M), drainage area. WSP 1909: 1937.

GAGE.--Water-stage recorder. Datum of gage is 451.70 ft above sea level. See WDR KY-90-1 for history of changes prior to Nov. 29, 1940.

REMARKS.--Estimated daily discharges: Oct. 31 to Nov. 2, 15-17, 22, 26-28, April 9-15, July 25-26, and Aug. 9. Records good except bot estimated periods, which are fair. Flow regulated by Green River Lake beginning February 1969 (station 03305990).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of January 1913 reached a stage of 54.0 ft at former site, discharge, 67,000 ft<sup>3</sup>/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	375	1040	5220	2040	2860	4090	3830	13100	5510	5360	618	217
2	374	1080	3720	1860	2800	3970	4320	10100	10100	4820	657	219
3	371	1110	2930	1210	2760	3900	3900	7940	4090	4630	593	211
4	369	1110	2540	1310	2810	3840	5800	7450	2030	4540	515	208
5	365	1100	2370	1730	3670	3750	7070	7840	4610	3820	380	206
6	319	1100	2090	2710	4570	3520	4760	8250	8980	3690	339	204
7	299	1120	1350	6720	4530	3460	4050	8400	5820	3450	318	203
8	295	1130	1220	20200	5500	3350	3790	10600	4780	2910	314	201
9	266	1130	1160	18200	7030	9440	4460	9230	7460	2910	328	195
10	238	1130	1610	9270	8250	10100	4120	8260	14800	1960	341	189
11	237	1110	3700	8140	9130	8240	3930	8060	8170	1510	323	189
12	243	1090	2730	8060	9960	7680	3790	7780	4340	1090	301	189
13	247	1080	2570	7820	10100	7160	3700	7170	3890	1020	304	191
14	264	1160	2230	7720	9430	6740	3590	5450	6080	976	302	191
15	280	1250	2030	7880	9060	5630	3510	3750	8390	873	376	189
16	297	1280	1860	8020	8750	4800	3480	3300	8340	844	554	187
17	614	1220	1630	8020	9030	4770	20200	2450	5530	972	368	189
18	884	1160	958	7760	9310	4740	18500	1620	5620	1100	324	200
19	883	1110	837	7520	9970	4460	9600	1130	5800	939	293	239
20	872	1080	782	7260	9990	9740	9370	1020	4320	811	278	261
21	858	1090	747	7020	9490	18300	6890	899	3800	757	280	281
22	852	1200	762	6570	8960	12000	7220	818	5320	724	269	251
23	848	1300	863	5890	8530	8650	7780	792	6560	706	258	242
24	850	1300	1060	5320	7430	8250	7820	798	8600	776	248	215
25	866	1220	2220	5010	5600	8340	7330	803	7040	904	238	209
26	884	1180	2850	4450	4980	7970	6890	1460	6870	1030	232	201
27	930	1150	2140	4160	4280	7550	6630	2180	6880	1160	224	198
28	960	1110	1920	4010	4230	6670	7100	2750	6610	1110	222	194
29	996	1060	2390	3690	---	6400	6750	2380	6260	1050	216	191
30	957	2450	2340	3070	---	5630	7240	1910	5660	683	214	192
31	998	---	2210	2950	---	4190	---	867	---	540	214	---
TOTAL	18091	35650	63039	195590	193010	207330	197420	148557	192260	57665	10441	6252
MEAN	584	1188	2034	6309	6893	6688	6581	4792	6409	1860	337	208
MAX	998	2450	5220	20200	10100	18300	20200	13100	14800	5360	657	281
MIN	237	1040	747	1210	2760	3350	3480	792	2030	540	214	187

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 1998, BY WATER YEAR (WY)

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	
MEAN	1390	2497	4228	4708	5368	4988	3713	3472	2463	1144	900	1301																		
MAX	5337	5187	12800	12130	10710	12040	8632	13250	7209	3132	3642	6104																		
(WY)	1976	1978	1979	1974	1991	1975	1994	1983	1997	1973	1977	1979																		
MIN	244	210	545	255	1952	1066	552	487	214	280	202	192																		
(WY)	1987	1972	1981	1981	1992	1983	1986	1988	1988	1993	1993	1983																		

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1970 - 1998	
ANNUAL TOTAL	1231764		1325305			
ANNUAL MEAN	3375		3631		3002	
HIGHEST ANNUAL MEAN					5285	
LOWEST ANNUAL MEAN					1348	
HIGHEST DAILY MEAN	40200	Mar 3	20200	Jan 8	62800	May 8 1984
LOWEST DAILY MEAN	220	Sep 18	187	Sep 16	157	Jul 8 1988
ANNUAL SEVEN-DAY MINIMUM	245	Sep 14	189	Sep 10	160	Jul 5 1988
INSTANTANEOUS PEAK FLOW			22400	Apr 17	76800	Mar 1 1962
INSTANTANEOUS PEAK STAGE			28.50	Apr 17	57.72	Mar 1 1962
INSTANTANEOUS LOW FLOW					157	Jul 8 1988
10 PERCENT EXCEEDS	7130		8360		7090	
50 PERCENT EXCEEDS	1820		2370		1590	
90 PERCENT EXCEEDS	320		243		292	

GREEN RIVER BASIN

03310300 NOLIN RIVER AT WHITE MILLS, KY

LOCATION.--Lat 37°33'03", long 86°02'43", Hardin County, Hydrologic Unit 05110001, on right bank, 0.8 mi southwest of White Mills, 1.6 mi downstream from bridge on State Highway 84, and at mile 78.7.

DRAINAGE AREA.--357 mi<sup>2</sup>, of which about 120 mi<sup>2</sup> does not contribute directly to surface runoff.

PERIOD OF RECORD.--October 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 583.08 ft above sea level. Prior to Jan. 8, 1960, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: May 5, 6, 24-25, June 14 to Aug 3. Records good except for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	63	66	176	183	285	386	477	1300	1510	1180	265	75
2	63	65	207	163	273	358	467	1130	673	715	178	73
3	61	68	154	160	262	337	405	942	447	473	109	72
4	62	71	139	156	259	318	386	829	814	311	141	68
5	61	69	141	153	279	300	362	670	1480	210	138	68
6	60	71	134	305	285	282	328	560	1010	242	136	68
7	61	70	121	944	284	275	307	868	639	183	141	65
8	58	77	113	2750	298	462	303	1060	508	388	140	61
9	57	77	113	2190	359	2780	705	883	1000	820	144	61
10	56	74	523	1530	628	1370	525	763	981	459	160	60
11	55	69	603	1140	1060	896	415	689	1460	249	145	62
12	56	66	345	984	1560	712	357	619	1620	163	131	62
13	57	71	261	1010	1140	633	349	559	980	123	121	62
14	62	144	213	908	885	579	410	511	3160	100	115	61
15	73	130	181	820	742	515	3130	469	3220	98	111	59
16	76	108	157	761	715	472	4020	436	3080	204	106	58
17	73	86	137	681	842	461	1950	404	1760	553	103	57
18	69	77	121	603	971	477	1650	371	668	501	100	57
19	67	72	107	547	919	485	1370	347	443	327	97	61
20	70	67	95	497	833	2310	1140	335	327	218	93	64
21	66	66	86	455	752	3260	996	324	525	1430	92	66
22	63	81	142	427	657	1780	873	337	806	1560	90	63
23	63	97	206	438	614	1260	769	457	1490	322	88	61
24	67	93	244	466	560	1010	684	650	2360	200	86	59
25	71	83	749	423	501	855	618	850	1230	148	83	58
26	78	77	534	392	464	758	647	500	465	115	82	57
27	73	71	385	372	446	655	756	451	311	94	80	55
28	69	68	316	358	424	585	1090	363	237	80	79	54
29	66	67	270	343	---	532	2080	322	188	69	77	54
30	63	85	247	323	---	475	1660	299	630	200	75	53
31	63	---	217	302	---	435	---	455	---	300	75	---
TOTAL	2002	2386	7437	20784	17297	26013	29229	18753	34022	12035	3581	1854
MEAN	64.6	79.5	240	670	618	839	974	605	1134	388	116	61.8
MAX	78	144	749	2750	1560	3260	4020	1300	3220	1560	265	75
MIN	55	65	86	153	259	275	303	299	188	69	75	53
CFSM	.27	.34	1.01	2.83	2.61	3.54	4.11	2.55	4.79	1.64	.49	.26
IN.	.31	.37	1.17	3.26	2.71	4.08	4.59	2.94	5.34	1.89	.56	.29

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 1998, BY WATER YEAR (WY)

MEAN	154	290	636	695	891	1007	765	593	355	248	173	200
MAX	692	1206	2356	1603	3807	3353	2447	2715	1630	972	966	2258
(WY)	1978	1989	1979	1974	1989	1997	1972	1983	1997	1967	1967	1979
MIN	37.0	48.6	44.7	55.5	156	228	200	131	71.9	83.2	55.5	46.3
(WY)	1970	1964	1964	1981	1964	1983	1986	1976	1988	1994	1962	1983

SUMMARY STATISTICS FOR 1997 CALENDAR YEAR FOR 1998 WATER YEAR WATER YEARS 1960 - 1998

ANNUAL TOTAL	249822	175393	
ANNUAL MEAN	684	481	499
HIGHEST ANNUAL MEAN			971
LOWEST ANNUAL MEAN			283
HIGHEST DAILY MEAN	20000	4020	20000
LOWEST DAILY MEAN	55	53	32
ANNUAL SEVEN-DAY MINIMUM	57	56	33
INSTANTANEOUS PEAK FLOW		4680	24500
INSTANTANEOUS PEAK STAGE		16.03	36.46
INSTANTANEOUS LOW FLOW			31
ANNUAL RUNOFF (CFSM)	2.89	2.03	2.10
ANNUAL RUNOFF (INCHES)	39.21	27.53	28.60
10 PERCENT EXCEEDS	1400	1110	1080
50 PERCENT EXCEEDS	280	300	245
90 PERCENT EXCEEDS	67	63	61

## GREEN RIVER BASIN

03311000 NOLIN RIVER AT KYROCK, KY

LOCATION.--Lat 37°16'42", long 86°14'51", Edmonson County, Hydrologic Unit 05110001, in intake structure of Nolin River Dam on Nolin River, 0.3 mi upstream from Dismal Creek, 1.1 mi northeast of Kyrock, and at mile 7.8.

DRAINAGE AREA.--703 mi<sup>2</sup>, of which about 223 mi<sup>2</sup> does not contribute directly to surface runoff. Area at site used Oct. 1, 1960, to Sept. 30, 1973, 707 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1930 to March 1932, July 1939 to September 1950, October 1960 to current year.

GAGE.--Water-stage recorder and outflow gate dials. Datum of gage 400 ft above sea level. See WDR KY-90-1 for history of changes prior to Sept. 30, 1973.

REMARKS.--No estimated daily discharges. Water-discharge records not rated, see COOPERATION. Maximum gage height for period of record affected by backwater from the Green River. Flow regulated since March 1963 by Nolin Lake (station 03310900). Discharge records computed using gate openings.

COOPERATION.--Record of discharge furnished by U.S. Army Corps of Engineers.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known since 1854, 26.35 ft, in January 1937, from floodmarks, at site and datum used in 1939-50.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	396	1560	137	482	476	560	241	563	534	3360	267	52
2	396	1550	160	482	476	707	242	568	536	2650	266	52
3	329	1540	365	482	476	553	243	1140	781	1430	266	52
4	263	1530	476	481	405	476	243	2040	1120	1120	266	52
5	263	1530	310	481	333	476	244	2610	1120	834	266	52
6	262	1520	238	482	334	476	189	2850	1120	267	266	52
7	262	1510	238	484	334	476	121	2940	1120	267	266	52
8	262	1500	238	367	334	477	73	2840	1310	446	266	52
9	262	1500	238	249	585	479	49	2830	318	535	266	52
10	262	1490	403	251	711	484	49	2820	272	535	266	52
11	262	1480	478	1190	974	1450	50	2810	273	535	266	52
12	262	1470	479	3160	1700	2400	50	2800	274	534	266	52
13	261	1170	479	4010	1880	2220	50	2790	1350	534	189	52
14	403	987	479	3970	1870	1730	50	2120	2240	534	131	52
15	812	983	480	3920	1870	1260	50	871	1040	534	131	151
16	1100	980	478	3390	1860	918	51	552	563	535	131	200
17	1100	976	478	2230	1260	734	52	552	1120	676	131	200
18	1090	972	477	1900	1230	481	53	552	732	1130	131	200
19	1090	969	477	1890	1410	312	53	643	54	1120	104	200
20	1090	964	476	1880	1610	207	289	552	54	1120	131	200
21	1090	960	476	1330	1670	216	1180	540	722	1120	76	239
22	1080	957	476	941	1860	224	1970	535	1140	1120	52	266
23	805	953	476	939	1250	229	3020	535	1150	1120	52	266
24	308	948	476	938	939	231	3390	535	1940	726	52	266
25	86	944	478	649	939	233	3370	536	2290	533	52	266
26	86	940	480	477	938	235	3350	889	2970	400	52	265
27	562	935	481	477	937	236	3340	1120	3430	266	52	265
28	1080	518	481	477	706	237	2640	1120	3410	266	52	265
29	1420	95	482	538	---	238	1660	898	3390	266	52	265
30	1570	95	482	601	---	239	841	533	3380	267	52	265
31	1560	---	482	476	---	240	---	533	---	267	52	---
TOTAL	20074	33526	12854	39624	29367	19434	27203	43217	39753	25047	4868	4507
MEAN	648	1118	415	1278	1049	627	907	1394	1325	808	157	150
MAX	1570	1560	482	4010	1880	2400	3390	2940	3430	3360	267	266
MIN	86	95	137	249	333	207	49	533	54	266	52	52

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1998, BY WATER YEAR (WY)

MEAN	925	1351	1264	1560	1613	1244	906	1099	883	523	293	519
MAX	4959	3393	4491	4852	4541	5533	4777	4161	4437	2009	1335	2266
(WY)	1980	1973	1978	1979	1985	1989	1975	1984	1983	1967	1967	1982
MIN	.000	452	1.50	122	91.4	203	.63	.39	.000	.000	.000	.000
(WY)	1976	1964	1985	1981	1992	1983	1966	1964	1964	1964	1964	1975

## SUMMARY STATISTICS FOR 1997 CALENDAR YEAR FOR 1998 WATER YEAR WATER YEARS 1964 - 1998

ANNUAL TOTAL	484597	299474	
ANNUAL MEAN	1328	820	1012
HIGHEST ANNUAL MEAN			1880
LOWEST ANNUAL MEAN			597
HIGHEST DAILY MEAN	6910	4010	10300
LOWEST DAILY MEAN	50	49	.00
ANNUAL SEVEN-DAY MINIMUM	127	50	.00
INSTANTANEOUS PEAK FLOW			22700
INSTANTANEOUS PEAK STAGE		32.22	59.27
10 PERCENT EXCEEDS	4570	1920	2600
50 PERCENT EXCEEDS	533	482	478
90 PERCENT EXCEEDS	200	54	54

## GREEN RIVER BASIN

03312765 BEAVER CREEK AT HWY 31 E NEAR GLASGOW, KY

LOCATION.--Lat 37°02'05", long 85°54'13", Barren County, Hydrologic Unit 05110002, on downstream side of bridge on U.S. Highway 31 E, 2.7 mi northeast of Glasgow, 8.3 mi upstream from Little Beaver Creek, and at mile 23.1.

DRAINAGE AREA.--49.6 mi<sup>2</sup>.

PERIOD OF RECORD.--September 1991 to current year.

GAGE.--Water-stage recorder. Datum of gage is 651.43 ft above sea level.

REMARKS.--Estimated daily discharges: Oct. 10 to Mar. 27 and Sept. 23-30. Records fair except for period of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.9	5.5	18	24	21	36	78	257	46	136	37	15
2	6.8	4.8	35	22	20	33	61	220	40	71	29	15
3	6.8	4.1	30	21	19	30	79	190	51	105	27	15
4	6.2	3.6	25	22	18	28	278	191	62	59	25	14
5	6.4	3.2	22	25	17	26	164	166	349	41	24	14
6	6.3	3.0	19	30	28	24	110	129	202	31	23	13
7	6.1	3.0	18	50	60	22	91	160	97	37	23	13
8	5.0	5.0	18	160	100	31	224	152	68	620	23	13
9	4.5	8.0	15	350	95	110	167	113	770	210	27	13
10	4.0	6.8	14	120	130	240	127	107	581	129	26	12
11	3.5	5.8	19	50	190	120	102	107	361	100	23	12
12	3.0	4.7	44	32	260	82	89	85	222	81	22	13
13	2.5	4.0	35	27	170	63	81	72	184	66	21	12
14	2.9	3.7	28	25	110	52	110	64	183	61	21	12
15	3.9	5.8	24	24	85	46	99	55	1080	56	25	12
16	5.2	11	20	30	80	41	1810	48	266	90	21	13
17	7.0	20	17	49	200	36	1690	41	139	80	20	16
18	9.0	16	15	40	400	34	518	37	75	56	19	19
19	10.8	12.8	14	37	1200	77	715	32	53	29	19	20
20	8.0	11	13	34	166	175	391	29	39	42	18	74
21	6.9	9.6	12	33	102	390	272	27	32	39	18	31
22	6.2	8.6	11	31	87	270	222	27	25	36	17	20
23	5.4	22	10	28	73	200	195	29	28	38	17	14
24	4.9	16	15	35	60	160	162	24	25	41	17	12
25	4.6	13	22	56	54	140	110	27	15	33	16	10
26	4.2	10	30	48	48	115	93	57	11	30	16	9.0
27	3.7	9.6	40	40	43	95	82	46	8.3	29	16	8.0
28	10	8.8	36	35	39	80	75	30	6.7	28	15	7.0
29	10.5	8.4	32	31	---	70	68	24	44	25	16	6.6
30	7.6	8.0	29	27	---	61	133	20	527	25	15	6.2
31	6.5	---	27	23	---	57	---	19	---	42	15	---
TOTAL	185.3	255.8	707	1559	3875	2944	8396	2585	5590.0	2466	651	463.8
MEAN	5.98	8.53	22.8	50.3	138	95.0	280	83.4	186	79.5	21.0	15.5
MAX	11	22	44	350	1200	390	1810	257	1080	620	37	74
MIN	2.5	3.0	10	21	17	22	61	19	6.7	25	15	6.2
CFSM	.12	.17	.46	1.01	2.79	1.91	5.64	1.68	3.76	1.60	.42	.31
IN.	.14	.19	.53	1.17	2.91	2.21	6.30	1.94	4.19	1.85	.49	.35

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1998, BY WATER YEAR (WY)

	1992	1993	1994	1995	1996	1997	1998
MEAN	17.1	51.2	106	143	180	257	144
MAX	39.6	169	246	206	489	477	307
(WY)	1997	1997	1997	1995	1994	1997	1994
MIN	5.98	8.53	22.8	50.3	78.8	95.0	49.4
(WY)	1998	1998	1998	1998	1992	1998	1994

SUMMARY STATISTICS FOR 1997 CALENDAR YEAR FOR 1998 WATER YEAR WATER YEARS 1992 - 1998

ANNUAL TOTAL	38062.1	29677.9	
ANNUAL MEAN	104	81.3	99.6
HIGHEST ANNUAL MEAN			142
LOWEST ANNUAL MEAN			49.7
HIGHEST DAILY MEAN	2060	Mar 3	1810
LOWEST DAILY MEAN	2.5	Oct 13	2.5
ANNUAL SEVEN-DAY MINIMUM	3.5	Oct 9	3.5
INSTANTANEOUS PEAK FLOW			4490
INSTANTANEOUS PEAK STAGE			13.52
ANNUAL RUNOFF (CFSM)	2.10		1.64
ANNUAL RUNOFF (INCHES)	28.55		22.26
10 PERCENT EXCEEDS	217		183
50 PERCENT EXCEEDS	30		29
90 PERCENT EXCEEDS	6.3		6.8



GREEN RIVER BASIN

03316500 GREEN RIVER AT PARADISE, KY

LOCATION.--Lat 37°15'50", long 86°58'40", Muhlenberg County, Hydrologic Unit 05110003, on left bank of reservation of Tennessee Valley Authority generating plant, 0.4 mi southeast of Paradise, 1.1 mi downstream from Jacobs Creek, 2.8 mi upstream from Pond Creek, and at mile 98.8.

DRAINAGE AREA.--6,183 mi<sup>2</sup>, of which about 1,380 mi<sup>2</sup> does not contribute directly to surface runoff.

PERIOD OF RECORD.--October 1939 to September 1950 (published as "at Green River"), October 1959 to September 1960 (low-water records only), October 1960 to September 1981 and July 1991 to current year.

GAGE.--Water-stage recorder. Datum of gage is 363.19 ft above sea level (levels by Tennessee Valley Authority). See WDR KY-81-1 for history of changes prior to October 31, 1979. Auxiliary water-stage recorder on U.S. Highway 62 bridge at Rockport, 4.4 mi downstream.

REMARKS.--Estimated daily discharges: June 10-22. Records fair except for period of estimated record, which is poor. Peak stage for year effected by backwater. Flow regulated by Green River Lake beginning February 1969, Nolin River Lake beginning March 1963, and Barren River Lake beginning March 1964.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1950	5110	4510	5180	5380	6680	5440	25700	6340	13900	2840	697
2	1850	5260	6250	4760	4980	5890	5430	28000	6610	13600	2490	648
3	1660	5300	7670	4550	4560	5680	5440	28000	11800	12300	2370	635
4	1570	5250	6760	4320	4270	5500	5850	24700	11600	10600	2270	563
5	1500	5260	5820	3980	4250	5190	7070	21600	9770	10100	2140	538
6	1450	5300	5180	4440	4750	4940	8840	19900	14400	9410	2020	560
7	1430	5300	4460	6720	5900	4510	7730	19600	18300	8340	1950	543
8	1370	5320	3700	14600	7160	4090	6070	20400	16100	9550	2080	561
9	1290	5400	3150	23100	8530	4860	6590	21300	16500	10900	2840	540
10	1280	5560	3380	27600	10500	7680	7900	20500	27000	10500	3440	529
11	1210	5580	5300	25800	12300	11700	7610	19200	30000	9260	3450	525
12	1110	5550	6460	18800	14100	12300	6370	19900	35000	7760	2920	527
13	1130	5580	6510	18100	15500	11900	5110	18200	38000	6720	2380	532
14	1190	5640	5780	17300	15900	11300	5160	16200	35000	6060	2100	505
15	1250	5450	5170	15700	14600	10400	6270	14600	37000	6600	1880	510
16	1440	5390	4490	14200	13900	9500	12200	12300	38000	7410	1710	542
17	2490	5280	3900	13900	15300	8470	27500	10400	30000	9950	1610	581
18	3720	5180	3530	13800	19300	7400	34000	9260	22000	10700	1600	628
19	4280	5090	3220	13700	21000	6670	36800	8180	18000	9050	1540	834
20	4480	5000	2870	12900	20100	8560	37600	7270	14000	7590	1380	716
21	4400	5000	2610	12300	18800	13200	35400	6640	13000	6700	1230	729
22	4450	5090	2620	11600	17700	18900	30100	6580	16000	6150	1120	780
23	4460	5140	2950	10900	16600	19200	24400	6830	16600	5440	1050	816
24	4220	5120	3290	9930	14400	13600	21200	6440	15000	5130	941	803
25	3510	5050	4640	9020	12300	10800	19400	6860	15200	5560	895	801
26	2790	5030	5910	8320	9900	9450	17700	8510	14600	5940	869	819
27	2440	4930	6630	7590	8510	8520	16500	9030	14100	5310	810	832
28	2280	4880	6390	7020	7640	7610	16000	9460	14100	4710	763	818
29	2950	4530	5760	6650	---	6810	15700	9640	13900	4240	762	831
30	4190	4060	5530	6440	---	6080	19100	9140	13900	3980	735	831
31	4870	---	5530	6030	---	5590	---	7640	---	3480	695	---
TOTAL	78210	155630	149970	359250	328130	272980	460480	451980	581820	246940	54880	19774
MEAN	2523	5188	4838	11590	11720	8806	15350	14580	19390	7966	1770	659
MAX	4870	5640	7670	27600	21000	19200	37600	28000	38000	13900	3450	834
MIN	1110	4060	2610	3980	4250	4090	5110	6440	6340	3480	695	505

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 1998, BY WATER YEAR (WY)

MEAN	5192	8414	13920	16590	16370	18190	14320	10780	8520	4200	2834	3870
MAX	16950	19310	42250	36020	26410	41520	34210	25950	20190	8811	8743	22550
(WY)	1980	1980	1979	1974	1994	1997	1979	1995	1981	1973	1971	1979
MIN	2463	4030	2103	954	6083	6150	4441	2492	2024	1702	623	659
(WY)	1981	1972	1981	1981	1977	1981	1978	1976	1972	1993	1993	1998

SUMMARY STATISTICS

	FOR 1997 CALENDAR YEAR	FOR 1998 WATER YEAR	WATER YEARS 1970 - 1998
ANNUAL TOTAL	4147781	3160044	
ANNUAL MEAN	11360	8658	10300
HIGHEST ANNUAL MEAN			18460
LOWEST ANNUAL MEAN			6044
HIGHEST DAILY MEAN	83800	Mar 7	83800 Mar 7 1997
LOWEST DAILY MEAN	939	Sep 18	277 Sep 13 1995
ANNUAL SEVEN-DAY MINIMUM	984	Sep 12	320 Sep 8 1995
INSTANTANEOUS PEAK FLOW			39000 Jun 12
INSTANTANEOUS PEAK STAGE			24.03 Apr 21
INSTANTANEOUS LOW FLOW			250 Oct 23 1940
10 PERCENT EXCEEDS	25100	19200	23600
50 PERCENT EXCEEDS	6210	5940	6390
90 PERCENT EXCEEDS	1280	885	1410

## GREEN RIVER BASIN

03320000 GREEN RIVER AT LOCK 2, AT CALHOUN, KY

LOCATION.--Lat 37°32'02", long 87°15'50", McLean County, Hydrologic Unit 05110005, 870 ft upstream from Lock and Dam 2, on right bank 0.2 mi downstream from bridge on State Highway 81 at Calhoun, 0.2 mi upstream from Long Falls Creek, and at mile 63.3.

DRAINAGE AREA.--7,566 mi<sup>2</sup>, of which about 1,540 mi<sup>2</sup> does not contribute directly to surface runoff.

PERIOD OF RECORD.--March 1930 to current year. Prior to October 1958, published as "at Livermore."

REVISED RECORDS.--WSP 1385: 1939. WDR KY-82-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 353.95 ft above sea level. Auxiliary water-stage recorder at Livermore, 8.0 mi upstream at datum 360.11 ft above sea level. See WDR KY-88-1 for history of changes prior to Sept. 30, 1958.

REMARKS.--Estimated daily discharges: Jan. 15-19, and May 2-8, Sept. 8-10. Records good except for discharges below 1000 ft<sup>3</sup>/s, and periods of estimated record which are fair. Flow regulated by Green River Lake beginning February 1969, Nolin Lake beginning March 1963, Barren River Lake beginning March 1964, and Rough River Lake, October 1959.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2020	6140	5220	6290	6210	7930	6630	33700	7540	17100	3370	750
2	1910	6340	6940	5750	5600	6920	6740	37000	7090	16900	2900	711
3	1730	6420	8890	5440	5100	6540	6670	36000	12700	16000	2780	694
4	1640	6390	8020	5210	4650	6320	6940	34000	13800	14400	2650	624
5	1590	6370	6770	4770	4690	5980	8120	31000	11200	13100	2470	602
6	1530	6370	5960	5320	5160	5670	10500	28000	15500	11400	2350	617
7	1480	6380	5130	8450	6560	5280	9570	26000	19500	9960	2240	617
8	1430	6410	4300	17000	8100	4780	7500	27000	18200	11200	2390	620
9	1350	6510	3640	25800	9760	5260	7490	27700	18100	12400	3640	610
10	1300	6680	3740	31100	12200	8430	9220	27100	29100	12200	4080	600
11	1280	6730	5810	31200	15000	13600	9300	25500	34900	10900	4200	590
12	1220	6700	7460	25900	16900	14900	7980	26000	37800	9050	3560	592
13	1140	6730	7670	22500	18000	14600	6410	24700	40000	7830	2840	594
14	1160	6870	6800	21700	18800	13700	6290	21900	37200	7060	2400	588
15	1200	6640	6020	19000	18200	12700	7830	18700	38800	8140	2160	569
16	1380	6450	5230	18000	17300	11500	16100	15600	39900	9030	1960	556
17	2600	6480	4470	17000	18500	10400	31500	13300	35400	11400	1870	590
18	4420	6380	4090	16000	23400	9180	38500	11800	25700	12800	1890	680
19	5120	6250	3750	16000	26000	8170	41800	10100	19000	10900	1800	981
20	5400	6140	3190	15400	25800	11400	43500	8660	16000	8990	1570	839
21	5420	6070	2870	14600	24100	16500	43800	7750	15400	7870	1460	799
22	5400	6130	2880	13600	21800	22000	41800	7860	18200	7240	1370	815
23	5420	6230	3280	12500	19700	24600	36100	8160	19600	6380	1290	912
24	5150	6250	3830	11500	17600	18700	30600	7690	18400	5890	1200	923
25	4330	6220	5270	10400	15000	14100	27300	8150	18500	6220	1130	951
26	3330	6100	7060	9610	12100	11500	24400	10500	18200	6920	1040	996
27	2690	6030	7920	8710	10100	10500	22400	11100	17100	6200	965	942
28	2620	5860	7720	8120	9050	9060	21700	11500	17000	5520	911	952
29	3450	5480	6920	7620	---	8060	22400	11500	16900	4970	874	949
30	4960	4950	6570	7390	---	7250	26300	11200	17200	4650	832	960
31	5850	---	6530	7020	---	6650	---	9190	---	4180	770	---
TOTAL	89520	188700	173950	428900	395380	332180	585390	588360	653930	296800	64962	22223
MEAN	2888	6290	5611	13840	14120	10720	19510	18980	21800	9574	2096	741
MAX	5850	6870	8890	31200	26000	24600	43800	37000	40000	17100	4200	996
MIN	1140	4950	2870	4770	4650	4780	6290	7690	7090	4180	770	556

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 1998, BY WATER YEAR (WY)

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
MEAN	5583	10660	17020	19230	22630	20630	16130	13690	9334	4871	2927	4319																	
MAX	19100	22770	46530	41100	52100	53330	42430	50460	23850	12260	8763	27360																	
(WY)	1980	1980	1979	1974	1989	1997	1979	1983	1981	1989	1971	1979																	
MIN	2138	4874	2496	1223	7116	7479	2260	1706	541	1386	550	741																	
(WY)	1988	1972	1981	1981	1977	1981	1986	1988	1988	1988	1991	1998																	

## SUMMARY STATISTICS

	FOR 1997 CALENDAR YEAR	FOR 1998 WATER YEAR	WATER YEARS 1970 - 1998
ANNUAL TOTAL	5226423	3820295	
ANNUAL MEAN	14320	10470	12200
HIGHEST ANNUAL MEAN			22070
LOWEST ANNUAL MEAN			7249
HIGHEST DAILY MEAN	85200	Mar 7	85200
LOWEST DAILY MEAN	983	Sep 17	291
ANNUAL SEVEN-DAY MINIMUM	1060	Sep 12	329
INSTANTANEOUS PEAK FLOW			44200
INSTANTANEOUS PEAK STAGE			23.91
INSTANTANEOUS LOW FLOW			42.40
10 PERCENT EXCEEDS	36100		280
50 PERCENT EXCEEDS	7540	25600	30700
90 PERCENT EXCEEDS	1400	6940	7610
		1090	1470



## GREEN RIVER BASIN

03320500 POND RIVER NEAR APEX, KY

LOCATION.--Lat 37°07'20", long 87°19'10", Muhlenberg County, Hydrologic Unit 05110006, on downstream side of right pier of bridge on State Highway 189, 1.1 mi downstream from Coal Creek, 2.1 mi northeast of Apex, 5.7 mi upstream from West Fork, and at mile 62.8.

DRAINAGE AREA.--194 mi<sup>2</sup>.

PERIOD OF RECORD.--August 1940 to current year. October 1953 to September 1971, published as "East Fork Pond River near Apex."

REVISED RECORDS.--WSP 1083: 1942-46. WSP 1555: 1945-46(P), drainage area, WRD KY-93: 1989-91(P), WRD KY-96: 1989-96(P).

GAGE.--Water-stage recorder. Datum of gage is 384.53 ft above sea level. Prior to Aug. 21, 1942, nonrecording gage at same site. Prior to Oct. 1, 1974, at datum 6.11 ft higher.

REMARKS.--Estimated daily discharges: Oct. 1 to Nov. 1, Nov. 18 to Jan. 9, April 28-29, June 13-21 and Sept. 7-30. Records fair except for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.38	2.0	26	50	41	122	155	1350	44	109	14	1.5
2	.34	2.4	28	46	38	110	197	1120	37	91	27	1.6
3	.40	2.2	32	40	36	99	176	1020	29	67	19	1.6
4	.44	2.1	36	34	34	91	246	975	27	46	13	1.4
5	.40	2.2	42	32	38	82	263	836	435	31	6.9	1.2
6	.28	2.1	48	40	43	74	207	607	908	21	3.8	1.2
7	.24	2.0	42	100	49	81	166	566	606	15	4.3	.98
8	.22	1.9	40	800	75	72	144	743	324	19	5.4	.82
9	.24	1.7	38	700	148	84	270	564	2600	27	25	.70
10	.28	1.5	40	389	204	108	293	372	4510	32	39	.60
11	.30	1.5	54	201	227	103	227	256	3240	25	46	.50
12	.36	1.2	64	142	371	88	169	185	2020	18	113	.60
13	.46	1.4	58	127	314	79	130	139	1500	12	212	.70
14	.70	1.6	52	114	204	71	381	109	1100	9.2	142	.64
15	.60	1.9	48	102	148	63	620	89	1200	30	95	.60
16	.50	2.1	42	91	216	58	1490	74	900	183	65	.58
17	.44	2.3	40	82	1210	67	2340	62	700	194	43	.56
18	.38	2.6	38	74	1790	100	1740	50	500	138	27	.70
19	.34	3.0	36	67	1400	156	1400	39	400	95	16	.82
20	.42	3.6	36	61	1080	1050	1080	31	300	66	9.5	.80
21	.56	4.6	38	56	722	1070	786	27	210	43	6.3	.78
22	.52	6.0	40	54	467	784	693	27	166	27	5.1	.72
23	.42	10	48	80	301	495	584	26	126	20	4.9	.68
24	.46	20	58	113	204	292	420	25	99	15	4.7	.66
25	.54	22	76	111	159	196	273	33	78	9.8	4.2	.66
26	.90	21	88	92	137	174	195	48	60	5.8	3.4	.64
27	.80	20	90	78	133	148	182	78	46	5.0	2.5	.64
28	.74	27	86	69	131	129	300	91	34	4.8	2.0	.62
29	.70	26	80	61	---	115	460	76	26	4.6	1.9	.60
30	.80	25	70	52	---	104	918	63	68	4.6	1.8	.60
31	.90	---	60	46	---	94	---	47	---	5.5	1.7	---
TOTAL	15.06	222.9	1574	4104	9920	6359	16505	9728	22293	1373.3	964.4	24.70
MEAN	.49	7.43	50.8	132	354	205	550	314	743	44.3	31.1	.82
MAX	.90	27	90	800	1790	1070	2340	1350	4510	194	212	1.6
MIN	.22	1.2	26	32	34	58	130	25	26	4.6	1.7	.50
CFSM	.00	.04	.26	.68	1.83	1.06	2.84	1.62	3.83	.23	.16	.00
IN.	.00	.04	.30	.79	1.90	1.22	3.16	1.87	4.27	.26	.18	.00

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 1998, BY WATER YEAR (WY)

MEAN	22.1	174	400	455	628	621	437	318	122	60.6	31.5	58.6
MAX	208	1430	2167	2024	3988	2519	1822	2607	900	440	239	988
(WY)	1986	1958	1979	1950	1989	1997	1979	1984	1969	1989	1984	1979
MIN	.000	.000	.000	3.56	42.6	35.2	39.2	6.46	1.37	.44	.19	.000
(WY)	1954	1954	1964	1981	1941	1941	1986	1941	1964	1964	1993	1953

## SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1941 - 1998

ANNUAL TOTAL	129008.32	73083.36	
ANNUAL MEAN	353	200	275
HIGHEST ANNUAL MEAN			643
LOWEST ANNUAL MEAN			59.8
HIGHEST DAILY MEAN	19700	Mar 2	28400
LOWEST DAILY MEAN	.22	Oct 8	.00
ANNUAL SEVEN-DAY MINIMUM	.27	Oct 6	.00
INSTANTANEOUS PEAK FLOW		4770	35700
INSTANTANEOUS PEAK STAGE		18.29	26.81
ANNUAL RUNOFF (CFSM)	1.82	1.03	1.42
ANNUAL RUNOFF (INCHES)	24.74	14.01	19.29
10 PERCENT EXCEEDS	740	606	727
50 PERCENT EXCEEDS	55	47	47
90 PERCENT EXCEEDS	.73	.65	.70

## GREEN RIVER BASIN

03321060 POND RIVER NEAR MADISONVILLE, KY

LOCATION.--Lat 37°19'02", long 87°22'09", Hopkins County, Hydrologic Unit 05110006, on left bank 3 ft downstream from bridge on State Highway 70, 4.2 mi downstream from Flat Creek, 5.0 mi upstream from Earle Creek, 6.3 mi east of Madisonville, and at mile 25.9.

DRAINAGE AREA.--469 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1991 to September 1996 discharge records. October 1996 to September 1998 gage-height only.

GAGE.--Water-stage recorder. Datum of gage is 361.80 ft above sea level.

REMARKS.--Records fair.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.86	13.44	15.37	16.43	15.00	---	18.20	9.57	---	---	4.18	4.52
2	13.41	13.62	15.89	15.66	14.50	---	17.70	9.83	---	---	4.18	4.50
3	13.53	13.43	16.44	14.86	14.00	26.00	17.07	9.59	---	---	4.18	4.53
4	13.14	12.91	16.74	13.79	13.70	27.34	16.27	9.11	---	---	4.17	4.54
5	12.14	11.90	16.77	12.94	14.10	27.35	15.45	14.75	---	---	4.19	4.57
6	10.19	10.28	16.55	12.17	15.80	26.74	14.49	14.70	---	---	4.16	4.60
7	7.64	8.57	16.05	11.75	17.50	26.04	13.61	14.56	---	---	4.15	4.55
8	6.26	8.74	15.52	11.46	18.80	25.47	13.02	14.19	---	---	4.10	4.56
9	5.65	10.25	14.88	10.82	18.60	25.24	12.31	13.81	---	---	4.11	4.57
10	5.32	11.02	14.12	10.63	17.80	25.31	11.85	13.16	---	---	4.17	4.53
11	5.11	11.14	13.05	10.63	16.80	25.46	11.09	12.43	---	---	4.35	4.60
12	4.95	10.52	12.49	10.62	---	25.52	10.47	11.43	---	---	4.33	4.62
13	4.87	9.31	12.54	10.63	---	25.45	10.41	10.06	---	---	4.22	4.60
14	4.82	8.21	12.94	10.63	---	25.35	10.30	9.12	---	---	4.26	4.54
15	4.76	7.24	13.92	8.91	---	25.12	10.40	8.63	---	---	4.23	4.46
16	4.70	7.03	14.85	8.35	---	24.74	10.26	8.22	---	---	4.22	4.48
17	4.62	6.77	16.22	10.36	---	24.31	9.62	7.89	---	---	4.23	4.47
18	4.88	6.52	17.40	11.61	---	23.97	9.02	---	16.07	---	4.21	4.44
19	5.47	6.56	18.60	12.01	---	24.01	8.90	---	16.10	---	4.20	4.57
20	6.78	6.97	19.34	11.80	---	23.85	9.28	---	16.10	---	4.21	4.60
21	6.79	7.22	19.47	11.13	---	23.73	9.75	---	16.08	---	4.23	4.60
22	6.18	7.30	19.25	10.77	---	23.15	9.71	---	15.83	---	4.21	4.52
23	6.02	7.38	18.84	11.42	---	22.24	9.67	---	15.10	4.63	4.23	4.39
24	6.59	7.28	18.71	12.21	---	22.07	9.48	---	---	4.61	4.24	4.37
25	7.44	7.95	18.78	12.97	---	21.80	9.37	---	---	4.60	4.44	4.34
26	7.71	10.94	18.93	13.73	---	20.82	9.52	---	---	4.55	4.70	4.18
27	9.32	12.29	18.87	14.58	---	20.65	9.48	---	---	4.23	4.74	4.28
28	11.04	13.05	18.65	15.26	---	20.61	9.78	---	---	4.21	4.74	4.54
29	11.95	13.87	18.30	15.50	---	20.11	9.76	---	---	4.24	4.73	4.38
30	12.47	14.60	17.83	15.55	---	19.15	10.43	---	---	4.22	4.60	4.34
31	12.96	---	17.26	15.30	---	18.62	---	---	---	4.17	4.52	---
MEAN	8.05	9.88	16.60	12.40	---	---	11.56	---	---	---	4.30	4.49
MAX	13.53	14.60	19.47	16.43	---	---	18.20	---	---	---	4.74	4.62
MIN	4.62	6.52	12.49	8.35	---	---	8.90	---	---	---	4.10	4.18

## GREEN RIVER BASIN

03321060 POND RIVER NEAR MADISONVILLE, KY--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.46	4.36	4.49	5.60	6.25	11.87	7.75	14.49	9.09	6.10	4.76	4.08
2	4.48	4.34	4.55	5.40	6.00	10.10	7.87	15.19	7.89	6.35	4.71	4.07
3	4.39	4.33	4.58	5.35	5.82	8.47	8.33	16.05	6.97	6.35	4.68	4.07
4	4.32	4.30	4.62	5.20	5.73	7.66	8.60	16.56	6.53	6.27	4.72	4.05
5	4.38	4.31	4.90	5.10	5.80	7.33	9.05	16.86	7.71	6.10	4.71	4.02
6	4.32	4.35	4.72	5.30	5.86	6.98	9.45	16.99	9.95	5.70	4.70	4.02
7	4.24	4.40	4.60	5.80	5.96	6.67	9.28	16.98	11.62	5.42	4.73	4.01
8	4.28	4.49	4.62	8.00	6.20	6.75	8.80	16.84	12.47	5.63	4.68	4.00
9	4.25	4.40	4.66	11.00	6.74	6.95	8.99	16.58	13.32	5.69	5.07	3.99
10	4.36	4.36	4.64	11.75	7.99	6.96	9.65	16.33	14.78	5.72	5.47	3.94
11	4.31	4.32	4.70	12.25	9.35	7.05	10.23	15.96	17.76	5.69	5.48	3.90
12	4.23	4.31	5.10	12.65	10.28	7.07	10.27	15.39	19.58	5.61	5.35	3.95
13	4.23	4.30	5.40	12.60	10.98	6.90	9.67	14.63	20.16	5.46	5.35	3.94
14	4.36	4.51	5.42	12.10	11.48	6.67	9.59	13.71	20.17	5.39	6.12	3.94
15	4.33	4.61	5.28	11.30	11.61	6.44	10.54	12.47	20.32	7.51	6.30	3.96
16	4.34	4.63	5.11	10.20	11.45	6.35	13.45	10.54	20.29	9.89	5.90	4.00
17	4.40	4.66	4.94	9.75	11.68	6.35	16.24	8.12	20.00	10.55	5.53	4.07
18	4.39	4.59	4.87	8.80	12.84	6.47	17.38	6.82	19.53	10.64	5.28	4.03
19	4.38	4.57	4.78	7.60	13.84	6.87	17.81	6.34	18.99	9.71	5.09	4.05
20	4.37	4.54	4.68	6.75	15.44	8.67	18.10	6.00	18.32	8.18	4.93	4.04
21	4.37	4.50	4.70	6.35	16.53	10.98	18.16	5.78	17.54	6.96	4.78	4.04
22	4.43	4.48	4.73	6.25	16.93	12.07	18.06	5.74	16.71	6.23	4.68	4.09
23	4.36	4.63	4.80	6.30	16.94	12.92	17.78	5.69	15.79	5.78	4.53	4.16
24	4.35	4.66	4.93	6.60	16.62	13.73	17.44	5.58	14.55	5.47	4.48	4.18
25	4.41	4.70	5.30	7.25	16.03	14.16	17.03	5.72	12.83	5.24	4.37	4.13
26	4.44	4.52	5.40	7.50	15.24	14.03	16.50	6.44	10.39	5.12	4.31	4.13
27	4.38	4.51	6.40	7.33	14.28	13.51	15.97	7.30	7.65	4.99	4.28	4.17
28	4.39	4.48	6.75	7.26	13.21	12.68	15.37	7.83	6.35	4.87	4.21	4.19
29	4.38	4.47	6.50	7.31	---	11.33	14.66	7.93	5.80	4.80	4.17	4.20
30	4.38	4.45	6.18	7.03	---	9.39	14.39	9.65	5.97	4.78	4.14	4.21
31	4.32	---	5.80	6.58	---	7.99	---	10.07	---	4.80	4.09	---
MEAN	4.36	4.47	5.10	8.01	10.97	9.08	12.88	11.31	13.63	6.35	4.89	4.05
MAX	4.48	4.70	6.75	12.65	16.94	14.16	18.16	16.99	20.32	10.64	6.30	4.21
MIN	4.23	4.30	4.49	5.10	5.73	6.35	7.75	5.58	5.80	4.78	4.09	3.90

## WABASH RIVER BASIN

03378500 WABASH RIVER AT NEW HARMONY, IN

(National stream-quality accounting network station)

LOCATION.--Lat 38°07'55", long 87°56'25", Posey County, Hydrologic Unit 05120113, at bridge on U.S. Highway 66 at New Harmony, and at mile 51.5.

DRAINAGE AREA.--29,234 mi<sup>2</sup>

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--

CHEMICAL ANALYSES: October 1974 to 1986, 1997 to current water year.

SEDIMENT DISCHARGE: Partial record station--October 1974 to 1985

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1974 to September 1980.

WATER TEMPERATURE: October 1974 to September 1980.

REMARKS.--Water discharge obtained from station Wabash River at Mount Carmel, IL. (03377500).

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 805 microsiemens Feb. 15, 1977; minimum, 200 micorsiemens Mar. 3, 1979.

WATER TEMPERATURE: Maximum, 32.0° C June 28, 1978, July 14-18, 1980; minimum, freezing point on many days during winter period.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	TIME	SAMPLE TYPE	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CaCO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS Ca) (00915)
NOV											
04...	1130	ENVIRONMENTAL	5000	697	8.2	10.2	8.0	10.7	95	290	74
DEC											
16...	1150	ENVIRONMENTAL	8400	667	8.2	4.1	8.2	12.9	98	280	74
JAN											
15...	1150	ENVIRONMENTAL	43500	423	7.9	4.1	76	11.2	97	180	50
FEB											
24...	1200	ENVIRONMENTAL	3700	546	8.0	8.0	32	11.2	97	240	61
MAR											
24...	1220	ENVIRONMENTAL	--	394	7.8	7.1	100	10.2	83	170	46
24...	1230	REPLICATE	--	--	--	--	85	--	--	170	45
APR											
06...	1240	ENVIRONMENTAL	--	455	7.7	12.9	43	8.8	84	200	52
21...	1220	ENVIRONMENTAL	120000	316	7.8	14.5	60	7.6	74	140	39
21...	1230	REPLICATE	--	--	--	--	51	--	--	140	39
MAY											
05...	1350	ENVIRONMENTAL	92000	336	7.6	16.5	46	8.7	90	150	40
20...	1200	ENVIRONMENTAL	39000	508	8.0	24.0	34	6.7	79	230	60
27...	1200	ENVIRONMENTAL	66000	370	7.6	20.5	100	6.0	66	160	43
JUN											
03...	1250	ENVIRONMENTAL	35500	501	7.8	24.0	46	5.8	70	230	60
23...	1310	ENVIRONMENTAL	170000	332	7.6	26.0	40	6.0	74	150	40
JUL											
21...	1200	ENVIRONMENTAL	30400	458	8.0	28.0	34	7.6	97	220	60
AUG											
11...	1200	ENVIRONMENTAL	56000	382	7.7	26.0	46	5.6	69	170	46
25...	1140	ENVIRONMENTAL	16500	475	8.4	27.5	15	9.7	123	210	54

WABASH RIVER BASIN

03378500 WABASH RIVER AT NEW HARMONY, IN--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD (MG/L AS HCO3 (00453)	ALKA- LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3 (39086)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SI02) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)
NOV 04...	26	33	3.6	245	201	44	79	.25	3.5	419	2.3	1.6
DEC 16...	24	28	3.6	47	39	38	79	.23	5.2	417	3.4	3.1
JAN 15...	15	11	4.5	133	109	23	37	.23	7.1	279	6.1	5.4
FEB 24...	20	18	3.0	190	156	31	61	.13	5.6	316	4.9	4.3
MAR 24...	14	9.2	3.3	142	116	19	37	.19	6.4	234	5.4	4.7
24...	14	9.1	3.3	--	--	18	36	.23	6.4	238	5.4	4.8
APR 06...	17	9.8	3.2	168	138	20	39	.17	6.8	270	5.5	5.3
21...	11	6.5	3.2	126	103	11	30	.17	5.8	189	3.3	3.1
21...	11	6.4	3.2	--	--	11	30	.16	5.8	188	3.8	3.6
MAY 05...	12	7.6	3.7	120	98	13	32	.17	6.0	191	3.5	3.1
20...	19	11	2.9	208	170	20	45	.19	5.7	294	4.3	3.7
27...	13	7.7	3.4	140	115	13	33	.12	5.8	217	5.4	4.0
JUN 03...	19	11	3.5	195	160	21	41	.20	6.7	289	5.7	4.7
23...	11	5.5	4.8	108	89	11	20	.19	6.9	196	5.3	4.9
JUL 21...	18	11	3.7	203	166	20	38	.21	6.6	290	3.9	3.4
AUG 11...	13	11	3.6	141	114	16	35	.19	6.3	226	2.3	1.6
25...	18	14	3.3	195	160	20	39	.20	3.7	276	2.0	1.1

DATE	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)
NOV 04...	.78	.13	.031	1.38	.132	1.35	.27	.91	.130	.039	.10	.17
DEC 16...	--	--	<.010	2.80	<.020	--	.27	.58	.143	.079	.30	--
JAN 15...	--	--	.021	4.88	<.020	4.86	.50	1.2	.344	.081	.35	--
FEB 24...	--	--	<.010	3.98	<.020	--	.30	.97	.245	.065	.22	--
MAR 24...	1.1	.49	.019	4.21	.046	4.19	.53	1.1	.382	.103	.27	.06
24...	1.1	.47	.022	4.24	.048	4.22	.52	1.2	.373	.101	.27	.06
APR 06...	.76	.50	.035	4.72	.036	4.69	.54	.80	.251	.121	.32	.05
21...	.67	.42	.025	2.62	.031	2.60	.45	.70	.185	.075	.23	.04
21...	.60	.43	.025	3.12	.034	3.10	.46	.63	.157	.076	.22	.04
MAY 05...	.81	.44	.027	2.63	.034	2.61	.47	.85	.242	.065	.23	.04
20...	.90	.30	.032	3.38	.046	3.35	.34	.95	.235	.029	.20	.06
27...	1.7	.34	.114	3.55	.087	3.44	.43	1.8	.538	.076	.20	.11
JUN 03...	1.3	.31	.073	4.38	.044	4.30	.35	1.3	.360	.062	.23	.06
23...	.84	.45	.089	4.47	.021	4.38	.47	.86	.254	.106	.36	.03
JUL 21...	.77	.26	.010	3.07	.026	3.06	.28	.80	.212	.061	.28	.03
AUG 11...	.93	.20	.020	1.37	.040	1.35	.24	.97	.283	.083	.31	.05
25...	--	--	.010	.848	<.020	.838	.28	1.1	.159	.037	.11	--

## WABASH RIVER BASIN

03378500 WABASH RIVER AT NEW HARMONY, IN--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ANTI- MONY, DIS- SOLVED (UG/L AS SB) (01095)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)
NOV											
04...	6.0	.10	.033	1.5	<1.0	1	55	<1.0	154	<1.0	3.1
DEC											
16...	--	--	.097	3.0	<1.0	1	51	<1.0	119	<1.0	2.7
JAN											
15...	22	.07	.114	5.2	<1.0	<1	41	<1.0	47	<1.0	3.2
FEB											
24...	--	--	.073	4.0	<1.0	<1	46	<1.0	59	<1.0	4.6
MAR											
24...	19	.06	.087	4.3	<1.0	<1	39	<1.0	32	<1.0	1.5
24...	19	.07	.087	4.2	<1.0	1	38	<1.0	33	<1.0	1.4
APR											
06...	21	.12	.105	3.9	<1.0	<1	44	<1.0	40	<1.0	1.5
21...	11	.08	.075	5.2	<1.0	<1	35	<1.0	40	<1.0	2.3
21...	14	.08	.073	4.2	<1.0	<1	35	<1.0	37	<1.0	2.3
MAY											
05...	12	.09	.076	4.8	<1.0	1	38	<1.0	40	<1.0	1.5
20...	15	.11	.066	4.7	<1.0	1	50	<1.0	63	<1.0	2.2
27...	15	.37	.066	5.5	<1.0	1	40	<1.0	39	<1.0	1.7
JUN											
03...	19	.24	.075	5.8	<1.0	<1	49	<1.0	63	<1.0	2.4
23...	19	.29	.119	5.5	<1.0	<1	39	<1.0	43	<1.0	1.3
JUL											
21...	14	.03	.092	5.0	<1.0	2	48	<1.0	66	<1.0	1.9
AUG											
11...	6.0	.07	.100	4.8	<1.0	1	40	<1.0	60	<1.0	1.6
25...	3.7	.03	.037	5.2	<1.0	2	43	<1.0	87	<1.0	1.5
DATE	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)
NOV											
04...	<1.0	1.3	<3.0	<1.0	6	2.1	7.7	2.8	<1	<1.0	297
DEC											
16...	<1.0	1.6	<10	<1.0	4	8.5	5.8	2.5	<1	<1.0	283
JAN											
15...	<1.0	2.1	28	<1.0	<4	1.5	2.7	2.1	<1	<1.0	145
FEB											
24...	<1.0	1.4	<10	<1.0	5	1.5	2.9	2.1	<1	<1.0	199
MAR											
24...	<1.0	1.5	13	<1.0	4	2.1	1.9	1.6	<1	<1.0	123
24...	<1.0	1.4	12	<1.0	<4	2.0	1.9	1.6	<1	<1.0	122
APR											
06...	<1.0	1.8	<10	<1.0	<4	1.8	2.5	1.6	<1	<1.0	146
21...	<1.0	1.7	16	<1.0	<4	2.2	1.7	1.5	<1	<1.0	107
21...	<1.0	1.6	14	<1.0	<4	2.0	1.7	1.5	<1	<1.0	106
MAY											
05...	<1.0	1.5	<10	<1.0	<4	2.1	1.5	1.6	<1	<1.0	106
20...	<1.0	1.6	<10	<1.0	<4	1.0	2.9	1.6	<1	<1.0	169
27...	<1.0	1.7	<10	<1.0	<4	<1.0	1.8	1.8	<1	<1.0	114
JUN											
03...	<1.0	1.9	<10	<1.0	<4	<1.0	3.2	1.7	<1	<1.0	157
23...	<1.0	1.9	<10	<1.0	<4	1.3	2.1	1.5	<1	<1.0	95
JUL											
21...	<1.0	1.8	<10	<1.0	<4	<1.0	3.8	1.6	<1	<1.0	188
AUG											
11...	<1.0	2.3	<10	<1.0	4	<1.0	3.5	2.0	<1	<1.0	132
25...	<1.0	1.9	<10	<1.0	5	1.0	4.6	1.6	<1	<1.0	185

## WABASH RIVER BASIN

03378500 WABASH RIVER AT NEW HARMONY, IN--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C) (00689)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	ACETO- CHLOR, WATER, FLTRD REC (UG/L) (49260)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)
NOV 04...	<6	2.1	1.2	3.2	1.5	<.002	.0180	.529	<.0020	<.0020	<.0040
DEC 16...	<10	8.4	1.4	3.7	.80	.015	.0231	.341	<.0020	<.0020	.0072
JAN 15...	<10	2.5	<1.0	6.4	2.0	.023	.0305	.267	<.0020	<.0020	<.0040
FEB 24...	<10	2.0	1.1	3.6	1.5	.005	.0133	.210	<.0020	<.0020	<.0040
MAR 24...	<10	1.7	<1.0	5.3	3.4	.007	.0124	.207	<.0020	<.0020	<.0040
MAR 24...	<10	<1.0	<1.0	5.4	3.3	.005	.0123	.205	<.0020	<.0020	<.0040
APR 06...	<10	1.9	<1.0	4.6	1.8	.008	.0126	.314	<.0020	<.0020	E.0029
APR 21...	<10	3.4	<1.0	5.1	1.5	.012	.0928	.716	<.0020	<.0020	.0054
APR 21...	<10	1.9	<1.0	5.1	1.7	.012	.0877	.692	<.0020	<.0020	.0048
MAY 05...	<10	4.5	<1.0	4.6	1.5	.028	.949	4.11	<.0020	<.0020	<.0040
MAY 20...	<10	1.3	1.1	4.7	2.5	.021	.304	2.19	<.0020	<.0020	<.0040
MAY 27...	<10	<1.0	<1.0	4.2	4.8	--	--	--	--	--	--
JUN 03...	<10	2.8	<1.0	3.4	3.4	.248	1.84	10.2	<.0020	<.0020	E.0608
JUN 23...	<10	7.3	<1.0	4.4	1.4	.176	1.04	10.4	<.0020	<.0020	--
JUL 21...	<10	2.7	<1.0	3.7	2.9	.023	.199	1.55	<.0020	<.0020	<.0040
AUG 11...	<10	2.4	<1.0	4.4	3.1	.015	.0363	.491	<.0020	<.0020	<.0040
AUG 25...	<10	2.3	<1.0	3.6	2.9	.009	.0206	.489	<.0020	<.0020	<.0040

DATE	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	FONOFOS WATER DISS REC (UG/L) (04095)	LINDANE DIS- SOLVED (UG/L) (39341)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METRI- BUZIN WATER DISSOLV (UG/L) (82630)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	P, P' DDE DISSOLV (UG/L) (34653)	PARA- THION, DIS- SOLVED (UG/L) (39542)
NOV 04...	.190	E.0541	<.002	<.001	<.0030	<.004	<.005	<.004	.232	<.0060	<.004
DEC 16...	.178	E.0772	.007	<.001	<.0030	<.004	<.005	<.004	.151	<.0060	<.018
JAN 15...	.0488	E.102	<.002	<.001	<.0030	<.004	<.005	.009	.168	<.0060	<.004
FEB 24...	.0366	E.0677	<.002	<.001	<.0030	<.004	<.005	<.004	.078	<.0060	<.004
MAR 24...	.0516	E.0672	<.002	<.001	<.0030	<.004	<.005	.011	.299	<.0060	<.004
MAR 24...	.0511	E.0686	<.002	<.001	<.0030	<.004	<.005	.011	.300	<.0060	<.004
APR 06...	.0747	E.0697	E.002	<.001	<.0030	<.004	<.005	.005	.202	<.0060	<.004
APR 21...	.180	E.0415	E.004	<.001	<.0030	<.004	<.005	.026	.236	<.0060	<.004
APR 21...	.144	E.0339	E.004	<.001	<.0030	<.004	<.005	.023	.226	<.0060	<.004
MAY 05...	.963	E.107	<.002	<.001	<.0030	<.004	<.005	.098	1.77	<.0060	<.004
MAY 20...	.555	E.0983	<.002	<.001	<.0030	<.004	<.005	.031	1.01	<.0060	<.004
MAY 27...	--	--	--	--	--	--	--	--	--	--	--
JUN 03...	1.76	E.394	<.002	<.001	<.0030	<.004	<.005	.068	2.45	<.0060	<.004
JUN 23...	1.78	E.875	.012	<.001	<.0030	<.004	<.005	.096	5.10	<.0060	<.004
JUL 21...	.612	E.393	<.002	<.001	<.0030	<.004	<.005	.035	1.07	<.0060	<.004
AUG 11...	.104	E.109	<.002	<.001	<.0030	<.004	<.005	<.004	.297	<.0060	<.004
AUG 25...	.148	E.101	<.002	<.001	<.0030	<.004	<.005	<.004	.260	<.0060	<.004

## WABASH RIVER BASIN

03378500 WABASH RIVER AT NEW HARMONY, IN--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	PROP- CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)
NOV											
04...	<.0070	E.0140	.0361	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
DEC											
16...	<.0070	E.0113	.0442	<.0020	E.0059	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
JAN											
15...	<.0070	E.0144	.0224	<.0020	E.0037	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
FEB											
24...	<.0070	E.0056	.0262	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
MAR											
24...	<.0070	E.0067	.0432	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
24...	<.0070	E.0070	.0428	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
APR											
06...	<.0070	E.0045	.0490	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
21...	<.0070	E.0083	.287	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
21...	<.0070	E.0088	.268	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
MAY											
05...	<.0070	.0222	.897	<.0020	<.0030	<.0300	<.0020	<.0030	<.0170	<.0040	.0136
20...	<.0070	.0192	.160	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
27...	--	--	--	--	--	--	--	--	--	--	--
JUN											
03...	<.0070	.0275	.688	<.0020	<.0030	E.0252	<.0020	<.0030	<.0170	<.0040	<.0040
23...	<.0070	.0351	.395	<.0020	<.0030	E.157	<.0020	<.0030	<.0170	<.0040	.0223
JUL											
21...	<.0070	.0191	.0946	<.0020	<.0030	E.0158	<.0020	<.0030	<.0170	<.0040	<.0040
AUG											
11...	<.0070	.0260	.0339	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
25...	<.0070	.0198	.0255	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040

DATE	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PEB- ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)
NOV											
04...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
DEC											
16...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
JAN											
15...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
FEB											
24...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
MAR											
24...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
24...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
APR											
06...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
21...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
21...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
MAY											
05...	<.0030	.0068	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
20...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
27...	--	--	--	--	--	--	--	--	--	--	--
JUN											
03...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
23...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
JUL											
21...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
AUG											
11...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
25...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030



## WABASH RIVER BASIN

03378500 WABASH RIVER AT NEW HARMONY, IN--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	SEDI-MENT, DIS-CHARGE, SUS-PENDEDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDEDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV											
04...	<.0040	<.0130	<.0100	<.0070	<.0130	<.0010	<.0020	<.0020	30	405	98
DEC											
16...	<.0040	<.0130	.0140	<.0070	<.0130	<.0010	.0054	<.0020	23	522	95
JAN											
15...	<.0040	<.0130	.0200	<.0070	<.0130	<.0010	<.0020	<.0020	245	28800	93
FEB											
24...	<.0040	<.0130	.0102	<.0070	<.0130	<.0010	<.0020	<.0020	271	2710	90
MAR											
24...	<.0040	<.0130	E.0089	<.0070	<.0130	<.0010	<.0020	<.0020	--	--	--
24...	<.0040	<.0130	E.0087	<.0070	<.0130	<.0010	<.0020	<.0020	255	--	90
APR											
06...	<.0040	<.0130	<.0100	<.0070	<.0130	<.0010	<.0020	<.0020	127	--	89
21...	<.0040	<.0130	E.0078	<.0070	<.0130	<.0010	<.0020	<.0020	107	34700	90
21...	<.0040	<.0130	E.0064	<.0070	<.0130	<.0010	<.0020	<.0020	--	--	--
MAY											
05...	<.0040	<.0130	E.0075	<.0070	<.0130	<.0010	<.0020	<.0020	129	32000	89
20...	<.0040	<.0130	E.0095	<.0070	<.0130	<.0010	<.0020	<.0020	134	14100	98
27...	--	--	--	--	--	--	--	--	336	59900	96
JUN											
03...	<.0040	<.0130	E.0092	<.0070	<.0130	<.0010	<.0020	<.0020	263	25200	98
23...	<.0040	<.0130	.0119	<.0070	<.0130	<.0010	.0070	<.0020	105	48200	90
JUL											
21...	<.0040	<.0130	.0103	<.0070	<.0130	<.0010	<.0020	<.0020	159	13100	98
AUG											
11...	<.0040	<.0130	<.0100	<.0070	<.0130	<.0010	<.0020	<.0020	178	26900	95
25...	<.0040	<.0130	<.0100	<.0070	<.0130	<.0010	<.0020	<.0020	73	3250	92

## TRADEWATER RIVER BASIN

03383000 TRADEWATER RIVER AT OLNEY, KY

LOCATION.--Lat 37°13'26", long 87°46'53", Caldwell County, Hydrologic Unit 05140205, on left bank at downstream side of bridge on State Highway 1220 at Olney, 0.9 mi upstream from Cave Creek, 5.4 mi downstream from Flynn Creek, 9.5 mi northeast of Princeton, and at mile 72.7.

DRAINAGE AREA.--255 mi<sup>2</sup>, of which about 9 mi<sup>2</sup> does not contribute directly to surface runoff.

PERIOD OF RECORD.--August 1940 to May 1984, March 1985 to current year.

GAGE.--Water-stage recorder. Datum of gage is 362.80 ft above sea level. Prior to July 31, 1942, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Nov. 7 to Dec. 28, Feb. 20-22, Apr. 18-22, May 2-6, June 14-19, July 17-20, Aug. 8-9, and Sept. 20-30. Records fair except for periods of estimated record, which are poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of January 1937 reached a stage of 19.27 ft, from floodmarks, discharge, 17,000 ft<sup>3</sup>/s, by slope-area measurement from U.S. Army Corp of Engineers.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.64	1.9	24	43	37	106	127	1700	72	141	29	1.5
2	.54	1.8	27	40	33	92	156	1400	58	98	37	1.8
3	.53	1.8	30	34	29	81	157	1100	46	92	36	1.8
4	.56	1.8	33	30	27	75	169	900	37	68	27	2.0
5	.51	1.8	40	30	28	68	191	700	302	50	18	2.0
6	.34	2.4	46	34	32	63	176	600	708	39	13	1.9
7	.25	3.0	44	73	38	59	151	656	457	39	10	1.8
8	.24	4.0	40	308	51	58	136	889	223	73	12	1.4
9	.27	3.6	36	634	60	67	151	763	985	93	50	1.2
10	.30	3.0	38	382	75	77	245	493	2430	105	120	1.1
11	.35	2.6	50	177	98	84	199	322	2620	87	90	.82
12	.38	2.0	60	129	161	82	159	242	2880	65	56	.99
13	.57	2.7	56	114	232	70	137	200	3210	53	41	1.0
14	.88	4.0	50	106	202	63	549	170	2800	63	26	1.0
15	1.1	7.9	46	98	158	58	1210	149	3000	1160	20	.94
16	1.3	7.6	40	89	175	56	1580	131	2000	2100	19	.98
17	1.2	7.7	38	82	612	65	1920	112	1400	2000	15	.97
18	1.1	7.2	36	82	1440	94	1600	95	800	1700	11	1.2
19	.99	7.0	35	68	1530	114	1700	81	520	700	7.8	1.4
20	1.1	6.8	34	58	1200	426	1200	69	351	240	6.3	1.4
21	1.3	8.0	34	50	700	849	800	60	224	138	5.2	1.3
22	1.0	10	38	59	400	759	600	54	184	103	4.6	1.3
23	.84	20	44	68	260	440	414	51	151	77	3.9	1.2
24	1.0	24	53	83	190	263	283	49	128	59	3.6	1.2
25	1.2	22	70	96	156	194	226	105	107	49	3.2	1.1
26	1.8	20	82	95	136	163	195	202	89	38	3.0	1.1
27	1.8	20	83	80	122	142	187	184	70	32	2.7	1.1
28	1.5	24	81	67	115	126	404	173	56	26	2.3	1.0
29	1.5	24	71	57	---	113	510	139	44	26	2.1	1.0
30	1.4	23	59	49	---	100	1350	113	77	24	1.7	1.0
31	1.5	---	52	43	---	93	---	90	---	23	1.5	---
TOTAL	27.99	275.6	1470	3358	8297	5100	16882	11992	26029	9561	677.9	38.50
MEAN	.90	9.19	47.4	108	296	165	563	387	868	308	21.9	1.28
MAX	1.8	24	83	634	1530	849	1920	1700	3210	2100	120	2.0
MIN	.24	1.8	24	30	27	56	127	49	37	23	1.5	.82
CFSM	.00	.04	.19	.44	1.20	.67	2.29	1.57	3.53	1.25	.09	.01
IN.	.00	.04	.22	.51	1.25	.77	2.55	1.81	3.94	1.45	.10	.01

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 1998, BY WATER YEAR (WY)

MEAN	29.6	210	446	560	738	782	597	397	155	89.8	37.1	51.1
MAX	324	2178	1963	2268	3529	2360	1851	1878	949	946	275	798
(WY)	1997	1958	1979	1950	1989	1997	1979	1983	1969	1989	1985	1950
MIN	.000	.000	.96	4.85	19.2	61.9	53.7	7.09	1.18	.003	.000	.000
(WY)	1941	1954	1964	1964	1964	1941	1986	1941	1944	1952	1952	1953

## SUMMARY STATISTICS

## FOR 1997 CALENDAR YEAR

## FOR 1998 WATER YEAR

## WATER YEARS 1941 - 1998

ANNUAL TOTAL	150089.37	83708.99	
ANNUAL MEAN	411	229	335
HIGHEST ANNUAL MEAN			701
LOWEST ANNUAL MEAN			61.6
HIGHEST DAILY MEAN	8680	Mar 3	3210
LOWEST DAILY MEAN	.24	Oct 8	.24
ANNUAL SEVEN-DAY MINIMUM	.30	Oct 6	.30
INSTANTANEOUS PEAK FLOW		3240	Jun 13
INSTANTANEOUS PEAK STAGE		15.01	Jun 13
ANNUAL RUNOFF (CFSM)	1.67		1.36
ANNUAL RUNOFF (INCHES)	22.70		12.66
10 PERCENT EXCEEDS	1000	700	1140
50 PERCENT EXCEEDS	82	58	62
90 PERCENT EXCEEDS	1.1	1.2	1.1

## OHIO RIVER MAIN STEM

03399800 OHIO RIVER BELOW SMITHLAND DAM, SMITHLAND, KY

LOCATION.--Lat 37°09'30", long 88°25'34", Livingston County, Hydrologic Unit 05140203, 2400 ft below Smithland Dam, 1.1 mi upstream from Cumberland Island, 1.8 mi northwest of Smithland, and at mile 919.0

DRAINAGE AREA.--144,000 mi<sup>2</sup>, approximately.

PERIOD OF RECORD.--October 1993 to current year.

GAGE.--Gate opening, lockage and water-stage recorders. Datum of headwater gage is 311.94 ft above sea level. Datum of tailwater gage 0.8 mi downstream is 289.98 ft above sea level.

REMARKS.--1994: No estimated daily discharges. Records fair.

1995: No estimated daily discharges. Records fair.

1996: Estimated daily discharges: June 18. Records fair.

1997: Estimated daily discharges: Oct. 13-15, Dec. 1, 9-12, 19, 29, Feb. 25, 26, and Apr. 3-5. Records fair except for periods of estimated records, which are poor.

1998: Estimated daily discharges: Jan. 10, 19, Feb. 11, Mar. 12, 17, Apr. 1, 13, May 18, and June 13. Records fair except for periods of estimated records, which are poor. Daily discharge computed from tailwater elevation, head, gate openings, and lockages. Flow regulated by Ohio River system of locks, dams, and reservoirs upstream from station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	109000	70400	310000	101000	541000	542000	574000	457000	99000	99300	95900	72800
2	98500	80500	320000	100000	553000	552000	576000	451000	63400	102000	71200	67000
3	94200	94400	331000	105000	552000	564000	581000	432000	73600	84300	50700	77200
4	94900	97100	321000	100000	556000	566000	581000	414000	80200	83400	44100	75600
5	90900	103000	344000	119000	564000	560000	586000	393000	59600	94000	51400	74900
6	73900	95200	352000	158000	567000	544000	596000	365000	42200	79400	63700	53300
7	63700	88900	385000	196000	561000	524000	600000	343000	66800	73700	69400	32800
8	70700	99100	402000	230000	548000	516000	596000	328000	69600	56800	74100	52200
9	56500	110000	412000	268000	522000	512000	587000	327000	64400	72100	89400	32200
10	57500	107000	423000	291000	486000	511000	574000	341000	62700	80700	71300	30300
11	51100	96800	436000	313000	464000	522000	569000	357000	62500	66000	40000	24700
12	56100	81800	443000	336000	464000	532000	587000	374000	56900	53700	48200	24500
13	60000	76100	440000	367000	483000	532000	604000	388000	50300	68900	38500	30000
14	57100	97400	429000	363000	506000	533000	609000	399000	53300	60900	19300	30300
15	57700	184000	403000	347000	532000	540000	603000	394000	53400	69400	47400	27000
16	64300	271000	316000	311000	548000	548000	599000	322000	77700	65500	62400	18000
17	65700	302000	276000	295000	556000	558000	575000	282000	85500	59900	83600	26000
18	65400	341000	234000	282000	560000	564000	572000	240000	93900	68600	86900	41000
19	65000	365000	206000	241000	559000	555000	594000	200000	99300	52000	103000	33500
20	65000	382000	187000	158000	562000	546000	623000	177000	76000	56500	118000	26600
21	128000	382000	173000	98300	558000	529000	638000	162000	78900	55200	151000	41300
22	142000	389000	169000	92400	545000	489000	645000	136000	87600	44700	166000	26200
23	142000	392000	171000	103000	531000	437000	648000	110000	65300	50500	172000	25300
24	147000	392000	157000	120000	523000	387000	646000	106000	66500	53200	143000	33800
25	144000	385000	153000	143000	535000	337000	638000	104000	66300	47500	131000	29900
26	127000	369000	154000	206000	550000	324000	630000	95300	68600	58300	114000	19300
27	124000	359000	138000	283000	548000	345000	612000	89900	81000	62600	102000	29300
28	86700	341000	124000	350000	539000	405000	579000	96200	90600	63900	80000	38700
29	106000	325000	119000	379000	---	477000	524000	108000	79700	56100	62200	41800
30	103000	314000	101000	458000	---	527000	477000	105000	76600	54200	61000	39000
31	76000	---	103000	516000	---	555000	---	94600	---	84100	74200	---
TOTAL	2742900	6790700	8532000	7429700	15013000	15633000	17823000	8191000	2151400	2077400	2584900	1174500
MEAN	88480	226400	275200	239700	536200	504300	594100	264200	71710	67010	83380	39150
MAX	147000	392000	443000	516000	567000	566000	648000	457000	99300	102000	172000	77200
MIN	51100	70400	101000	92400	464000	324000	477000	89900	42200	44700	19300	18000

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1994, BY WATER YEAR (WY)

	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994
MEAN	88480	226400	275200	239700	536200	504300	594100	264200	71710	67010	83380	39150
MAX	88480	226400	275200	239700	536200	504300	594100	264200	71710	67010	83380	39150
(WY)	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994
MIN	88480	226400	275200	239700	536200	504300	594100	264200	71710	67010	83380	39150
(WY)	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994

## SUMMARY STATISTICS

## FOR 1994 WATER YEAR

ANNUAL TOTAL	90143500
ANNUAL MEAN	247000
HIGHEST DAILY MEAN	648000
LOWEST DAILY MEAN	18000
ANNUAL SEVEN-DAY MINIMUM	25800
INSTANTANEOUS PEAK FLOW	648000
INSTANTANEOUS PEAK STAGE	45.29
10 PERCENT EXCEEDS	560000
50 PERCENT EXCEEDS	138000
90 PERCENT EXCEEDS	51300

## OHIO RIVER MAIN STEM

03399800 OHIO RIVER BELOW SMITHLAND DAM, SMITHLAND, KY--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33300	21400	117000	62300	238000	197000	85300	199000	571000	144000	42200	24600
2	39100	24300	122000	42700	216000	182000	95400	192000	547000	148000	29700	27500
3	41400	47800	113000	51200	189000	188000	76600	189000	520000	152000	35900	20200
4	44500	73000	89300	39400	168000	209000	66600	198000	497000	143000	44700	18100
5	38700	87500	84200	51300	169000	224000	59400	222000	472000	141000	53600	18400
6	45300	65200	100000	67300	168000	240000	64700	242000	449000	116000	77800	24300
7	35900	54300	109000	66500	171000	243000	67500	245000	406000	97200	137000	15200
8	21000	64000	127000	95900	173000	258000	69700	223000	279000	76600	164000	12900
9	30200	53500	158000	136000	162000	334000	78700	198000	243000	67300	184000	26800
10	26800	67800	185000	182000	120000	401000	83600	189000	217000	54700	199000	25600
11	30200	76300	207000	198000	106000	437000	89200	194000	189000	53500	208000	14300
12	30300	77900	215000	190000	102000	462000	89200	205000	197000	58000	198000	22600
13	26600	80800	241000	174000	91400	475000	116000	220000	196000	30200	181000	12800
14	19500	61600	265000	173000	94200	465000	133000	261000	200000	42400	160000	16900
15	19900	67500	269000	176000	98500	457000	152000	303000	229000	39900	136000	39100
16	24300	76800	259000	192000	169000	451000	156000	344000	251000	30900	84600	24100
17	38700	70400	227000	226000	232000	440000	157000	374000	249000	42600	66500	17500
18	32800	69500	194000	273000	272000	412000	148000	418000	211000	53000	71500	33000
19	30000	53300	168000	372000	313000	368000	145000	457000	113000	44700	62700	33000
20	28600	45200	148000	403000	336000	296000	144000	508000	89300	50900	45900	10300
21	32900	42000	136000	418000	355000	221000	209000	558000	97500	49200	53300	30000
22	32900	41400	132000	430000	376000	181000	211000	585000	99200	30400	48400	22600
23	30400	50000	117000	432000	377000	158000	240000	591000	88000	45000	53200	22100
24	27100	58400	109000	422000	354000	143000	261000	592000	76300	50800	30300	26300
25	32500	66100	84400	398000	265000	133000	264000	605000	97800	47500	22800	22500
26	24600	65900	84400	372000	232000	136000	256000	616000	111000	39100	28000	27900
27	26000	62700	76100	328000	211000	132000	264000	622000	99500	44500	45100	15100
28	28900	59800	66400	305000	207000	129000	266000	620000	111000	42000	18400	19000
29	41800	74600	59900	266000	---	117000	243000	609000	114000	75800	15300	19000
30	32900	93600	52400	243000	---	94800	208000	598000	120000	76400	38700	29800
31	26600	---	61300	243000	---	84800	---	586000	---	66000	22300	---
TOTAL	973700	1852600	4376400	7028600	5965100	8268600	4498900	11963000	7139600	2152600	2557900	671500
MEAN	31410	61750	141200	226700	213000	266700	150000	385900	238000	69440	82510	22380
MAX	45300	93600	269000	432000	377000	475000	266000	622000	571000	152000	208000	39100
MIN	19500	21400	52400	39400	91400	84800	59400	189000	76300	30200	15300	10300

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1995, BY WATER YEAR (WY)

MEAN	59950	144100	208200	233200	374600	385500	372000	325100	154900	68230	82950	30770
MAX	88480	226400	275200	239700	536200	504300	594100	385900	238000	69440	83380	39150
(WY)	1994	1994	1994	1994	1994	1994	1994	1995	1995	1995	1994	1994
MIN	31410	61750	141200	226700	213000	266700	150000	264200	71710	67010	82510	22380
(WY)	1995	1995	1995	1995	1995	1995	1995	1994	1994	1994	1995	1995

	FOR 1994 CALENDAR YEAR			FOR 1995 WATER YEAR			WATER YEARS 1994 - 1995		
ANNUAL TOTAL			79280600			57448500			
ANNUAL MEAN			217200			157400			202200
HIGHEST ANNUAL MEAN									247000
LOWEST ANNUAL MEAN									157400
HIGHEST DAILY MEAN			648000	Apr 23		622000	May 27		648000
LOWEST DAILY MEAN			18000	Sep 16		10300	Sep 20		10300
ANNUAL SEVEN-DAY MINIMUM			25400	Oct 10		18600	Sep 7		18600
INSTANTANEOUS PEAK FLOW						629000	May 27		648000
INSTANTANEOUS PEAK STAGE						44.08	May 27		45.29
10 PERCENT EXCEEDS			560000			385000			535000
50 PERCENT EXCEEDS			95900			109000			117000
90 PERCENT EXCEEDS			32700			26700			32500

## OHIO RIVER MAIN STEM

03399800 OHIO RIVER BELOW SMITHLAND DAM, SMITHLAND, KY--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25500	47300	77900	57800	575000	278000	404000	443000	472000	119000	105000	29200
2	22600	35700	97200	62100	570000	300000	375000	475000	481000	98800	149000	24400
3	30100	55800	110000	76100	564000	320000	368000	486000	484000	102000	184000	28100
4	19100	49900	101000	103000	548000	338000	375000	485000	471000	80600	200000	29800
5	32500	55400	91500	148000	532000	351000	385000	487000	458000	79600	198000	18000
6	61200	49800	77900	185000	509000	359000	389000	495000	440000	80100	168000	41300
7	85100	55700	78500	208000	465000	368000	383000	523000	419000	69300	110000	44700
8	95900	58600	70500	203000	394000	384000	361000	546000	396000	69300	96800	52400
9	94000	57900	72300	171000	217000	388000	327000	572000	384000	83300	77300	93600
10	80100	77600	64000	116000	190000	387000	275000	592000	387000	40500	85600	94500
11	61000	102000	64200	83800	197000	394000	210000	609000	402000	54600	74600	86500
12	45100	116000	61000	97800	222000	405000	179000	616000	418000	70800	80300	58900
13	42400	107000	41200	94100	263000	413000	169000	621000	431000	39100	63900	45600
14	28300	120000	35200	89500	293000	412000	149000	615000	439000	48500	84300	63800
15	20500	136000	38300	99300	308000	387000	134000	620000	439000	72400	89400	62300
16	47900	150000	52500	110000	301000	323000	124000	622000	434000	57900	102000	61000
17	60500	149000	60300	120000	267000	294000	122000	621000	421000	71000	127000	106000
18	53000	154000	82200	167000	219000	273000	146000	617000	375000	83600	122000	108000
19	35800	143000	125000	235000	176000	271000	179000	615000	293000	69600	91600	113000
20	35900	131000	185000	301000	149000	288000	231000	616000	258000	106000	62000	128000
21	26500	115000	237000	347000	147000	310000	261000	621000	239000	136000	50600	163000
22	33400	109000	267000	356000	169000	336000	294000	618000	240000	163000	38500	178000
23	36000	115000	288000	381000	197000	362000	314000	612000	249000	205000	30300	165000
24	29900	114000	296000	412000	218000	381000	344000	602000	257000	239000	61800	136000
25	38900	112000	290000	437000	242000	399000	360000	591000	257000	253000	41400	101000
26	47200	108000	224000	464000	253000	414000	376000	575000	234000	228000	52300	75500
27	30200	108000	127000	502000	258000	429000	375000	554000	202000	184000	54900	78700
28	47500	100000	96500	532000	262000	442000	368000	525000	176000	160000	41800	108000
29	41900	96400	78400	558000	263000	446000	385000	499000	172000	126000	39100	140000
30	33000	75300	73500	576000	---	436000	410000	482000	160000	93300	36000	167000
31	41600	---	70400	584000	---	422000	---	473000	---	106000	29200	---
TOTAL	1382600	2904400	3633500	7876500	8968000	11310000	8772000	17428000	10488000	3389300	2746700	2601300
MEAN	44600	96810	117200	254100	309200	364800	292400	562200	349600	109300	88600	86710
MAX	95900	154000	296000	584000	575000	446000	410000	622000	484000	253000	200000	178000
MIN	19100	35700	35200	57800	147000	271000	122000	443000	160000	39100	29200	18000

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1996, BY WATER YEAR (WY)

	1994	1995	1996	1995	1996	1995	1996	1995	1996	1995	1996	1995
MEAN	54830	128300	177900	240200	352300	378600	345500	404100	219800	81930	84830	49410
MAX	88480	226400	275200	254100	536200	504300	594100	562200	349600	109300	88600	86710
(WY)	1994	1994	1994	1996	1994	1994	1994	1996	1996	1996	1996	1996
MIN	31410	61750	117200	226700	213000	266700	150000	264200	71710	67010	82510	22380
(WY)	1995	1995	1996	1995	1995	1995	1995	1994	1994	1994	1995	1995

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR	FOR 1996 WATER YEAR	WATER YEARS 1994 - 1996
ANNUAL TOTAL	58166300	81500300	
ANNUAL MEAN	159400	222700	209000
HIGHEST ANNUAL MEAN			247000
LOWEST ANNUAL MEAN			157400
HIGHEST DAILY MEAN	622000	May 27	648000
LOWEST DAILY MEAN	10300	Sep 20	10300
ANNUAL SEVEN-DAY MINIMUM	18600	Sep 7	18600
INSTANTANEOUS PEAK FLOW			623000
INSTANTANEOUS PEAK STAGE			44.10
10 PERCENT EXCEEDS	385000	486000	45.29
50 PERCENT EXCEEDS	111000	160000	
90 PERCENT EXCEEDS	29100	41900	36000

## OHIO RIVER MAIN STEM

03399800 OHIO RIVER BELOW SMITHLAND DAM, SMITHLAND, KY--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	187000	99800	287000	287000	482000	408000	452000	139000	350000	157000	62400	33100
2	203000	102000	312000	264000	468000	503000	423000	159000	368000	139000	42300	30000
3	207000	105000	394000	256000	454000	578000	404000	213000	417000	144000	45200	29000
4	182000	98900	423000	237000	451000	641000	380000	234000	442000	149000	21600	23500
5	146000	82300	448000	220000	442000	695000	363000	256000	449000	165000	29100	26500
6	127000	82900	465000	219000	437000	743000	318000	247000	454000	158000	56100	33500
7	128000	123000	478000	211000	436000	766000	289000	218000	455000	142000	23500	22000
8	104000	133000	486000	220000	430000	787000	254000	202000	455000	91800	29800	14100
9	76500	132000	485000	225000	433000	804000	231000	194000	452000	85100	20300	29800
10	55800	153000	462000	218000	435000	819000	209000	194000	448000	62100	29700	30400
11	52900	205000	433000	202000	424000	829000	181000	202000	443000	76300	35600	22600
12	50200	245000	376000	193000	404000	831000	186000	186000	442000	73300	17100	44700
13	44400	273000	259000	178000	380000	830000	191000	183000	436000	74600	32900	36300
14	53000	293000	237000	169000	355000	829000	176000	183000	424000	45400	35700	36000
15	50000	298000	245000	145000	313000	823000	160000	160000	403000	64800	29800	23200
16	41500	286000	271000	115000	273000	812000	179000	136000	398000	58600	44600	24600
17	33200	251000	305000	122000	245000	796000	179000	135000	397000	47500	26900	32800
18	50400	215000	379000	124000	217000	778000	175000	122000	406000	38700	59200	28200
19	41900	182000	422000	122000	207000	763000	167000	118000	423000	22800	101000	21400
20	51000	157000	449000	124000	189000	744000	147000	127000	434000	56400	128000	30100
21	69900	149000	464000	120000	172000	732000	159000	126000	440000	35900	137000	24300
22	95300	147000	467000	120000	178000	723000	147000	128000	445000	20300	130000	41900
23	103000	156000	454000	185000	194000	706000	136000	150000	434000	41700	105000	36000
24	134000	151000	418000	219000	221000	687000	132000	168000	399000	56300	92800	17000
25	152000	173000	370000	233000	233000	671000	117000	163000	247000	55800	81200	32600
26	152000	207000	344000	266000	250000	649000	121000	177000	198000	39300	56100	19700
27	156000	229000	331000	308000	322000	627000	123000	171000	165000	53100	38700	15000
28	169000	251000	328000	326000	341000	595000	127000	197000	144000	44400	50600	44000
29	157000	254000	330000	409000	---	552000	135000	236000	152000	67700	53400	13900
30	140000	269000	325000	443000	---	518000	134000	269000	159000	67400	33200	27600
31	119000	---	308000	471000	---	488000	---	321000	---	86200	30200	---
TOTAL	3332000	5502900	11755000	6951000	9386000	21727000	6395000	5714000	11279000	2419500	1679000	843800
MEAN	107500	183400	379200	224200	335200	700900	213200	184300	376000	78050	54160	28130
MAX	207000	298000	486000	471000	482000	831000	452000	321000	455000	165000	137000	44700
MIN	33200	82300	237000	115000	172000	408000	117000	118000	144000	20300	17100	13900

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1997, BY WATER YEAR (WY)

	1994	1995	1996	1997	1994	1995	1996	1997	1994	1995	1996	1997
MEAN	67990	142100	228200	236200	348100	459200	312400	349200	258800	80960	77170	44090
MAX	107500	226400	379200	254100	536200	700900	594100	562200	376000	109300	88600	86710
(WY)	1997	1994	1997	1996	1994	1997	1994	1996	1997	1996	1996	1996
MIN	31410	61750	117200	224200	213000	266700	150000	184300	71710	67010	54160	22380
(WY)	1995	1995	1996	1997	1995	1995	1995	1997	1994	1994	1997	1995

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1994 - 1997	
ANNUAL TOTAL	94169700		86984200			
ANNUAL MEAN	257300		238300		216300	
HIGHEST ANNUAL MEAN					247000	
LOWEST ANNUAL MEAN					157400	
HIGHEST DAILY MEAN	622000	May 16	831000	Mar 12	831000	Mar 12 1997
LOWEST DAILY MEAN	18000	Sep 5	13900	Sep 29	10300	Sep 20 1995
ANNUAL SEVEN-DAY MINIMUM	27800	Aug 30	24300	Sep 24	18600	Sep 7 1995
INSTANTANEOUS PEAK FLOW			832000	Mar 12	832000	Mar 12 1997
INSTANTANEOUS PEAK STAGE			51.44	Mar 12	51.44	Mar 12 1997
10 PERCENT EXCEEDS	486000		467000		516000	
50 PERCENT EXCEEDS	229000		179000		149000	
90 PERCENT EXCEEDS	58600		33200		35800	

## OHIO RIVER MAIN STEM

03399800 OHIO RIVER BELOW SMITHLAND DAM, SMITHLAND, KY--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66400	37500	94800	103000	181000	327000	300000	558000	176000	357000	107000	35300
2	58900	41100	107000	98300	188000	281000	230000	551000	168000	365000	107000	14800
3	37500	41600	111000	98600	188000	239000	209000	550000	149000	369000	70800	37600
4	35600	42100	121000	81000	170000	211000	204000	553000	144000	367000	69500	36100
5	48000	42900	129000	74700	146000	199000	205000	555000	142000	369000	79300	28800
6	32600	61900	121000	77100	137000	204000	202000	554000	143000	373000	49000	33500
7	27400	64800	116000	112000	158000	202000	208000	557000	115000	342000	90500	22000
8	31600	60400	101000	178000	199000	195000	220000	559000	129000	290000	95800	37400
9	26800	59100	85700	251000	232000	183000	220000	560000	130000	227000	122000	25800
10	23500	89000	87100	340000	255000	189000	221000	558000	119000	198000	128000	29600
11	24600	102000	89200	411000	290000	223000	239000	556000	161000	194000	109000	19900
12	39000	117000	95500	440000	307000	280000	259000	554000	187000	201000	115000	39300
13	6870	116000	107000	448000	310000	321000	300000	549000	280000	180000	106000	24300
14	12800	102000	127000	458000	315000	338000	319000	539000	343000	167000	105000	19800
15	30400	92000	134000	467000	337000	343000	328000	517000	386000	164000	99800	32000
16	25000	84500	141000	469000	359000	339000	349000	488000	392000	176000	83400	19100
17	17700	91000	125000	463000	377000	300000	382000	460000	402000	173000	65300	23600
18	17100	102000	95900	450000	384000	238000	448000	400000	408000	143000	61500	24000
19	17200	100000	75100	400000	377000	203000	492000	316000	417000	115000	88900	14400
20	22700	94800	65500	319000	356000	201000	543000	236000	420000	96700	83500	23000
21	31300	74300	58500	275000	340000	235000	571000	189000	411000	143000	79100	24600
22	15800	70200	63900	230000	341000	288000	558000	171000	408000	195000	61800	41700
23	20600	63700	61600	199000	353000	353000	540000	188000	404000	206000	52000	31800
24	23000	59500	55800	177000	360000	380000	536000	193000	401000	163000	42300	24300
25	30700	76500	69400	165000	363000	403000	540000	229000	399000	125000	44200	31400
26	34200	86700	93400	165000	364000	418000	558000	242000	390000	118000	46700	13600
27	30100	90000	108000	180000	357000	421000	566000	255000	380000	116000	65700	22300
28	20000	87900	112000	192000	343000	425000	570000	256000	359000	102000	39000	23900
29	30500	84800	111000	195000	---	424000	568000	250000	333000	94700	36600	24600
30	41200	79700	108000	191000	---	409000	568000	207000	339000	86300	51200	18200
31	31900	---	114000	178000	---	379000	---	189000	---	94700	32000	---
TOTAL	910970	2315000	3084400	7885700	8087000	9151000	11453000	12539000	8635000	6310400	2386900	796700
MEAN	29390	77170	99500	254400	288800	295200	381800	404500	287800	203600	77000	26560
MAX	66400	117000	141000	469000	384000	425000	571000	560000	420000	373000	128000	41700
MIN	6870	37500	55800	74700	137000	183000	202000	171000	115000	86300	32000	13600

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1998, BY WATER YEAR (WY)

	1994	1995	1996	1997	1998	1994	1995	1996	1997	1998	1994	1995	1996	1997	1998
MEAN	60270	129100	202500	239800	336300	426400	326300	360200	264600	105500	77130	40590			
MAX	107500	226400	379200	254400	536200	700900	594100	562200	376000	203600	88600	86710			
(WY)	1997	1994	1997	1998	1994	1997	1994	1996	1997	1998	1996	1996			
MIN	29390	61750	99500	224200	213000	266700	150000	184300	71710	67010	54160	22380			
(WY)	1998	1995	1998	1997	1995	1995	1995	1997	1994	1994	1997	1995			

## SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1994 - 1998

ANNUAL TOTAL	72704670	73555070		
ANNUAL MEAN	199200	201500		
HIGHEST ANNUAL MEAN			213400	
LOWEST ANNUAL MEAN			247000	1994
HIGHEST DAILY MEAN	831000	Mar 12	157400	1995
LOWEST DAILY MEAN	6870	Oct 13	831000	Mar 12 1997
ANNUAL SEVEN-DAY MINIMUM	18200	Oct 13	6870	Oct 13 1997
INSTANTANEOUS PEAK FLOW			18200	Oct 13 1997
INSTANTANEOUS PEAK STAGE			578000	Apr 21
10 PERCENT EXCEEDS	454000		41.75	Apr 21
50 PERCENT EXCEEDS	126000			496000
90 PERCENT EXCEEDS	28000			149000
				33200

CUMBERLAND RIVER BASIN

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1979 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1979 to current year.

pH: October 1979 to current year.

WATER TEMPERATURE: October 1979 to current year.

DISSOLVED OXYGEN: October 1979 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1979.

REMARKS.--Four submersible pumps are located on Martins Fork Dam, at four different elevations referenced to sea level. Pump 1 is located near the bottom of the lake, at an elevation of 1,272 ft; pump 2 is at an elevation of 1,285 ft; pump 3 at an elevation of 1,298 ft; and pump 4 at an elevation of 1,308 ft, occasional operation. Each lake level is sampled once every four hours, or six times per day. A maximum and minimum value for PH ans a maximun, minimum, and mean value for temperature, specific conductance, and dissolved oxygen is determined for each level. The monitor was shut down Oct. 1- 10 and Nov. 13 to Mar. 29.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG.C), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	PUMP NUMBER 1											
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	116	112	114	---	---	---	---	---	---
2	---	---	---	120	112	115	---	---	---	---	---	---
3	---	---	---	120	112	116	---	---	---	---	---	---
4	---	---	---	116	112	115	---	---	---	---	---	---
5	---	---	---	121	112	116	---	---	---	---	---	---
6	---	---	---	121	113	117	---	---	---	---	---	---
7	---	---	---	117	113	115	---	---	---	---	---	---
8	---	---	---	117	113	114	---	---	---	---	---	---
9	---	---	---	117	113	114	---	---	---	---	---	---
10	---	---	---	118	114	115	---	---	---	---	---	---
11	158	154	155	118	114	115	---	---	---	---	---	---
12	162	150	156	118	114	116	---	---	---	---	---	---
13	158	154	155	---	---	---	---	---	---	---	---	---
14	158	154	157	---	---	---	---	---	---	---	---	---
15	158	149	154	---	---	---	---	---	---	---	---	---
16	153	148	150	---	---	---	---	---	---	---	---	---
17	160	151	156	---	---	---	---	---	---	---	---	---
18	155	147	150	---	---	---	---	---	---	---	---	---
19	150	150	150	---	---	---	---	---	---	---	---	---
20	154	145	148	---	---	---	---	---	---	---	---	---
21	152	145	149	---	---	---	---	---	---	---	---	---
22	148	143	147	---	---	---	---	---	---	---	---	---
23	151	142	146	---	---	---	---	---	---	---	---	---
24	146	129	138	---	---	---	---	---	---	---	---	---
25	125	118	122	---	---	---	---	---	---	---	---	---
26	125	118	122	---	---	---	---	---	---	---	---	---
27	126	119	123	---	---	---	---	---	---	---	---	---
28	123	115	120	---	---	---	---	---	---	---	---	---
29	123	115	120	---	---	---	---	---	---	---	---	---
30	119	111	115	---	---	---	---	---	---	---	---	---
31	116	111	113	---	---	---	---	---	---	---	---	---
MONTH	162	111	140	121	112	115	---	---	---	---	---	---





## CUMBERLAND RIVER BASIN

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG.C), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

## PUMP NUMBER 2

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	120	112	115	---	---	---	---	---	---
2	---	---	---	120	116	117	---	---	---	---	---	---
3	---	---	---	120	112	117	---	---	---	---	---	---
4	---	---	---	120	112	117	---	---	---	---	---	---
5	---	---	---	121	116	117	---	---	---	---	---	---
6	---	---	---	121	113	117	---	---	---	---	---	---
7	---	---	---	117	113	114	---	---	---	---	---	---
8	---	---	---	117	113	115	---	---	---	---	---	---
9	---	---	---	117	113	116	---	---	---	---	---	---
10	---	---	---	118	114	115	---	---	---	---	---	---
11	146	142	143	118	114	116	---	---	---	---	---	---
12	146	142	144	118	114	117	---	---	---	---	---	---
13	146	142	144	---	---	---	---	---	---	---	---	---
14	146	142	143	---	---	---	---	---	---	---	---	---
15	142	137	140	---	---	---	---	---	---	---	---	---
16	152	132	138	---	---	---	---	---	---	---	---	---
17	140	131	136	---	---	---	---	---	---	---	---	---
18	131	130	131	---	---	---	---	---	---	---	---	---
19	130	126	127	---	---	---	---	---	---	---	---	---
20	126	125	125	---	---	---	---	---	---	---	---	---
21	125	124	124	---	---	---	---	---	---	---	---	---
22	124	120	123	---	---	---	---	---	---	---	---	---
23	120	119	120	---	---	---	---	---	---	---	---	---
24	122	118	120	---	---	---	---	---	---	---	---	---
25	122	118	120	---	---	---	---	---	---	---	---	---
26	123	118	121	---	---	---	---	---	---	---	---	---
27	126	119	123	---	---	---	---	---	---	---	---	---
28	123	115	118	---	---	---	---	---	---	---	---	---
29	123	115	121	---	---	---	---	---	---	---	---	---
30	123	119	120	---	---	---	---	---	---	---	---	---
31	116	111	114	---	---	---	---	---	---	---	---	---
MONTH	152	111	128	121	112	116	---	---	---	---	---	---
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	116	100	107	99	88	93
2	---	---	---	---	---	---	111	104	108	103	91	96
3	---	---	---	---	---	---	107	103	104	111	91	101
4	---	---	---	---	---	---	103	103	103	99	82	92
5	---	---	---	---	---	---	107	103	105	90	82	85
6	---	---	---	---	---	---	107	103	106	94	75	82
7	---	---	---	---	---	---	111	107	108	85	77	81
8	---	---	---	---	---	---	---	---	---	93	77	81
9	---	---	---	---	---	---	---	---	---	93	74	84
10	---	---	---	---	---	---	106	106	106	84	76	81
11	---	---	---	---	---	---	106	98	103	82	76	78
12	---	---	---	---	---	---	110	98	102	86	78	82
13	---	---	---	---	---	---	106	98	103	90	78	84
14	---	---	---	---	---	---	106	97	102	82	75	79
15	---	---	---	---	---	---	105	97	103	90	75	80
16	---	---	---	---	---	---	113	97	105	78	75	77
17	---	---	---	---	---	---	82	75	78	82	75	78
18	---	---	---	---	---	---	83	71	78	82	78	81
19	---	---	---	---	---	---	95	76	88	86	77	82
20	---	---	---	---	---	---	79	72	75	85	81	84
21	---	---	---	---	---	---	80	73	76	85	81	83
22	---	---	---	---	---	---	88	80	83	85	77	82
23	---	---	---	---	---	---	85	80	83	85	77	82
24	---	---	---	---	---	---	90	78	86	85	81	84
25	---	---	---	---	---	---	90	79	87	85	81	83
26	---	---	---	---	---	---	93	85	89	85	81	83
27	---	---	---	---	---	---	97	85	88	85	79	83
28	---	---	---	---	---	---	97	85	91	83	79	80
29	---	---	---	---	---	---	92	88	89	82	78	80
30	---	---	---	112	100	107	96	84	92	82	78	79
31	---	---	---	108	100	103	---	---	---	82	78	81
MONTH	---	---	---	112	100	105	116	71	95	111	74	83

CUMBERLAND RIVER BASIN

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG.C), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

PUMP NUMBER 2

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	82	78	79	90	84	87	95	87	90	118	114	116
2	81	77	78	88	83	85	91	87	90	118	114	117
3	81	73	78	87	83	84	94	86	90	113	109	110
4	81	77	79	87	83	85	94	86	90	113	109	111
5	81	77	80	87	82	85	95	90	91	114	110	112
6	80	76	77	86	82	83	95	87	91	114	110	112
7	80	76	77	86	82	83	100	88	94	114	110	113
8	80	76	77	85	81	82	96	92	93	119	110	115
9	80	75	77	89	81	85	---	---	---	119	115	117
10	79	71	75	89	81	84	97	93	95	122	115	118
11	78	74	75	84	80	82	98	94	96	119	119	119
12	78	74	77	88	80	82	98	94	97	123	119	121
13	86	74	78	84	79	82	99	95	98	127	120	122
14	78	74	75	87	79	82	104	95	101	131	126	128
15	82	74	78	87	83	86	104	100	103	130	119	124
16	90	78	82	87	82	84	105	96	102	130	122	125
17	82	78	79	86	78	83	109	97	102	126	122	125
18	86	78	82	90	82	86	109	101	104	130	126	127
19	82	78	81	89	81	83	110	106	107	130	122	127
20	86	82	83	91	81	84	110	102	107	130	126	128
21	86	82	83	92	88	91	114	102	107	134	126	130
22	86	82	85	95	91	92	110	106	107	138	126	130
23	86	82	84	95	87	90	110	106	108	134	126	129
24	86	82	85	94	87	91	106	106	106	130	130	130
25	86	82	85	94	86	90	114	110	111	---	---	---
26	86	82	85	94	90	91	114	106	110	---	---	---
27	90	82	86	93	89	90	114	106	110	---	---	---
28	90	82	87	93	89	92	118	110	111	139	135	136
29	90	82	85	93	88	90	114	110	111	140	136	139
30	90	86	87	88	88	88	114	110	112	145	137	141
31	---	---	---	95	88	91	118	110	113	---	---	---
MONTH	90	71	81	95	78	86	118	86	102	145	109	123
YEAR	152	71	99									

PUMP NUMBER 3

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	120	116	119	---	---	---	---	---	---
2	---	---	---	120	116	117	---	---	---	---	---	---
3	---	---	---	120	112	117	---	---	---	---	---	---
4	---	---	---	120	116	117	---	---	---	---	---	---
5	---	---	---	120	116	117	---	---	---	---	---	---
6	---	---	---	121	113	118	---	---	---	---	---	---
7	---	---	---	117	113	116	---	---	---	---	---	---
8	---	---	---	117	113	116	---	---	---	---	---	---
9	---	---	---	117	113	116	---	---	---	---	---	---
10	---	---	---	118	114	116	---	---	---	---	---	---
11	146	142	143	118	114	115	---	---	---	---	---	---
12	146	142	143	118	118	118	---	---	---	---	---	---
13	146	142	144	---	---	---	---	---	---	---	---	---
14	146	142	143	---	---	---	---	---	---	---	---	---
15	141	137	139	---	---	---	---	---	---	---	---	---
16	148	136	138	---	---	---	---	---	---	---	---	---
17	144	135	139	---	---	---	---	---	---	---	---	---
18	135	127	132	---	---	---	---	---	---	---	---	---
19	130	126	128	---	---	---	---	---	---	---	---	---
20	129	125	127	---	---	---	---	---	---	---	---	---
21	128	122	124	---	---	---	---	---	---	---	---	---
22	127	120	123	---	---	---	---	---	---	---	---	---
23	123	119	121	---	---	---	---	---	---	---	---	---
24	122	118	120	---	---	---	---	---	---	---	---	---
25	122	118	119	---	---	---	---	---	---	---	---	---
26	122	114	119	---	---	---	---	---	---	---	---	---
27	123	119	121	---	---	---	---	---	---	---	---	---
28	123	115	118	---	---	---	---	---	---	---	---	---
29	123	119	122	---	---	---	---	---	---	---	---	---
30	119	115	118	---	---	---	---	---	---	---	---	---
31	124	115	118	---	---	---	---	---	---	---	---	---
MONTH	148	114	129	121	112	117	---	---	---	---	---	---













## CUMBERLAND RIVER BASIN

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

## PUMP NUMBER 4

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	7.5	7.4	7.3	7.2	7.2	7.2	7.1	7.0	7.0	6.9
2	---	---	7.6	7.4	7.3	7.2	7.3	7.2	7.0	6.9	6.9	6.8
3	---	---	7.5	7.4	7.3	7.1	7.3	7.2	6.9	6.9	6.9	6.8
4	---	---	7.4	7.2	7.1	7.0	7.3	7.3	7.1	6.9	6.9	6.9
5	---	---	7.4	6.8	7.1	7.0	7.5	7.3	7.0	7.0	6.9	6.9
6	---	---	7.3	7.2	7.1	7.0	7.3	7.3	7.0	7.0	7.0	6.9
7	---	---	7.4	7.1	7.0	7.0	7.3	7.2	7.0	7.0	7.0	7.0
8	---	---	7.4	7.3	7.0	7.0	7.4	7.2	7.1	7.0	7.0	6.9
9	---	---	7.4	7.3	7.0	7.0	7.5	7.3	---	---	6.9	6.9
10	---	---	7.4	7.3	7.0	6.9	7.4	7.3	7.0	7.0	6.9	6.9
11	---	---	7.3	7.0	7.1	7.0	7.4	7.3	6.9	6.7	6.9	6.7
12	---	---	7.4	7.1	7.1	7.0	7.3	7.2	6.8	6.7	7.0	6.7
13	---	---	7.4	7.2	7.1	7.0	7.4	7.3	6.9	6.6	7.0	6.8
14	---	---	7.4	7.2	7.1	7.0	7.3	7.3	6.8	6.8	7.0	6.7
15	---	---	7.5	7.2	7.1	7.0	7.4	7.3	7.0	6.8	7.0	6.9
16	---	---	7.3	7.2	7.2	7.2	7.3	7.3	7.0	6.9	7.0	6.9
17	---	---	7.3	7.2	7.3	7.1	7.3	7.3	7.0	6.9	7.0	6.9
18	---	---	7.4	7.2	7.3	7.1	7.4	7.3	7.0	7.0	7.0	6.9
19	---	---	7.3	7.2	7.2	7.2	7.3	7.3	---	---	6.9	6.7
20	---	---	7.5	7.2	7.3	7.1	7.3	7.1	---	---	6.7	6.6
21	---	---	7.4	7.2	7.2	7.1	7.1	7.1	---	---	6.9	6.6
22	---	---	7.3	7.2	7.2	7.1	7.2	7.0	---	---	6.9	6.8
23	---	---	7.2	7.2	7.2	7.1	7.2	7.1	---	---	6.8	6.7
24	---	---	7.3	7.2	7.2	7.1	7.2	7.2	---	---	6.8	6.8
25	---	---	7.3	7.2	7.1	7.1	7.2	7.2	---	---	---	---
26	---	---	7.2	7.2	7.2	7.1	7.3	7.1	7.1	7.1	---	---
27	7.0	6.9	7.3	7.2	7.2	7.2	7.3	7.2	7.1	7.0	---	---
28	7.2	6.9	7.4	7.2	7.2	7.2	7.2	7.2	7.0	7.0	---	---
29	7.4	7.1	7.2	7.2	7.2	7.2	7.2	7.2	7.0	7.0	---	---
30	7.5	7.2	7.3	7.2	7.2	7.2	7.2	7.1	7.0	7.0	---	---
31	---	---	7.2	7.2	---	---	7.2	7.1	7.0	7.0	---	---
MONTH	7.5	6.9	7.6	6.8	7.3	6.9	7.5	7.0	7.1	6.6	7.0	6.6
YEAR	7.6	6.6										

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

## PUMP NUMBER 1

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	15.9	15.7	15.8	---	---	---	---	---	---
2	---	---	---	15.9	15.7	15.8	---	---	---	---	---	---
3	---	---	---	15.7	15.7	15.7	---	---	---	---	---	---
4	---	---	---	15.5	15.1	15.3	---	---	---	---	---	---
5	---	---	---	15.1	14.7	14.9	---	---	---	---	---	---
6	---	---	---	14.7	14.3	14.5	---	---	---	---	---	---
7	---	---	---	14.5	14.3	14.3	---	---	---	---	---	---
8	---	---	---	14.3	14.1	14.1	---	---	---	---	---	---
9	---	---	---	14.1	13.9	14.0	---	---	---	---	---	---
10	---	---	---	13.9	13.9	13.9	---	---	---	---	---	---
11	16.6	16.4	16.5	13.9	13.5	13.7	---	---	---	---	---	---
12	16.8	16.4	16.6	13.7	13.5	13.6	---	---	---	---	---	---
13	16.8	16.4	16.6	---	---	---	---	---	---	---	---	---
14	16.6	16.6	16.6	---	---	---	---	---	---	---	---	---
15	16.8	16.4	16.6	---	---	---	---	---	---	---	---	---
16	16.8	16.4	16.6	---	---	---	---	---	---	---	---	---
17	16.6	16.4	16.5	---	---	---	---	---	---	---	---	---
18	16.6	16.4	16.5	---	---	---	---	---	---	---	---	---
19	16.8	16.4	16.6	---	---	---	---	---	---	---	---	---
20	16.8	16.6	16.6	---	---	---	---	---	---	---	---	---
21	16.8	16.6	16.7	---	---	---	---	---	---	---	---	---
22	16.8	16.6	16.7	---	---	---	---	---	---	---	---	---
23	16.8	16.6	16.7	---	---	---	---	---	---	---	---	---
24	17.0	16.8	16.9	---	---	---	---	---	---	---	---	---
25	17.4	17.0	17.1	---	---	---	---	---	---	---	---	---
26	17.0	16.8	17.0	---	---	---	---	---	---	---	---	---
27	17.0	16.8	16.9	---	---	---	---	---	---	---	---	---
28	17.0	16.6	16.8	---	---	---	---	---	---	---	---	---
29	16.4	16.3	16.4	---	---	---	---	---	---	---	---	---
30	16.3	15.9	16.1	---	---	---	---	---	---	---	---	---
31	16.1	15.7	15.9	---	---	---	---	---	---	---	---	---
MONTH	17.4	15.7	16.6	15.9	13.5	14.6	---	---	---	---	---	---



CUMBERLAND RIVER BASIN

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

PUMP NUMBER 2

DAY	MAX	MIN	MEAN	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	16.3	15.9	16.1	---	---	---	---	---	---			
2	---	---	---	16.3	16.1	16.1	---	---	---	---	---	---			
3	---	---	---	16.1	15.7	15.9	---	---	---	---	---	---			
4	---	---	---	15.7	15.5	15.6	---	---	---	---	---	---			
5	---	---	---	15.3	14.9	15.1	---	---	---	---	---	---			
6	---	---	---	14.9	14.7	14.8	---	---	---	---	---	---			
7	---	---	---	14.7	14.5	14.7	---	---	---	---	---	---			
8	---	---	---	14.5	14.5	14.5	---	---	---	---	---	---			
9	---	---	---	14.3	14.1	14.2	---	---	---	---	---	---			
10	---	---	---	14.1	14.1	14.1	---	---	---	---	---	---			
11	21.0	20.6	20.7	14.1	13.9	14.0	---	---	---	---	---	---			
12	21.0	20.4	20.7	13.9	13.7	13.8	---	---	---	---	---	---			
13	21.0	20.4	20.8	---	---	---	---	---	---	---	---	---			
14	21.0	20.6	20.8	---	---	---	---	---	---	---	---	---			
15	20.8	20.6	20.8	---	---	---	---	---	---	---	---	---			
16	20.6	20.2	20.4	---	---	---	---	---	---	---	---	---			
17	20.2	20.0	20.1	---	---	---	---	---	---	---	---	---			
18	19.8	19.6	19.6	---	---	---	---	---	---	---	---	---			
19	19.6	19.4	19.5	---	---	---	---	---	---	---	---	---			
20	19.4	19.2	19.3	---	---	---	---	---	---	---	---	---			
21	19.0	18.8	18.9	---	---	---	---	---	---	---	---	---			
22	18.8	18.4	18.6	---	---	---	---	---	---	---	---	---			
23	18.2	17.8	18.1	---	---	---	---	---	---	---	---	---			
24	17.8	17.6	17.7	---	---	---	---	---	---	---	---	---			
25	17.6	17.4	17.5	---	---	---	---	---	---	---	---	---			
26	17.4	17.2	17.3	---	---	---	---	---	---	---	---	---			
27	17.8	17.2	17.4	---	---	---	---	---	---	---	---	---			
28	17.4	17.0	17.1	---	---	---	---	---	---	---	---	---			
29	16.8	16.6	16.6	---	---	---	---	---	---	---	---	---			
30	16.4	16.3	16.4	---	---	---	---	---	---	---	---	---			
31	16.3	16.1	16.2	---	---	---	---	---	---	---	---	---			
MONTH	21.0	16.1	18.8	16.3	13.7	14.9	---	---	---	---	---	---			
DAY	MAX	MIN	MEAN	FEBRUARY			MARCH			APRIL			MAY		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	17.9	12.0	14.1	13.7	13.3	13.5			
2	---	---	---	---	---	---	16.6	13.2	14.9	14.1	13.5	13.7			
3	---	---	---	---	---	---	15.5	13.5	14.5	14.0	13.4	13.7			
4	---	---	---	---	---	---	14.1	12.7	13.4	14.0	13.8	13.9			
5	---	---	---	---	---	---	13.5	13.1	13.3	14.0	13.6	13.8			
6	---	---	---	---	---	---	13.3	12.9	13.0	14.2	13.4	13.8			
7	---	---	---	---	---	---	13.9	13.1	13.5	14.0	13.2	13.6			
8	---	---	---	---	---	---	---	---	---	14.0	13.4	13.6			
9	---	---	---	---	---	---	---	---	---	13.6	13.2	13.4			
10	---	---	---	---	---	---	14.2	14.0	14.1	13.8	13.2	13.6			
11	---	---	---	---	---	---	13.6	13.0	13.2	14.1	13.4	13.7			
12	---	---	---	---	---	---	13.6	12.6	13.0	14.1	13.7	13.9			
13	---	---	---	---	---	---	13.4	12.4	13.0	14.5	14.0	14.2			
14	---	---	---	---	---	---	15.1	12.5	13.2	14.6	14.2	14.4			
15	---	---	---	---	---	---	13.7	12.7	13.2	15.0	14.0	14.4			
16	---	---	---	---	---	---	14.3	12.9	13.6	14.4	14.2	14.2			
17	---	---	---	---	---	---	13.7	13.3	13.5	14.3	14.0	14.2			
18	---	---	---	---	---	---	13.3	13.0	13.2	14.7	14.1	14.3			
19	---	---	---	---	---	---	13.0	12.7	12.9	14.5	14.1	14.3			
20	---	---	---	---	---	---	12.6	12.4	12.5	14.5	14.3	14.4			
21	---	---	---	---	---	---	12.4	12.2	12.3	14.6	14.3	14.4			
22	---	---	---	---	---	---	12.5	12.0	12.3	14.6	14.4	14.5			
23	---	---	---	---	---	---	12.4	12.1	12.3	14.6	14.2	14.5			
24	---	---	---	---	---	---	12.7	11.9	12.4	14.8	14.4	14.6			
25	---	---	---	---	---	---	13.1	12.5	12.8	14.9	14.4	14.6			
26	---	---	---	---	---	---	13.1	12.7	12.9	14.9	14.5	14.7			
27	---	---	---	---	---	---	13.1	12.7	13.0	14.7	14.1	14.4			
28	---	---	---	---	---	---	13.1	12.9	13.0	14.5	14.1	14.3			
29	---	---	---	---	---	---	13.3	13.1	13.2	14.6	14.4	14.5			
30	---	---	---	14.4	11.6	13.0	13.5	13.1	13.2	14.6	14.4	14.5			
31	---	---	---	13.8	11.6	12.9	---	---	---	14.6	14.4	14.6			
MONTH	---	---	---	14.4	11.6	12.9	17.9	11.9	13.2	15.0	13.2	14.1			

## CUMBERLAND RIVER BASIN

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

## PUMP NUMBER 2

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	14.9	14.5	14.7	17.1	16.3	16.8	19.0	18.4	18.7	21.0	20.2	20.7
2	15.3	14.7	14.9	17.0	16.6	16.8	19.0	18.4	18.7	21.0	20.6	20.7
3	14.9	14.7	14.7	17.2	16.6	16.8	19.0	18.4	18.7	21.2	20.8	21.0
4	15.2	14.8	15.0	17.0	16.4	16.8	19.2	18.2	18.8	21.0	20.8	20.9
5	15.2	14.8	15.0	17.2	16.6	17.0	18.8	18.6	18.7	21.2	20.6	20.9
6	15.2	14.8	15.0	17.6	16.6	17.2	19.4	18.4	18.9	20.8	20.6	20.7
7	15.3	15.1	15.2	17.6	16.8	17.2	19.2	18.4	18.9	21.7	20.0	20.9
8	15.3	15.1	15.1	17.6	17.0	17.3	19.4	18.8	19.1	21.4	20.2	20.8
9	15.5	15.1	15.3	17.4	16.8	17.3	---	---	---	1.4	20.6	21.0
10	15.8	15.2	15.5	17.6	17.0	17.5	19.2	18.8	19.1	21.5	20.8	21.2
11	15.4	14.9	15.2	17.8	17.2	17.5	19.4	19.0	19.2	21.4	20.8	21.1
12	15.5	14.7	15.1	18.0	17.2	17.6	19.6	18.8	19.2	21.4	21.0	21.3
13	16.6	14.9	15.4	18.2	17.6	17.7	19.4	19.0	19.2	21.5	21.0	21.3
14	15.7	14.9	15.2	18.0	17.4	17.7	20.0	18.8	19.4	21.9	20.6	21.3
15	15.8	15.0	15.4	18.0	17.6	17.8	19.4	19.2	19.3	22.1	20.8	21.4
16	15.6	15.2	15.5	18.0	17.6	17.9	19.6	19.0	19.4	21.9	20.8	21.3
17	16.4	15.4	15.7	18.4	18.0	18.1	19.8	19.4	19.6	21.9	21.0	21.4
18	16.0	15.8	15.9	18.2	17.6	18.0	20.0	19.2	19.7	21.7	21.2	21.5
19	16.4	15.8	16.1	18.6	17.6	18.2	20.0	19.4	19.7	21.9	21.2	21.6
20	16.2	15.8	16.0	18.6	17.8	18.3	20.4	19.2	19.9	21.9	21.4	21.5
21	16.4	15.6	16.1	18.4	17.8	18.1	20.4	19.6	19.9	21.9	21.2	21.5
22	16.5	15.7	16.1	18.8	17.8	18.2	20.4	19.8	20.1	22.3	21.2	21.8
23	16.8	16.3	16.5	18.8	17.8	18.3	20.8	19.8	20.2	22.1	21.0	21.7
24	16.5	16.1	16.4	19.0	18.2	18.5	20.4	20.0	20.2	21.9	21.5	21.7
25	17.0	16.1	16.5	18.4	18.0	18.3	20.8	20.0	20.5	---	---	---
26	16.6	16.5	16.6	18.8	18.0	18.4	21.2	20.0	20.5	---	---	---
27	17.0	16.3	16.6	19.0	18.2	18.5	21.0	20.2	20.5	---	---	---
28	17.1	16.6	16.8	18.6	18.2	18.5	20.8	20.2	20.6	21.9	21.4	21.7
29	17.1	16.7	16.9	18.8	18.2	18.6	20.8	20.4	20.7	22.1	20.8	21.6
30	17.3	16.2	16.9	19.0	18.2	18.6	20.8	20.6	20.7	22.3	21.7	21.8
31	---	---	---	18.8	18.4	18.6	21.0	20.6	20.7	---	---	---
MONTH	17.3	14.5	15.7	19.0	16.3	17.8	21.2	18.2	19.6	22.3	20.0	21.3
YEAR	22.3	11.6	17.0									

## PUMP NUMBER 3

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	16.4	16.3	16.4	---	---	---	---	---	---
2	---	---	---	16.4	16.1	16.3	---	---	---	---	---	---
3	---	---	---	16.1	15.9	16.0	---	---	---	---	---	---
4	---	---	---	15.9	15.5	15.6	---	---	---	---	---	---
5	---	---	---	16.1	15.3	15.6	---	---	---	---	---	---
6	---	---	---	15.1	14.7	14.9	---	---	---	---	---	---
7	---	---	---	14.9	14.7	14.8	---	---	---	---	---	---
8	---	---	---	14.7	14.5	14.6	---	---	---	---	---	---
9	---	---	---	14.5	14.3	14.4	---	---	---	---	---	---
10	---	---	---	14.5	14.1	14.3	---	---	---	---	---	---
11	22.1	21.7	21.9	14.1	14.1	14.1	---	---	---	---	---	---
12	22.5	22.1	22.2	13.9	13.7	13.8	---	---	---	---	---	---
13	23.1	22.1	22.7	---	---	---	---	---	---	---	---	---
14	22.9	21.5	22.0	---	---	---	---	---	---	---	---	---
15	21.5	21.0	21.2	---	---	---	---	---	---	---	---	---
16	21.5	20.4	20.8	---	---	---	---	---	---	---	---	---
17	20.4	20.2	20.2	---	---	---	---	---	---	---	---	---
18	19.8	19.6	19.7	---	---	---	---	---	---	---	---	---
19	20.0	19.6	19.7	---	---	---	---	---	---	---	---	---
20	19.8	19.2	19.4	---	---	---	---	---	---	---	---	---
21	19.2	19.0	19.1	---	---	---	---	---	---	---	---	---
22	19.0	18.6	18.8	---	---	---	---	---	---	---	---	---
23	19.2	18.0	18.3	---	---	---	---	---	---	---	---	---
24	18.0	17.8	17.9	---	---	---	---	---	---	---	---	---
25	18.8	17.6	18.1	---	---	---	---	---	---	---	---	---
26	18.0	17.4	17.8	---	---	---	---	---	---	---	---	---
27	18.2	17.4	17.9	---	---	---	---	---	---	---	---	---
28	17.8	17.0	17.3	---	---	---	---	---	---	---	---	---
29	18.0	16.6	17.1	---	---	---	---	---	---	---	---	---
30	16.8	16.4	16.6	---	---	---	---	---	---	---	---	---
31	17.4	16.4	16.8	---	---	---	---	---	---	---	---	---
MONTH	23.1	16.4	19.3	16.4	13.7	15.1	---	---	---	---	---	---





CUMBERLAND RIVER BASIN

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

PUMP NUMBER 1

DAY	MAX	MIN	MEAN	PUMP NUMBER 1								
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	---	---	---	7.0	6.1	6.6	---	---	---	---	---	---
2	---	---	---	6.2	5.6	6.0	---	---	---	---	---	---
3	---	---	---	7.9	5.5	7.3	---	---	---	---	---	---
4	---	---	---	7.8	7.7	7.8	---	---	---	---	---	---
5	---	---	---	7.9	7.6	7.8	---	---	---	---	---	---
6	---	---	---	7.8	7.6	7.7	---	---	---	---	---	---
7	---	---	---	7.7	7.2	7.5	---	---	---	---	---	---
8	---	---	---	7.5	6.8	7.2	---	---	---	---	---	---
9	---	---	---	7.4	7.2	7.3	---	---	---	---	---	---
10	---	---	---	7.4	7.1	7.2	---	---	---	---	---	---
11	.5	.4	.4	7.4	7.2	7.2	---	---	---	---	---	---
12	.5	.4	.5	7.1	7.1	7.1	---	---	---	---	---	---
13	.5	.4	.5	---	---	---	---	---	---	---	---	---
14	.5	.4	.5	---	---	---	---	---	---	---	---	---
15	.5	.5	.5	---	---	---	---	---	---	---	---	---
16	.6	.5	.5	---	---	---	---	---	---	---	---	---
17	.5	.5	.5	---	---	---	---	---	---	---	---	---
18	.5	.5	.5	---	---	---	---	---	---	---	---	---
19	.5	.4	.5	---	---	---	---	---	---	---	---	---
20	.5	.4	.5	---	---	---	---	---	---	---	---	---
21	.5	.4	.4	---	---	---	---	---	---	---	---	---
22	.5	.4	.5	---	---	---	---	---	---	---	---	---
23	.5	.3	.4	---	---	---	---	---	---	---	---	---
24	.7	.5	.6	---	---	---	---	---	---	---	---	---
25	5.6	2.1	3.3	---	---	---	---	---	---	---	---	---
26	4.8	1.5	3.2	---	---	---	---	---	---	---	---	---
27	5.4	1.9	3.5	---	---	---	---	---	---	---	---	---
28	7.1	3.3	5.8	---	---	---	---	---	---	---	---	---
29	7.2	6.7	6.9	---	---	---	---	---	---	---	---	---
30	7.1	6.7	7.0	---	---	---	---	---	---	---	---	---
31	7.2	6.7	7.0	---	---	---	---	---	---	---	---	---
MONTH	7.2	.3	2.1	7.9	5.5	7.2	---	---	---	---	---	---
DAY	MAX	MIN	MEAN	PUMP NUMBER 1								
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	---	---	---	---	---	---	10.3	9.7	10.0	8.7	8.5	8.6
2	---	---	---	---	---	---	9.7	9.6	9.6	9.1	8.5	8.6
3	---	---	---	---	---	---	9.9	9.1	9.6	8.7	8.1	8.5
4	---	---	---	---	---	---	9.0	8.8	8.9	8.7	8.1	8.3
5	---	---	---	---	---	---	8.8	8.7	8.7	8.5	8.0	8.2
6	---	---	---	---	---	---	8.7	8.6	8.7	8.7	8.1	8.4
7	---	---	---	---	---	---	8.7	8.5	8.6	8.6	8.2	8.3
8	---	---	---	---	---	---	8.8	8.7	8.7	8.3	8.0	8.2
9	---	---	---	---	---	---	8.7	8.6	8.7	7.9	7.6	7.7
10	---	---	---	---	---	---	8.8	8.6	8.7	7.6	7.0	7.3
11	---	---	---	---	---	---	8.6	8.6	8.6	7.3	6.8	7.0
12	---	---	---	---	---	---	8.8	8.6	8.7	8.1	6.7	7.3
13	---	---	---	---	---	---	8.8	8.7	8.8	9.0	7.6	8.1
14	---	---	---	---	---	---	8.9	8.7	8.8	8.2	7.6	7.9
15	---	---	---	---	---	---	9.0	8.8	8.8	7.8	7.5	7.6
16	---	---	---	---	---	---	9.0	8.8	8.9	7.3	6.7	7.0
17	---	---	---	---	---	---	12.3	8.9	10.2	6.7	5.9	6.3
18	---	---	---	---	---	---	11.1	9.2	10.5	6.2	5.7	5.9
19	---	---	---	---	---	---	12.1	10.7	11.5	5.7	5.3	5.5
20	---	---	---	---	---	---	11.6	11.4	11.5	5.3	5.0	5.1
21	---	---	---	---	---	---	11.4	10.8	11.1	4.9	4.4	4.6
22	---	---	---	---	---	---	11.3	10.6	11.0	4.4	4.0	4.2
23	---	---	---	---	---	---	10.8	9.8	10.4	4.2	3.3	3.9
24	---	---	---	---	---	---	10.3	9.0	9.6	3.9	3.3	3.6
25	---	---	---	---	---	---	9.6	9.0	9.3	3.5	2.7	3.1
26	---	---	---	---	---	---	9.7	9.1	9.3	3.4	2.5	3.1
27	---	---	---	---	---	---	9.3	8.9	9.1	3.2	2.2	2.8
28	---	---	---	---	---	---	9.3	8.8	9.0	2.9	2.1	2.5
29	---	---	---	---	---	---	9.3	8.9	9.1	2.5	2.4	2.4
30	---	---	---	11.1	9.9	10.6	9.1	8.5	8.8	2.4	2.0	2.2
31	---	---	---	10.5	9.9	10.2	---	---	---	2.6	1.7	2.2
MONTH	---	---	---	11.1	9.9	10.4	12.3	8.5	9.4	9.1	1.7	5.9

## CUMBERLAND RIVER BASIN

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

## PUMP NUMBER 1

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	2.7	1.3	1.8	.2	.2	.2	.0	.0	.0	.6	.4	.5
2	1.7	1.4	1.5	.2	.2	.2	.0	.0	.0	.5	.5	.5
3	2.0	1.0	1.4	.2	.2	.2	.0	.0	.0	.5	.4	.5
4	1.7	1.0	1.5	.2	.2	.2	.0	.0	.0	.6	.4	.5
5	1.3	.9	1.1	.2	.2	.2	.0	.0	.0	.5	.3	.4
6	2.4	.8	1.2	.2	.2	.2	.1	.0	.1	.3	.1	.2
7	1.4	.8	1.1	.2	.2	.2	.1	.1	.1	.2	.2	.2
8	1.1	.2	.6	.2	.2	.2	.1	.1	.1	.3	.1	.2
9	.5	.2	.3	.2	.2	.2	---	---	---	.3	.2	.2
10	.5	.2	.3	.2	.2	.2	.2	.2	.2	.3	.2	.2
11	.7	.2	.4	.2	.2	.2	.2	.2	.2	.3	.2	.2
12	.7	.3	.4	.2	.2	.2	.3	.3	.3	.4	.2	.3
13	.6	.3	.4	.2	.2	.2	.3	.3	.3	.4	.3	.4
14	.7	.3	.4	.2	.2	.2	.3	.3	.3	.3	.2	.3
15	.6	.3	.4	.2	.2	.2	.4	.4	.4	.4	.3	.3
16	.5	.3	.4	.2	.2	.2	.4	.4	.4	.3	.2	.3
17	.4	.2	.3	.2	.2	.2	.4	.4	.4	.3	.2	.2
18	.3	.2	.2	.2	.2	.2	.5	.5	.5	.3	.2	.3
19	.3	.2	.3	.2	.2	.2	---	---	---	.3	.2	.2
20	.2	.2	.2	.3	.2	.2	---	---	---	.3	.3	.3
21	.2	.2	.2	.2	.1	.1	---	---	---	.4	.3	.4
22	.3	.2	.2	.2	.1	.1	---	---	---	.4	.4	.4
23	.3	.2	.3	.2	.1	.1	---	---	---	.5	.4	.4
24	.3	.2	.2	.2	.0	.1	---	---	---	.5	.5	.5
25	.2	.2	.2	.1	.0	.0	---	---	---	---	---	---
26	.2	.2	.2	.1	.0	.0	---	---	---	---	---	---
27	.2	.2	.2	.0	.0	.0	.4	.3	.4	---	---	---
28	.2	.2	.2	.0	.0	.0	.4	.3	.4	.5	.3	.4
29	.2	.2	.2	.0	.0	.0	.5	.3	.4	.3	.2	.2
30	.2	.2	.2	.0	.0	.0	.5	.4	.4	.2	.1	.2
31	---	---	---	.0	.0	.0	.5	.4	.4	---	---	---
MONTH	2.7	.2	.5	.3	.0	.1	.5	.0	.2	.6	.1	.3
YEAR	12.3	.0	3.2									

## PUMP NUMBER 2

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	7.7	7.1	7.4	---	---	---	---	---	---
2	---	---	---	8.1	7.1	7.6	---	---	---	---	---	---
3	---	---	---	8.4	7.9	8.1	---	---	---	---	---	---
4	---	---	---	8.5	8.1	8.3	---	---	---	---	---	---
5	---	---	---	8.6	8.3	8.4	---	---	---	---	---	---
6	---	---	---	8.3	8.2	8.3	---	---	---	---	---	---
7	---	---	---	8.3	7.8	8.2	---	---	---	---	---	---
8	---	---	---	8.0	7.7	7.9	---	---	---	---	---	---
9	---	---	---	8.2	7.8	8.0	---	---	---	---	---	---
10	---	---	---	8.2	7.8	8.0	---	---	---	---	---	---
11	3.1	1.6	2.1	8.1	7.9	8.0	---	---	---	---	---	---
12	2.7	.5	1.6	8.1	7.8	8.0	---	---	---	---	---	---
13	3.1	.6	1.9	---	---	---	---	---	---	---	---	---
14	2.4	.8	1.6	---	---	---	---	---	---	---	---	---
15	1.8	1.1	1.4	---	---	---	---	---	---	---	---	---
16	4.8	.8	3.4	---	---	---	---	---	---	---	---	---
17	5.0	4.5	4.8	---	---	---	---	---	---	---	---	---
18	5.3	4.5	4.9	---	---	---	---	---	---	---	---	---
19	5.4	4.4	5.0	---	---	---	---	---	---	---	---	---
20	5.2	4.6	4.9	---	---	---	---	---	---	---	---	---
21	5.2	4.5	4.9	---	---	---	---	---	---	---	---	---
22	5.5	4.6	4.9	---	---	---	---	---	---	---	---	---
23	5.8	5.2	5.5	---	---	---	---	---	---	---	---	---
24	6.0	5.7	5.9	---	---	---	---	---	---	---	---	---
25	6.4	5.9	6.2	---	---	---	---	---	---	---	---	---
26	6.5	5.9	6.2	---	---	---	---	---	---	---	---	---
27	6.6	5.4	5.6	---	---	---	---	---	---	---	---	---
28	7.4	5.8	6.7	---	---	---	---	---	---	---	---	---
29	7.3	7.1	7.2	---	---	---	---	---	---	---	---	---
30	7.4	7.2	7.3	---	---	---	---	---	---	---	---	---
31	7.4	7.3	7.4	---	---	---	---	---	---	---	---	---
MONTH	7.4	.5	4.7	8.6	7.1	8.0	---	---	---	---	---	---



