03262001 WOOLPER CREEK AT WOOLPER CREEK ROAD NEAR BURLINGTON, KY

LOCATION.--Lat 39°01'48", long 84°48'15", Boone County, Hydrologic Unit 05090203, at bridge on Woolper Road, 1.0 mi upstream from Ashby Fork, 1.1 mi downstream from Double Lick Creek, 4.3 mi west of Burlington, and at mile 4.8.

DRAINAGE AREA.--24.19 mi^2.

PERIOD OF RECORD.--December 2000 to current year.

GAGE.--Water-stage recorder with telemetry and crest-stage gage. Datum of gage is 490.67 ft NGVD of 1929.

REMARKS.--Records fair.

COOPERATION.--Northern Kentucky Sanitation District No. 1.

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

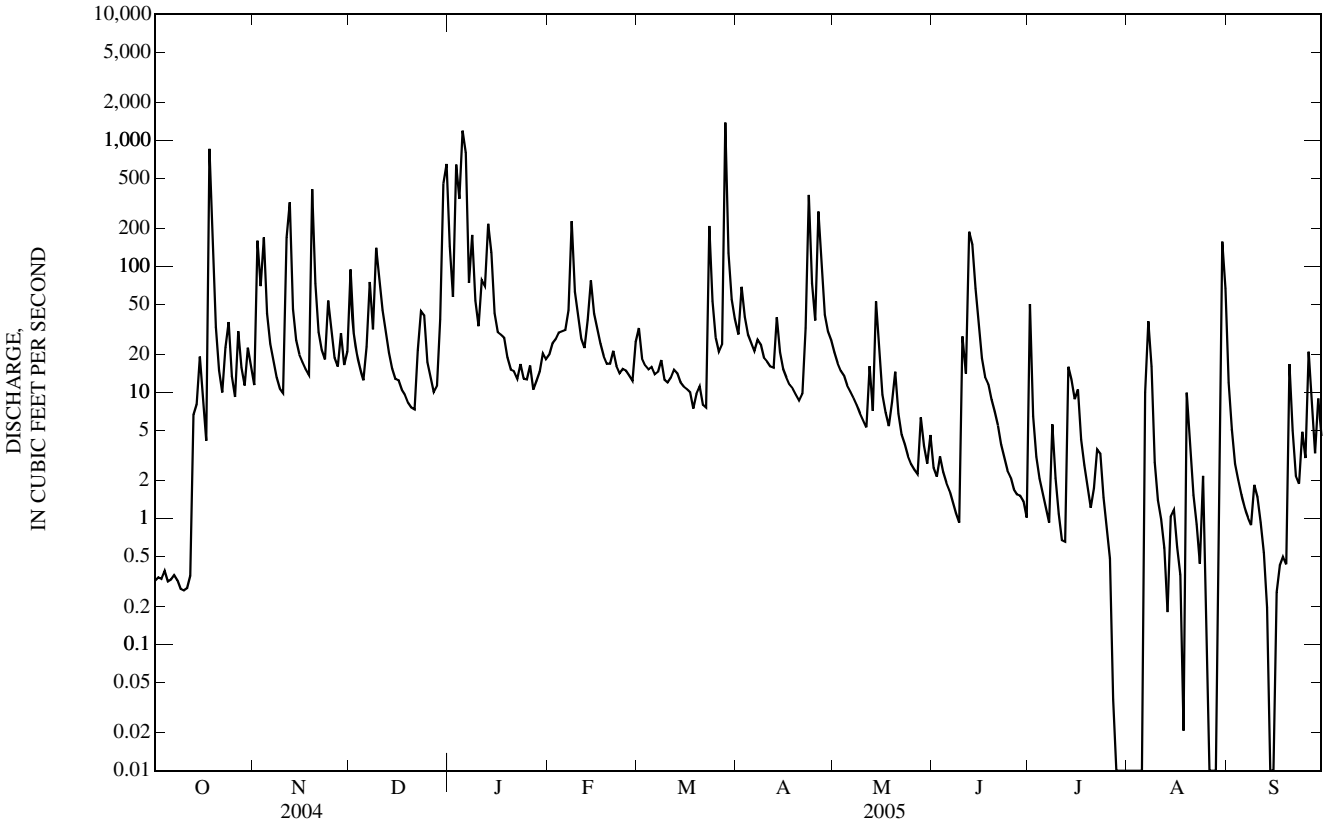
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.32	11	94	144	20	33	29	21	2.5	50	0.00	12
2	0.34	160	29	57	24	19	69	17	2.2	6.5	0.00	5.1
3	0.33	70	20	643	26	16	40	15	3.1	3.1	0.00	2.7
4	0.39	170	15	345	30	15	29	14	2.3	2.1	0.00	2.0
5	0.32	42	12	1,190	31	16	25	11	1.9	1.6	0.00	1.5
6	0.33	24	23	797	31	14	21	10	1.7	1.2	10	1.2
7	0.36	18	75	74	45	15	26	9.1	1.4	0.93	37	1.0
8	0.32	13	32	177	229	18	24	8.0	1.1	5.6	16	0.89
9	0.28	11	140	54	63	13	19	6.9	0.93	2.1	2.8	1.8
10	0.27	9.9	78	34	40	12	18	6.0	28	1.1	1.4	1.5
11	0.28	170	45	79	27	13	16	5.3	14	0.67	0.99	0.93
12	0.35	322	31	70	23	15	16	16	189	0.65	0.59	0.54
13	6.7	46	21	218	38	14	40	7.1	149	16	0.18	0.20
14	8.1	26	15	129	77	12	21	53	67	13	1.0	0.00
15	19	20	13	43	42	11	15	21	35	8.9	1.2	0.00
16	9.2	17	13	30	32	11	13	9.6	19	11	0.59	0.26
17	4.1	15	11	29	24	10	12	7.0	13	4.3	0.36	0.43
18	856	14	9.6	27	20	7.5	11	5.4	12	2.7	0.02	0.50
19	191	410	8.3	19	17	9.8	9.6	8.4	8.8	1.8	10	0.43
20	33	73	7.6	15	17	11	8.7	15	7.1	1.2	4.1	17
21	15	30	7.4	15	21	8.0	9.8	6.8	5.5	1.7	1.5	5.0
22	10	22	22	13	16	7.6	33	4.6	3.9	3.5	0.90	2.2
23	23	18	44	17	14	210	370	3.9	3.0	3.3	0.44	1.9
24	36	54	41	13	15	53	74	3.1	2.4	1.5	2.2	4.9
25	13	32	17	13	15	27	37	2.7	2.1	0.81	0.17	3.0
26	9.2	19	13	16	14	21	273	2.5	1.7	0.48	0.00	21
27	31	16	10	11	12	24	108	2.3	1.6	0.04	0.00	7.8
28	16	30	11	12	25	1,380	42	6.4	1.5	0.00	0.00	3.3
29	11	17	38	15	---	127	30	3.8	1.4	0.00	0.39	9.0
30	23	21	454	21	---	55	26	2.7	1.0	0.00	157	4.5
31	16	---	649	18	---	38	---	4.6	---	0.00	67	---
TOTAL	1,334.19	1,900.9	1,998.9	4,338	988	2,235.9	1,465.1	309.2	583.13	145.78	315.83	112.58
MEAN	43.0	63.4	64.5	140	35.3	72.1	48.8	9.97	19.4	4.70	10.2	3.75
MAX	856	410	649	1,190	229	1,380	370	53	189	50	157	21
MIN	0.27	9.9	7.4	11	12	7.5	8.7	2.3	0.93	0.00	0.00	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2005, BY WATER YEAR (WY)

MEAN	37.0	45.3	60.0	64.5	41.6	45.5	46.7	54.8	25.8	17.4	11.3	16.3
MAX	72.7	63.4	84.1	140	59.7	72.1	104	114	34.8	56.5	29.0	31.6
(WY)	(2002)	(2005)	(2002)	(2005)	(2003)	(2005)	(2002)	(2002)	(2003)	(2001)	(2001)	(2003)
MIN	6.83	30.7	33.6	14.0	28.0	11.0	6.34	9.97	12.5	0.33	0.13	3.75
(WY)	(2004)	(2003)	(2004)	(2001)	(2001)	(2001)	(2001)	(2005)	(2004)	(2002)	(2002)	(2005)

03262001 WOOLPER CREEK AT WOOLPER CREEK ROAD NEAR BURLINGTON, KY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 2001 - 2005	
ANNUAL TOTAL	15,709.52		15,727.51			
ANNUAL MEAN	42.9		43.1		41.4	
HIGHEST ANNUAL MEAN					50.5	2002
LOWEST ANNUAL MEAN					35.5	2004
HIGHEST DAILY MEAN	1,550	Jan 4	1,380	Mar 28	1,550	Jan 4, 2004
LOWEST DAILY MEAN	0.27	Oct 10	0.00	Jul 28	0.00	Jul 27, 2002
ANNUAL SEVEN-DAY MINIMUM	0.31	Oct 5	0.00	Jul 28	0.00	Aug 5, 2002
MAXIMUM PEAK FLOW			4,240	Mar 28	6,640	Jul 18, 2001
MAXIMUM PEAK STAGE			9.37	Mar 28	12.17	Jul 18, 2001
INSTANTANEOUS LOW FLOW					0.00	Sep 14, 2002
10 PERCENT EXCEEDS	80		71		72	
50 PERCENT EXCEEDS	15		13		13	
90 PERCENT EXCEEDS	0.87		0.44		0.75	



03262001 WOOLPER CREEK AT WOOLPER ROAD NEAR BURLINGTON, KY—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 2000 to current year.

COOPERATION.--Northern Kentucky Sanitation District No. 1.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: December 2000 to current year.
pH: December 2000 to current year.
WATER TEMPERATURES: December 2000 to current year.
DISSOLVED OXYGEN: December 2000 to current year.
TURBIDITY: December 2000 to current year.

INSTRUMENTATION.--Water-quality monitor with telemetry. New turbidity probe installed summer 2004, range 0-3000 FNU.

REMARKS.--
SPECIFIC CONDUCTANCE: Records rated fair. Missing record: Jan. 9-10, Mar. 28-29, Apr. 30, and May 1-3, 27-31, 2005.
pH: Records rated fair. No missing record.
WATER TEMPERATURES: Records rated excellent. No missing record.
DISSOLVED OXYGEN: Records rated fair. Missing record Nov 22-30, Dec. 1-9, 2004, Jan. 7-10, Mar. 12-24, 28, Apr. 24-30, May 1-2, and June 13, 2005.
TURBIDITY: Records poor. Missing record Dec. 21-29, 31, 2004, Jan. 1-9, 16-22, Mar. 28-31, Apr. 1-7, 27-30, May 1-2, and July 10-13, 2005.

EXTREMES FOR PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded, 2720 microsiemens, Jan. 30, 2005; minimum recorded, 96 microsiemens, May 8, 2002.
pH: Maximum recorded, 9.0 units, Feb. 15, 23, 26, 2005; minimum recorded, 7.1 units, Jan. 7 and June 14, 2005.
WATER TEMPERATURES: Maximum recorded, 32.0°C, July 25, 2005; minimum recorded, 0.0°C, several days in Dec., Jan., Feb., and Mar. of each year of record.
DISSOLVED OXYGEN: Maximum recorded, 20.0 mg/L, Dec. 4, 6, 2000; minimum recorded, 0.9 mg/L, Jan. 3, 2005.
TURBIDITY: Maximum recorded, 2600 FNU, July 1, 2005; minimum recorded, <2.0 FNU, Nov .2001, Jul. 7-9, 2002, and Nov. 8-11, Jun. 8, 21, 2004; and several days in Feb., Mar., Apr., and May 2005.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 2720 microsiemens, Jan. 30, 2005; minimum recorded, 116 microsiemens, June 12, 2005.
pH: Maximum recorded, 9.0 units, Feb. 15, 23, and 26, 2005; minimum recorded, 7.1 units, Jan. 7, and June 14, 2005.
WATER TEMPERATURES: Maximum recorded, 32.0°C, July 25, 2005; minimum recorded, 0.0°C, Several days in Dec . 2004 and Jan., Feb., and Mar. 2005.
DISSOLVED OXYGEN: Maximum recorded, 18.6 mg/L, Nov. 15, 2004; minimum recorded, 0.9 mg/L, Jan. 3, 2005.
TURBIDITY: Maximum recorded, 2600 FNU, July 1, 2005; minimum recorded, <2.0 FNU, Feb. 25-27, Mar. 4, 6, 9-19, 21-22, Apr. 10, 12-13, 15-18, and May 3-5, 2005.

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	628	570	619	555	532	545	511	345	378	406	315	364
2	631	618	625	574	333	452	477	411	446	454	398	425
3	631	621	625	475	348	419	495	477	488	416	261	336
4	630	621	626	486	271	374	512	492	503	356	262	320
5	630	575	624	484	403	450	523	499	511	347	197	235
6	630	621	625	521	482	505	533	492	507	265	167	191
7	633	612	627	539	516	529	502	351	422	534	265	441
8	635	626	631	551	529	537	463	377	426	545	454	480
9	642	626	634	553	534	542	496	305	435	---	---	---
10	644	634	639	551	534	542	495	341	437	---	---	---
11	641	630	633	560	228	473	529	495	516	469	379	420
12	638	527	615	380	224	291	544	515	522	421	363	388
13	621	534	593	454	380	423	572	541	557	445	190	387
14	666	601	635	494	454	475	586	564	574	395	203	318
15	688	467	591	510	488	498	599	574	585	429	379	407
16	489	462	474	525	502	513	617	583	595	450	428	441
17	519	489	504	552	519	532	602	583	593	716	450	599
18	522	128	323	557	523	539	606	580	592	710	602	673
19	381	170	297	531	201	315	603	577	589	602	548	575
20	469	380	430	427	319	380	633	577	604	551	517	531
21	514	464	489	473	426	452	648	614	632	1,300	521	770
22	546	509	528	503	472	489	637	590	608	1,940	1,300	1,820
23	567	444	542	522	498	512	815	637	702	1,930	1,490	1,700
24	461	418	436	524	409	471	1,060	815	955	1,510	1,130	1,280
25	529	459	497	472	410	440	1,060	832	929	1,130	916	1,030
26	554	524	542	500	469	486	833	785	807	1,070	896	1,000
27	584	512	530	518	496	507	815	759	782	1,000	875	935
28	557	516	534	526	464	481	814	762	786	920	827	878
29	577	546	565	505	470	486	1,670	799	930	1,470	709	801
30	591	548	574	535	500	513	1,710	314	830	2,720	1,470	2,250
31	595	526	553	---	---	---	315	255	279	2,000	1,180	1,590
MONTH	688	128	554	574	201	472	1,710	255	597			

03262001 WOOLPER CREEK AT WOOLPER ROAD NEAR BURLINGTON, KY—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	1,180	844	988	657	600	628	536	482	511	---	---	---
2	924	694	766	733	627	704	588	435	492	---	---	---
3	1,540	688	798	731	639	686	502	444	476	---	---	---
4	2,300	877	1,360	649	590	621	529	457	493	507	469	488
5	877	653	733	648	588	605	524	453	488	532	466	500
6	653	583	613	878	648	771	523	442	485	680	479	570
7	616	537	573	744	612	677	517	453	486	714	671	691
8	635	433	482	731	609	690	581	491	539	727	688	705
9	572	488	526	717	621	665	546	510	530	742	706	726
10	584	559	568	639	602	620	545	514	530	754	729	743
11	588	571	579	626	601	612	545	525	537	761	720	753
12	598	575	587	751	603	637	564	543	553	911	711	788
13	690	568	602	1,780	751	1,230	567	470	529	793	736	762
14	624	542	568	1,780	968	1,320	535	508	521	751	530	623
15	558	529	541	968	765	849	560	526	543	657	572	610
16	579	548	566	772	683	731	567	536	548	702	646	668
17	598	553	576	695	636	664	571	539	551	678	621	654
18	586	548	567	652	619	635	580	543	563	673	620	648
19	590	554	571	652	620	630	590	562	574	666	623	647
20	593	576	584	798	652	747	607	567	591	708	635	668
21	749	586	663	787	717	751	614	571	589	677	605	642
22	724	614	667	720	662	697	672	450	566	636	606	622
23	632	572	602	797	337	485	484	252	332	629	608	620
24	591	555	574	541	439	502	933	484	810	639	620	627
25	642	565	617	573	541	559	941	921	931	652	622	636
26	725	642	686	589	524	559	939	401	776	662	629	642
27	659	580	620	542	483	521	783	530	702	---	---	---
28	678	568	598	---	---	---	784	676	767	---	---	---
29	---	---	---	---	---	---	748	506	695	---	---	---
30	---	---	---	506	435	474	---	---	---	---	---	---
31	---	---	---	528	472	496	---	---	---	---	---	---
MONTH	2,300	433	649									
		JUNE			JULY			AUGUST			SEPTEMBER	
1	820	774	801	577	299	369	620	580	603	517	416	469
2	826	783	802	474	397	439	618	578	600	585	517	556
3	809	758	780	506	464	482	615	579	599	604	585	594
4	828	801	810	525	495	508	609	573	594	607	596	603
5	810	779	795	539	508	522	610	594	603	605	588	600
6	813	773	792	548	508	530	614	406	529	605	579	596
7	815	744	783	553	516	541	433	171	387	605	577	595
8	889	755	812	603	544	573	428	204	343	607	578	596
9	891	791	840	603	575	591	489	428	456	614	592	602
10	837	374	678	599	565	587	514	475	489	616	591	607
11	578	415	522	604	567	590	536	492	512	619	599	611
12	669	116	551	602	570	590	541	499	525	621	598	613
13	372	150	254	678	449	525	558	518	541	624	599	614
14	492	292	408	516	462	490	549	439	519	624	600	614
15	499	407	458	527	499	513	568	536	548	626	601	615
16	552	499	530	561	487	514	573	550	564	627	583	608
17	581	552	569	529	339	498	578	544	564	617	592	607
18	589	581	584	544	522	531	586	548	569	621	585	607
19	594	583	589	558	523	539	627	455	554	618	542	607
20	596	582	590	561	517	547	490	445	463	808	488	539
21	597	577	590	565	535	555	515	481	494	507	500	504
22	600	579	592	566	539	557	517	484	504	525	502	509
23	606	582	596	582	563	570	526	497	514	528	496	519
24	609	584	600	584	554	573	534	122	436	521	513	518
25	615	586	604	586	553	574	545	317	515	526	512	521
26	616	589	606	593	550	576	546	520	535	679	481	517
27	620	591	610	599	571	586	553	523	541	496	475	482
28	624	584	611	601	568	588	561	532	547	532	494	509
29	623	595	612	616	576	594	558	532	549	583	505	540
30	629	471	610	611	579	599	555	196	415	557	513	528
31	---	---	---	615	580	602	416	263	351	---	---	---
MONTH	891	116	633	678	299	544	627	122	515	808	416	567
YEAR	2,720	116	596									

03262001 WOOLPER CREEK AT WOOLPER ROAD NEAR BURLINGTON, KY—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8.0	7.8	8.2	7.9	8.5	8.2	7.7	7.3	8.6	8.3	8.9	8.2
2	7.9	7.7	8.1	7.9	8.6	8.2	7.9	7.2	8.5	8.4	8.8	8.1
3	8.0	7.8	8.1	7.9	8.5	8.1	8.0	7.3	8.6	8.3	8.7	8.0
4	8.0	7.8	8.0	7.9	8.4	8.0	7.6	7.4	8.5	8.2	8.8	8.1
5	8.0	7.8	8.1	7.9	8.4	8.0	7.7	7.4	8.6	8.2	8.8	8.1
6	8.0	7.8	8.1	7.9	8.6	8.1	7.9	7.2	8.6	8.2	8.9	8.1
7	8.0	7.8	8.2	7.9	8.3	8.0	7.2	7.1	8.5	8.2	8.9	8.0
8	8.0	7.8	8.2	7.9	8.7	8.1	7.7	7.2	8.2	8.0	8.9	8.0
9	7.9	7.7	8.3	7.9	8.5	8.0	8.1	7.7	8.4	8.0	8.7	7.9
10	7.9	7.7	8.3	8.0	8.5	8.2	8.3	8.1	8.7	8.1	8.6	7.9
11	8.0	7.8	8.3	7.9	8.6	8.3	8.2	8.1	8.8	8.1	8.6	8.0
12	7.9	7.8	8.0	7.8	8.8	8.3	8.2	8.1	8.7	8.2	8.7	8.0
13	8.0	7.7	8.2	7.9	8.7	8.3	8.3	7.9	8.6	8.1	8.7	8.0
14	8.0	7.8	8.2	7.9	8.7	8.3	8.2	7.9	8.4	8.1	8.7	7.9
15	7.9	7.7	8.2	7.9	8.6	8.3	8.4	8.1	9.0	8.1	8.7	7.9
16	7.8	7.7	8.2	7.8	8.6	8.2	8.4	8.3	8.9	8.1	8.7	7.9
17	7.9	7.7	8.2	7.9	8.6	8.3	8.4	8.2	8.9	8.1	8.7	7.8
18	7.8	7.6	8.5	7.9	8.6	8.3	8.4	8.1	8.9	8.1	8.6	7.8
19	7.8	7.7	8.2	7.9	8.7	8.3	8.4	8.2	8.8	8.1	8.4	7.8
20	7.7	7.6	8.3	8.0	8.6	8.4	8.4	8.3	8.6	8.1	8.5	7.9
21	7.7	7.6	8.3	8.1	8.6	8.3	8.5	8.3	8.9	8.2	8.5	7.9
22	7.8	7.7	8.3	8.0	8.7	8.3	8.5	8.4	8.9	8.0	8.4	7.8
23	8.0	7.6	8.3	8.0	8.6	8.4	8.5	8.3	9.0	8.1	8.1	7.9
24	8.0	7.7	8.4	8.0	8.5	8.2	8.5	8.3	8.9	8.1	8.4	7.9
25	7.8	7.7	8.5	8.2	8.5	8.2	8.4	8.3	8.9	8.1	8.5	7.9
26	7.9	7.7	8.4	8.1	8.5	8.2	8.4	8.3	9.0	8.1	8.8	8.0
27	8.0	7.7	8.4	8.1	8.5	8.2	8.5	8.2	8.9	8.1	8.8	8.0
28	8.0	7.7	8.5	8.1	8.4	8.2	8.5	8.1	8.8	8.0	8.4	8.1
29	8.2	7.8	8.5	8.0	8.7	8.1	8.5	8.2	---	---	8.2	7.9
30	8.3	7.9	8.4	8.0	8.3	8.0	8.5	8.3	---	---	8.3	7.9
31	8.2	7.9	---	---	8.1	7.3	8.5	8.3	---	---	8.4	7.9
MONTH	8.3	7.6	8.5	7.8	8.8	7.3	8.5	7.1	9.0	8.0	8.9	7.8
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.6	7.9	8.4	8.2	8.4	8.0	7.9	7.7	7.9	7.5	8.2	8.0
2	8.7	8.0	8.6	8.4	8.1	7.8	8.1	7.7	7.8	7.5	8.2	8.0
3	8.9	8.2	8.7	8.3	8.4	7.9	8.3	7.9	7.7	7.4	8.2	8.0
4	8.9	7.9	8.6	8.1	8.4	7.9	8.3	7.9	7.7	7.4	8.2	8.0
5	9.0	8.0	8.6	8.0	8.2	7.8	8.3	7.9	7.6	7.3	8.3	8.0
6	8.8	7.9	8.5	8.1	8.2	7.8	8.3	7.9	7.9	7.4	8.3	8.0
7	8.9	7.9	8.4	8.0	8.3	7.6	8.3	7.9	8.0	7.7	8.3	8.0
8	8.9	8.1	8.3	8.0	8.0	7.4	8.3	7.9	7.9	7.7	8.2	7.9
9	8.9	8.3	8.3	8.0	8.1	7.3	8.4	8.0	8.0	7.7	8.3	7.9
10	8.6	8.1	8.3	8.0	8.0	7.3	8.3	7.9	8.1	7.8	8.3	7.9
11	8.6	8.0	8.3	8.1	7.8	7.4	8.2	7.8	8.2	7.7	8.2	7.9
12	8.4	8.0	8.3	8.0	7.9	7.4	8.2	7.8	8.2	7.7	8.1	7.9
13	8.5	8.1	8.5	8.0	7.7	7.2	8.2	7.9	8.0	7.6	8.1	7.9
14	8.6	8.0	8.3	8.1	8.1	7.1	8.3	8.0	8.2	7.6	8.0	7.9
15	8.5	8.0	8.7	8.2	8.0	7.9	8.4	8.0	8.2	7.8	8.1	7.8
16	8.4	7.9	8.9	8.1	8.1	7.9	8.4	8.0	8.0	7.7	8.1	7.8
17	8.2	7.8	9.0	8.3	8.1	8.0	8.4	7.9	8.0	7.7	8.2	7.9
18	8.1	7.7	8.8	8.3	8.2	8.0	8.4	7.9	8.0	7.7	8.1	7.9
19	8.1	7.7	8.6	8.3	8.3	8.0	8.4	7.9	8.1	7.6	8.1	7.9
20	7.9	7.6	8.6	8.3	8.3	8.0	8.2	7.8	8.0	7.7	8.0	7.8
21	8.1	7.6	8.9	8.2	8.3	8.0	8.3	7.8	8.1	7.8	8.0	7.8
22	8.3	7.9	8.8	8.3	8.2	7.9	8.3	8.0	8.2	7.8	8.1	7.8
23	8.3	7.9	8.7	8.3	8.2	7.9	8.3	8.0	8.2	7.8	8.2	7.8
24	8.0	7.3	8.6	8.3	8.2	7.8	8.6	7.9	8.2	7.7	8.1	7.8
25	7.5	7.4	8.6	8.2	8.2	7.8	8.3	7.5	7.9	7.8	8.1	7.9
26	8.3	7.4	8.5	8.1	8.1	7.8	8.4	7.6	8.0	7.7	8.1	7.9
27	7.9	7.7	8.4	8.0	8.0	7.7	8.0	7.6	8.0	7.7	8.0	7.9
28	8.0	7.8	8.6	7.8	8.1	7.7	8.0	7.7	7.9	7.7	8.0	7.8
29	8.0	7.9	8.2	7.9	8.0	7.7	8.0	7.7	8.0	7.8	8.2	7.8
30	8.2	8.0	8.0	7.8	8.0	7.7	8.0	7.6	8.0	7.8	8.1	7.9
31	---	---	8.3	8.0	---	---	8.0	7.5	8.1	7.9	---	---
MONTH	9.0	7.3	9.0	7.8	8.4	7.1	8.6	7.5	8.2	7.3	8.3	7.8
YEAR	9.0	7.1										

03262001 WOOLPER CREEK AT WOOLPER ROAD NEAR BURLINGTON, KY—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	17.8	12.0	15.2	14.8	13.4	14.1	8.6	5.8	7.5	6.9	5.2	6.1
2	16.9	14.0	16.1	16.8	14.8	15.7	5.9	4.2	5.1	8.4	6.7	7.3
3	15.9	10.6	13.2	15.1	12.3	13.3	5.3	3.7	4.5	9.7	8.4	9.2
4	16.1	9.8	12.8	13.3	11.7	12.6	4.7	2.3	3.6	9.7	8.8	9.4
5	13.1	9.1	11.3	11.7	9.3	10.4	5.5	2.9	4.2	8.8	7.3	8.2
6	13.5	7.7	10.4	11.3	7.8	9.5	8.9	5.5	7.2	7.5	6.9	7.2
7	14.3	8.1	10.9	12.4	9.0	10.7	12.1	8.9	10.6	7.1	6.3	6.5
8	16.4	10.3	13.1	11.2	8.1	9.4	10.6	7.7	9.2	6.5	5.9	6.2
9	16.5	12.8	14.5	8.1	6.0	7.1	9.2	6.6	7.6	6.6	6.0	6.3
10	15.5	12.1	14.0	8.5	5.5	7.1	10.1	9.2	9.6	6.7	6.3	6.5
11	14.1	9.9	11.8	10.0	7.4	8.3	9.3	6.6	7.9	9.8	6.5	7.8
12	13.6	9.7	11.6	10.6	8.6	9.8	6.9	5.7	6.4	12.1	9.8	11.2
13	13.5	12.7	13.1	8.6	6.2	7.1	6.6	3.1	5.1	11.8	8.9	11.2
14	14.9	13.2	13.9	7.0	4.4	5.8	3.1	2.2	2.7	8.9	4.4	6.7
15	13.8	11.0	12.4	7.0	4.1	5.7	2.2	0.5	1.3	4.4	2.7	3.5
16	11.0	9.3	10.5	8.5	6.6	7.5	1.8	0.2	0.9	3.1	0.3	2.0
17	11.5	7.4	9.1	10.3	8.5	9.4	2.4	0.7	1.6	0.3	0.0	0.0
18	11.7	8.0	9.5	12.3	10.3	11.3	2.9	0.3	1.6	0.0	0.0	0.0
19	12.7	11.7	12.2	12.8	12.0	12.5	2.9	0.1	1.7	0.2	0.0	0.0
20	13.7	12.7	13.2	13.0	12.1	12.6	0.4	0.0	0.1	0.2	0.0	0.1
21	14.2	13.4	13.7	12.6	11.1	11.8	0.9	0.2	0.5	0.5	0.0	0.0
22	13.7	12.8	13.2	11.2	10.7	11.0	0.6	0.0	0.2	0.3	0.0	0.0
23	14.5	12.2	13.0	11.6	10.5	11.0	0.0	0.0	0.0	0.0	0.0	0.0
24	15.8	13.5	14.5	13.2	11.6	12.2	0.1	0.0	0.0	0.0	0.0	0.0
25	14.2	11.3	13.0	12.0	6.4	8.9	0.0	0.0	0.0	0.3	0.0	0.0
26	13.6	11.3	12.8	7.4	5.3	6.4	0.1	0.0	0.0	0.2	0.0	0.0
27	14.6	13.5	14.0	8.0	6.9	7.5	0.1	0.0	0.0	0.3	0.0	0.0
28	15.8	13.7	14.8	7.8	6.0	7.2	0.3	0.0	0.1	0.0	0.0	0.0
29	18.0	15.7	16.7	6.5	5.4	6.0	0.3	0.0	0.1	0.0	0.0	0.0
30	19.1	16.8	17.7	8.1	6.4	6.9	2.0	0.0	0.3	0.2	0.0	0.0
31	16.8	14.0	15.0	---	---	---	5.2	2.0	3.9	0.5	0.0	0.0
MONTH	19.1	7.4	13.1	16.8	4.1	9.6	12.1	0.0	3.3	12.1	0.0	3.7
		FEBRUARY			MARCH			APRIL			MAY	
1	1.5	0.0	0.4	3.6	1.5	2.6	12.9	9.4	10.3	13.0	9.5	11.4
2	0.6	0.0	0.1	3.3	0.0	1.6	9.4	7.3	8.2	12.4	10.4	11.4
3	2.3	0.0	0.8	3.5	0.0	1.5	12.3	5.7	8.6	12.5	9.3	10.9
4	3.1	0.0	1.2	4.2	0.3	2.1	14.6	7.6	10.8	15.1	7.8	11.2
5	4.3	0.8	2.4	4.7	3.0	3.7	16.7	10.2	13.3	17.1	9.5	13.0
6	4.6	1.9	3.3	8.0	2.4	5.1	16.2	11.7	14.2	18.2	10.8	14.4
7	5.3	3.8	4.5	8.5	5.7	7.1	16.2	13.7	15.0	19.8	12.2	16.0
8	7.5	5.3	6.4	7.4	3.1	5.1	17.7	12.5	15.0	22.3	15.1	18.5
9	7.0	4.9	6.1	4.5	0.7	2.7	17.9	11.4	14.6	22.4	16.4	19.5
10	4.9	2.1	3.5	3.0	0.5	1.8	19.6	12.7	16.1	23.0	17.8	20.2
11	2.9	0.8	1.7	2.7	1.7	2.1	19.6	15.7	17.8	24.2	18.0	21.1
12	5.0	0.5	2.6	4.2	1.5	2.8	18.3	14.9	16.1	22.0	18.2	19.6
13	5.7	3.1	4.0	3.7	1.9	2.9	14.9	12.0	13.4	22.6	16.0	19.3
14	7.6	5.7	6.8	5.7	0.7	3.2	15.9	9.2	12.5	20.7	17.3	18.7
15	9.3	4.7	6.8	6.5	1.8	4.3	16.8	10.6	13.7	17.3	15.1	16.2
16	8.2	5.7	7.4	6.9	3.7	5.3	17.7	11.3	14.5	16.2	14.0	15.0
17	5.7	3.0	4.4	8.5	3.9	6.2	18.7	12.3	15.5	19.3	12.3	15.7
18	4.6	1.8	3.0	9.3	4.2	6.9	20.2	14.2	17.1	21.5	13.9	17.6
19	3.6	0.0	2.0	8.0	6.4	6.9	20.2	15.2	17.8	19.2	16.6	17.6
20	4.9	2.7	3.4	8.2	5.6	6.8	20.6	15.4	18.2	18.0	16.7	17.3
21	7.3	4.9	6.3	8.5	4.1	6.4	19.1	15.4	17.0	21.9	15.4	18.4
22	6.4	5.2	5.7	7.1	4.7	5.9	16.6	14.3	15.2	20.0	16.1	18.1
23	5.9	4.1	5.0	6.2	5.3	5.9	15.2	9.8	11.7	21.1	16.1	18.9
24	4.9	2.7	3.8	9.8	4.5	6.8	9.8	8.1	8.9	19.9	16.5	18.4
25	3.4	0.6	2.1	8.2	6.8	7.6	14.0	8.0	10.6	19.9	15.7	18.1
26	5.6	1.9	3.7	9.0	7.2	8.1	12.9	11.3	12.0	22.2	15.4	19.0
27	5.9	2.3	4.2	8.2	6.8	7.5	11.6	9.6	10.8	22.5	17.4	20.0
28	5.4	3.6	4.6	8.2	7.1	7.6	11.9	9.5	10.8	21.2	18.1	19.8
29	---	---	---	12.3	6.1	8.6	11.9	11.2	11.6	22.4	17.2	19.9
30	---	---	---	14.6	8.4	11.3	12.5	11.4	11.9	20.7	17.9	18.6
31	---	---	---	16.1	11.8	13.6	---	---	---	22.3	16.6	19.2
MONTH	9.3	0.0	3.8	16.1	0.0	5.5	20.6	5.7	13.4	24.2	7.8	17.2

03262001 WOOLPER CREEK AT WOOLPER ROAD NEAR BURLINGTON, KY—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	22.1	17.5	19.9	26.7	22.5	24.5	27.0	21.3	24.3	24.7	20.4	22.3
2	20.5	18.8	19.4	26.7	21.9	24.1	27.8	21.7	24.9	24.1	21.0	22.7
3	21.9	18.1	20.0	28.4	20.9	24.6	28.2	22.5	25.4	23.6	19.4	21.6
4	25.0	19.3	22.1	29.8	22.9	26.2	28.4	23.1	25.8	23.6	18.5	20.9
5	27.0	20.6	23.8	27.4	24.3	25.7	25.5	24.1	24.8	24.0	18.0	20.7
6	27.9	22.5	25.2	29.2	21.8	25.3	24.6	22.4	23.6	24.2	18.0	20.8
7	29.1	22.3	25.4	28.0	21.7	24.7	27.8	22.5	24.5	23.9	18.2	20.8
8	28.9	22.1	25.5	27.2	21.9	24.3	27.2	22.5	24.5	23.8	17.9	20.6
9	29.1	22.9	26.1	28.1	21.4	24.8	28.0	22.7	25.3	25.0	20.0	22.2
10	27.0	22.7	24.4	28.6	20.3	24.2	29.1	22.5	25.7	25.3	20.1	22.5
11	24.2	22.0	23.1	25.4	21.3	23.5	29.3	24.0	26.3	23.9	19.2	21.6
12	25.3	22.2	23.6	24.6	22.9	23.7	29.1	23.4	26.1	23.4	18.2	20.6
13	25.2	21.8	23.1	23.2	21.6	22.0	29.1	23.5	26.1	22.8	18.6	20.7
14	24.1	21.9	22.8	23.6	21.6	22.4	27.2	23.6	25.4	22.7	18.6	20.6
15	23.7	20.1	21.9	26.5	22.5	24.3	27.0	24.1	25.4	23.3	19.5	21.3
16	23.7	20.2	21.8	26.5	23.7	25.1	25.1	23.6	24.2	23.0	20.9	22.0
17	23.5	18.2	20.8	27.0	24.3	25.4	26.9	21.8	24.2	22.0	19.7	20.8
18	22.9	18.0	20.5	29.5	24.5	26.7	26.0	22.0	23.9	21.7	17.6	19.6
19	22.9	18.0	20.7	30.6	25.2	27.5	26.6	22.8	24.7	21.4	17.5	19.3
20	24.1	18.5	21.3	28.6	24.5	26.6	28.4	24.4	26.1	22.0	19.7	20.8
21	25.2	18.6	21.8	30.2	24.0	26.7	28.7	24.0	25.9	22.8	19.8	21.2
22	27.4	20.6	23.7	28.3	25.1	26.6	27.1	22.5	24.5	24.0	18.7	21.2
23	28.1	19.5	23.5	28.8	24.1	26.5	24.4	19.8	22.3	23.9	21.1	22.2
24	28.6	19.7	23.9	31.0	24.3	27.4	25.4	18.3	21.4	23.2	20.5	21.9
25	29.3	21.5	25.1	32.0	25.1	28.3	23.3	18.1	20.9	22.9	21.5	22.3
26	29.3	22.0	25.5	31.2	26.1	28.7	24.1	20.9	22.2	22.1	20.7	21.5
27	29.8	23.0	26.2	28.8	23.2	25.7	24.6	22.5	23.4	20.7	18.4	19.7
28	28.8	23.0	25.7	25.8	20.4	23.1	25.3	21.1	23.2	20.9	17.0	19.1
29	28.9	23.0	25.8	25.5	19.6	22.8	23.8	22.0	22.9	19.7	16.7	18.1
30	30.3	23.5	26.5	25.9	19.8	23.0	23.0	21.7	22.2	16.9	13.9	15.5
31	---	---	---	26.5	20.3	23.5	23.6	21.1	22.2	---	---	---
MONTH	30.3	17.5	23.3	32.0	19.6	25.1	29.3	18.1	24.3	25.3	13.9	20.8
YEAR	32.0	0.0	13.6									

03262001 WOOLPER CREEK AT WOOLPER ROAD NEAR BURLINGTON, KY—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	8.9	6.6	7.6	12.1	9.2	10.2	---	---	---	11.5	8.8	10.5
2	8.5	5.8	7.1	9.8	9.1	9.4	---	---	---	11.0	6.9	9.1
3	9.3	6.9	7.9	10.6	9.5	10.0	---	---	---	10.8	0.9	7.6
4	9.4	8.0	8.6	10.6	9.8	10.1	---	---	---	9.8	3.7	4.9
5	10.6	7.8	9.2	11.7	10.0	10.8	---	---	---	9.8	1.8	6.3
6	11.0	9.0	9.8	12.4	10.2	11.2	---	---	---	10.5	2.8	7.3
7	11.3	8.8	9.9	12.8	10.1	11.1	---	---	---	---	---	---
8	10.7	8.4	9.4	14.9	10.2	12.4	---	---	---	---	---	---
9	10.6	7.4	8.9	16.2	11.5	13.7	---	---	---	---	---	---
10	10.4	6.6	8.4	17.0	12.6	14.3	10.9	9.9	10.3	---	---	---
11	12.0	8.2	10.1	15.3	12.4	13.3	11.8	10.0	10.8	10.8	9.9	10.4
12	11.8	8.7	10	13.1	12.1	12.6	13.4	10.6	11.5	9.9	8.9	9.5
13	10.9	8.0	9.8	16.1	12.9	14.6	13.8	10.7	12.0	10.4	8.9	9.4
14	10.7	9.7	10.1	17.3	14.2	15.5	15.0	12.0	13.1	11.5	10.4	10.9
15	12.0	9.5	10.8	18.6	13.2	15.6	15.3	12.4	13.6	12.7	11.5	12.1
16	12.4	11.2	11.8	16.7	12.1	14.0	15.6	12.4	13.8	13.3	11.9	12.7
17	13.5	10.4	12.5	15.2	11.2	12.9	15.5	12.4	13.4	14.0	13.1	13.5
18	15.2	11.9	13.5	16.1	10.1	12.4	15.8	11.9	13.5	14.1	13.1	13.4
19	13.8	11.9	12.6	11.9	10.1	11.0	15.5	11.8	13.3	13.4	12.7	13.1
20	12.0	10.7	11.5	11.6	10.1	10.8	17.4	13.1	14.5	13.6	12.9	13.2
21	11.8	10.8	11.3	12.4	8.5	10.1	16.9	12.6	14.1	14.0	13.2	13.5
22	12.2	10.9	11.4	---	---	---	15.4	12.7	13.7	13.7	13.0	13.3
23	11.8	9.5	11.1	---	---	---	16.1	13.0	14.2	14.4	13.1	13.8
24	10.5	9.0	9.7	---	---	---	16.3	13.3	14.3	14.3	13.2	13.7
25	12.8	9.0	10.9	---	---	---	16.7	13.1	14.5	14.1	13.0	13.5
26	13.1	7.8	11.8	---	---	---	15.6	13.0	13.9	13.7	13.0	13.3
27	10.2	8.6	9.5	---	---	---	16.1	13.2	14.2	15.2	13.1	13.8
28	10.5	8.6	9.5	---	---	---	16.1	12.8	14.0	15.1	13.0	14.1
29	10.6	8.3	9.1	---	---	---	16.5	12.6	14.0	14.3	13.1	13.7
30	10.1	8.3	8.9	---	---	---	13.8	12.8	13.4	14.4	13.3	13.7
31	11.9	8.7	10	---	---	---	12.9	6.6	11.1	14.7	13.4	13.9
MONTH	15.2	5.8	10.1									
		FEBRUARY			MARCH			APRIL			MAY	
1	14.6	13.4	13.9	16.5	12.0	13.7	13.8	9.6	11.4	---	---	---
2	14.8	13.3	13.9	17.7	12.6	14.6	13.2	10.5	11.7	---	---	---
3	14.6	13.3	13.8	17.7	12.7	14.5	15.2	10.0	12.6	15.0	10.2	12.3
4	14.9	12.8	13.7	17.5	11.9	14.4	15.4	9.1	12.0	14.8	9.6	11.9
5	14.7	12.3	13.3	16.5	11.8	13.5	15.5	8.6	11.4	14.0	8.9	11.3
6	14.6	11.8	13.0	16.8	10.5	13.4	15.2	8.4	11.1	13.5	8.5	10.7
7	13.5	11.6	12.2	15.5	10.2	12.1	13.0	8.3	9.8	12.3	7.6	9.9
8	11.9	10.9	11.4	16.7	10.3	13.2	13.7	8.4	10.4	10.9	7.0	8.8
9	12.3	10.9	11.4	17.8	12.2	14.5	13.4	8.3	10.4	9.7	6.8	8.1
10	14.4	11.6	12.8	18.0	12.4	14.7	12.7	7.8	10.1	8.9	6.3	7.4
11	15.9	12.6	13.8	16.8	12.6	14.0	11.8	7.8	9.4	8.7	5.9	7.2
12	15.5	11.6	13.4	---	---	---	10.5	7.7	9.0	8.1	6.0	7.0
13	14.4	11.3	12.4	---	---	---	10.7	8.7	9.7	9.5	6.4	7.7
14	11.6	10.8	11.1	---	---	---	12.9	8.6	10.8	8.2	6.6	7.7
15	14.5	10.2	12.0	---	---	---	13.0	8.3	10.4	10.3	7.8	8.8
16	14.9	10.2	11.8	---	---	---	12.8	8.1	10.1	12.5	7.8	9.8
17	15.8	11.0	12.9	---	---	---	11.7	7.6	9.5	13.1	8.0	10.3
18	16.5	12.0	13.7	---	---	---	10.4	7.0	8.6	12.3	7.2	9.5
19	17.3	12.2	14.2	---	---	---	9.6	6.8	8.1	10.3	7.1	8.2
20	14.6	11.4	12.7	---	---	---	9.3	6.7	7.7	9.5	7.4	8.2
21	15.6	10.7	12.3	---	---	---	8.8	6.7	7.8	11.2	6.9	8.8
22	16.0	10.7	12.6	---	---	---	9.1	7.8	8.3	11.4	6.8	8.6
23	17.6	11.2	13.5	---	---	---	9.5	4.5	7.5	10.3	6.5	8.0
24	16.7	11.3	13.3	---	---	---	---	---	---	10.1	6.4	7.9
25	18.2	12.2	14.5	13.0	10.1	11.3	---	---	---	10.0	6.3	7.9
26	17.5	11.6	14.1	15.0	10.2	11.9	---	---	---	10.0	5.4	7.7
27	17.3	11.2	13.6	14.9	10.5	12.2	---	---	---	9.7	5.0	6.8
28	15.0	11.1	12.5	---	---	---	---	---	---	10.1	4.6	6.6
29	---	---	---	13.1	11.6	12.1	---	---	---	10.1	4.2	6.5
30	---	---	---	12.1	9.4	11.1	---	---	---	10.4	4.0	6.1
31	---	---	---	12.2	9.3	10.5	---	---	---	10.9	5.0	7.7
MONTH	18.2	10.2	13.0									

03262001 WOOLPER CREEK AT WOOLPER ROAD NEAR BURLINGTON, KY—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER—CONTINUED
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	11.4	6.3	8.4	7.9	5.9	6.7	10.0	3.7	6.6	8.1	6.7	7.4
2	10.6	6.0	7.6	7.1	5.9	6.5	9.7	3.7	6.5	7.8	6.5	7.0
3	10.8	6.2	8.1	8.0	5.4	6.7	9.9	3.3	6.3	7.9	6.4	7.0
4	10.9	5.4	7.7	8.5	5.0	6.6	10.5	3.1	6.1	8.3	6.3	7.1
5	10.5	4.8	7.1	8.9	5.1	6.6	8.9	2.8	5.0	8.4	6.1	7.1
6	10.0	4.4	6.6	9.9	5.6	7.2	6.8	3.2	5.3	8.8	5.9	7.2
7	11.8	4.6	7.0	10.0	5.5	7.1	7.7	5.3	6.3	9.0	5.8	7.1
8	10.7	3.5	6.4	8.5	5.6	7.2	7.2	5.5	6.4	10.1	5.7	7.7
9	9.4	3.0	5.3	9.8	5.9	7.6	6.8	5.2	6.0	8.9	5.8	7.3
10	9.2	3.0	5.6	10.8	5.5	7.5	7.8	4.8	6.2	9.2	5.9	7.2
11	6.5	5.3	5.9	9.9	5.2	7.2	8.7	4.7	6.2	8.7	5.8	7.1
12	7.1	5.2	5.9	8.5	5.0	6.4	10.1	4.6	6.6	9.2	5.7	7.4
13	---	---	---	7.8	5.6	6.9	9.2	4.6	6.5	9.6	5.4	7.4
14	8.2	7.6	7.9	8.0	6.9	7.2	9.3	4.8	6.8	10.7	6.5	8.2
15	8.3	7.3	7.9	9.1	6.7	7.8	8.9	5.4	6.9	10.6	6.0	7.7
16	8.8	7.4	7.9	8.9	6.6	7.7	7.7	5.1	6.1	9.4	5.1	6.9
17	9.3	7.4	8.3	10.0	6.6	7.9	9.2	4.8	6.6	10.0	6.0	7.7
18	9.8	7.4	8.5	9.6	6.1	7.6	8.9	4.6	6.4	10.1	6.1	7.7
19	10.0	7.4	8.5	9.8	5.6	7.4	7.2	4.3	6.0	9.7	6.4	7.8
20	10.3	7.1	8.4	9.7	5.6	7.1	6.9	5.3	6.0	8.5	6.4	7.6
21	10.2	6.8	8.3	9.3	5.5	6.8	7.7	5.2	6.2	8.2	6.8	7.4
22	9.7	6.4	7.7	8.7	5.6	6.8	8.5	5.1	6.5	8.7	6.0	7.3
23	10.0	6.2	7.7	8.3	5.4	6.8	9.3	5.2	6.9	8.7	5.9	6.8
24	9.5	5.6	7.5	9.6	4.8	6.7	9.5	5.2	6.7	8.2	6.0	7.0
25	9.6	5.5	7.2	8.4	3.8	6.0	7.8	5.1	6.2	9.4	6.4	7.6
26	9.7	5.4	7.1	9.2	3.7	6.0	8.3	4.5	5.9	8.3	6.9	7.6
27	8.6	4.9	6.6	8.8	3.5	5.9	8.4	4.2	5.9	8.5	7.4	7.8
28	8.9	4.7	6.5	10.3	4.8	7.0	8.5	4.9	6.3	8.7	6.8	7.8
29	8.9	4.5	6.4	9.9	4.7	6.8	8.2	4.9	6.2	9.4	7.0	8.3
30	9.1	4.4	6.4	10.4	4.4	6.7	8.1	4.7	6.6	9.8	8.2	9.0
31	---	---	---	10.9	4.0	6.7	8.3	7.2	7.7	---	---	---
MONTH				10.9	3.5	6.9	10.5	2.8	6.3	10.7	5.1	7.5
YEAR	18.6	0.9	9.7									

03262001 WOOLPER CREEK AT WOOLPER ROAD NEAR BURLINGTON, KY—Continued

TURBIDITY, WATER, MONOCHROME NEAR INFRA-RED LED LIGHT, 780-900 NM, DETECTION ANGLE 90 +/ -2.5 DEGREES, FNU
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	26	5.5	12	29	16	20	300	39	110	---	---	---
2	20	6.5	9.6	1,150	16	190	44	15	25	---	---	---
3	16	5.5	10	150	35	66	26	10	15	---	---	---
4	14	6.5	8.5	940	35	200	13	8.0	9.9	---	---	---
5	16	5.6	8.3	70	23	40	10	7.0	8.3	---	---	---
6	11	4.6	7.2	32	16	22	26	8.0	17	---	---	---
7	15	5.6	7.6	20	13	16	470	19	130	---	---	---
8	12	5.6	6.8	17	10	13	93	25	45	---	---	---
9	15	4.6	6.7	12	8.0	9.6	1,060	20	200	---	---	---
10	15	5.6	9.4	10	7.0	8.0	200	42	80	28	7.3	20
11	13	4.7	7.6	700	7.0	130	57	29	37	180	13	81
12	54	3.7	11	310	55	140	45	23	30	110	33	58
13	77	13	32	57	19	33	25	17	20	790	25	170
14	88	43	63	22	13	17	18	14	16	340	40	98
15	320	35	110	15	10	12	15	14	14	50	17	29
16	190	73	120	12	9.0	10	15	13	14	---	---	---
17	130	37	63	10	7.0	8.5	14	11	13	---	---	---
18	2,480	36	810	10	7.0	8.1	13	11	12	---	---	---
19	470	67	150	1,110	9.0	280	14	11	12	---	---	---
20	84	42	56	100	34	57	13	11	11	---	---	---
21	53	26	36	42	19	27	---	---	---	---	---	---
22	44	18	24	24	13	18	---	---	---	---	---	---
23	910	11	77	62	12	15	---	---	---	7.0	4.0	5.3
24	530	56	120	340	14	77	---	---	---	6.0	4.0	4.6
25	71	27	42	84	24	43	---	---	---	6.0	3.0	3.8
26	31	15	22	33	14	18	---	---	---	10	5.0	7.0
27	170	20	71	20	11	14	---	---	---	11	5.1	6.3
28	60	24	34	65	17	34	---	---	---	7.1	3.1	4.8
29	30	16	20	23	11	15	---	---	---	14	3.1	4.3
30	120	15	44	100	9.0	15	1,660	17	400	19	11	15
31	67	27	41	---	---	---	---	---	---	12	8.1	9.9
MONTH	2,480	3.7	66	1,150	7.0	52						
		FEBRUARY			MARCH			APRIL			MAY	
1	36	7.1	12	85	11	35	---	---	---	---	---	---
2	39	12	24	11	3.6	6.4	---	---	---	---	---	---
3	58	8.2	18	13	2.6	3.3	---	---	---	4.0	<2.0	2.4
4	51	19	30	3.6	<2.0	2.2	---	---	---	4.9	<2.0	2.6
5	46	18	26	2.7	2.7	2.7	---	---	---	4.8	<2.0	3.0
6	40	18	26	2.7	<2.0	2.3	---	---	---	14	2.7	3.7
7	230	18	41	8.7	2.7	3.8	---	---	---	5.6	2.5	3.7
8	710	69	230	5.7	2.7	4.4	7.2	3.6	4.7	5.5	3.4	4.2
9	71	22	39	3.7	<2.0	2.2	9.0	3.0	3.6	10	3.3	5.1
10	64	13	28	3.7	<2.0	2.1	4.0	<2.0	3.0	17	4.3	7.8
11	21	7.3	12	<2.0	<2.0	1.8	7.0	3.0	3.2	26	6.1	9.5
12	9.3	5.3	6.8	<2.0	<2.0	1.8	9.0	<2.0	3.1	55	15	28
13	83	6.3	23	3.8	<2.0	2.2	140	<2.0	45	47	4.9	16
14	110	47	68	<2.0	<2.0	1.8	53	4.0	19	2,210	6.9	380
15	74	15	33	<2.0	<2.0	1.8	4.0	<2.0	2.4	380	32	110
16	23	10	15	<2.0	<2.0	1.9	5.0	<2.0	2.6	45	9.6	20
17	14	6.4	9.5	2.9	<2.0	1.9	4.0	<2.0	2.5	13	4.5	8.1
18	7.4	4.4	5.3	3.9	<2.0	2.3	4.0	<2.0	3.0	7.5	3.4	5.7
19	6.4	3.4	4.3	4.9	<2.0	3.1	10	3.0	3.3	91	5.3	16
20	5.5	2.5	4.1	3.9	2.9	3.3	19	3.0	5.1	37	17	27
21	9.5	5.5	6.4	2.9	<2.0	1.9	220	6.0	32	21	9.0	14
22	6.5	3.5	5.3	18	<2.0	2.5	1,040	21	150	13	6.9	8.9
23	4.5	3.5	4.0	1,170	18	380	2,170	530	1,120	11	4.8	7.6
24	5.5	2.5	3.1	120	16	46	2,590	410	1,350	17	4.7	7.0
25	2.6	<2.0	2.3	22	5.9	11	2,360	100	520	17	3.6	6.7
26	3.6	<2.0	2.6	6.9	3.7	5.4	2,360	200	810	11	3.5	6.1
27	3.6	<2.0	2.7	130	4.5	8.2	---	---	---	24	4.5	7.7
28	88	2.6	18	---	---	---	---	---	---	160	5.4	36
29	---	---	---	---	---	---	---	---	---	75	16	36
30	---	---	---	---	---	---	---	---	---	39	3.1	20
31	---	---	---	---	---	---	---	---	---	23	6.1	15
MONTH	710	2.0	25									

03262001 WOOLPER CREEK AT WOOLPER ROAD NEAR BURLINGTON, KY—Continued

TURBIDITY, WATER, MONOCHROME NEAR INFRA-RED LED LIGHT, 780-900 NM, DETECTION ANGLE 90 +/ -2.5 DEGREES, FNU—CONTINUED

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	24	12	17	2,600	130	850	44	18	29	140	45	80
2	25	13	17	330	72	170	43	18	29	61	28	43
3	34	18	23	96	32	63	29	18	23	46	25	34
4	90	27	47	52	22	33	40	20	26	42	21	26
5	66	17	32	43	16	21	36	22	28	27	17	20
6	43	26	34	36	16	21	1,030	22	240	28	13	16
7	85	32	58	36	12	19	2,200	74	300	18	11	14
8	78	13	50	52	15	26	2,530	140	570	22	9.9	14
9	68	19	31	26	12	18	150	56	97	27	11	14
10	2,320	23	530	---	---	---	69	39	53	19	9.9	13
11	940	200	430	---	---	---	47	26	34	27	9.9	13
12	2,440	75	380	---	---	---	43	21	30	26	10	14
13	2,430	230	640	---	---	---	36	20	27	33	13	17
14	2,080	170	550	92	53	71	200	20	47	31	11	17
15	310	92	180	72	40	54	32	17	23	32	10	15
16	100	46	70	120	42	75	28	17	21	30	12	16
17	64	31	45	77	36	53	31	20	24	27	10	13
18	40	23	32	36	17	25	39	20	25	18	9.5	13
19	32	17	23	25	15	20	460	24	190	33	8.6	13
20	35	12	17	36	18	22	350	51	140	580	22	170
21	21	10	12	50	15	21	70	35	47	140	47	82
22	18	7.9	9.9	35	17	22	42	28	34	55	29	40
23	16	7.7	9.6	26	16	21	48	24	34	46	20	28
24	21	6.6	8.7	30	14	20	2,540	22	420	56	22	30
25	20	5.5	8.2	37	15	20	600	48	130	33	17	23
26	16	5.5	7.8	32	15	21	110	39	77	210	23	97
27	21	5.3	11	43	20	25	74	34	52	110	46	76
28	23	8.2	13	34	18	25	110	36	62	62	28	43
29	22	7.9	12	38	19	26	69	23	42	120	26	56
30	160	8.9	18	45	19	28	2,580	31	610	86	30	50
31	---	---	---	41	16	28	840	140	290	---	---	---
MONTH	2,440	5.3	110				2,580	17	120	580	8.6	37
YEAR	2,600	2.0	67									

THIS PAGE IS INTENTIONALLY BLANK.

03277075 GUNPOWDER CREEK AT CAMP ERNST ROAD NEAR UNION, KY

LOCATION.--Lat 38°59'39", long 84°42'58", Boone County, Hydrologic Unit 05090203, on upstream right wing wall of bridge on Camp Ernst Road, 0.65 mi below South Fork Gunpowder Creek, 3.8 mi northwest of Union, and 14.2 mi above the mouth.

DRAINAGE AREA.--36.6 mi^2.

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--April 1999 to current year.

GAGE.--Water-stage recorder with telemetry and crest stage gage. Datum of gage is 683.066 ft above NGVD of 1929.

REMARKS.--Records fair.

COOPERATION.--Northern Kentucky Sanitation District No. 1.

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

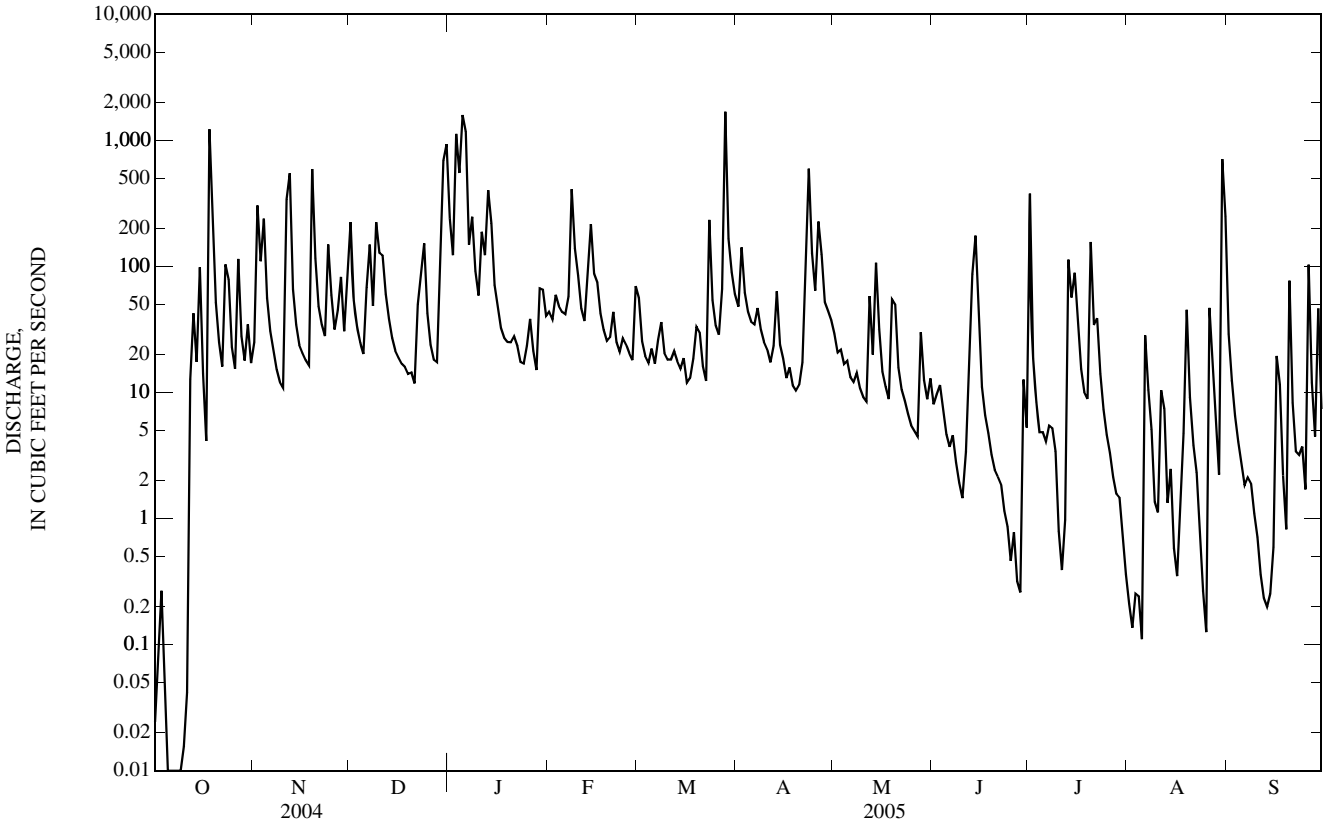
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.02	25	224	242	44	56	48	29	8.1	377	0.21	29
2	0.07	305	54	123	38	26	142	21	9.7	19	0.14	12
3	0.27	110	34	1,130	60	20	62	22	11	8.4	0.26	6.5
4	0.05	240	25	552	49	17	44	17	7.3	4.8	0.24	4.1
5	0.00	57	20	1,590	44	22	36	18	4.7	4.9	0.11	2.7
6	0.00	31	68	1,170	42	17	35	13	3.7	4.1	28	1.8
7	0.01	21	149	149	58	26	47	12	4.6	5.5	11	2.1
8	0.01	15	49	248	410	36	32	14	2.8	5.2	5.1	1.9
9	0.01	12	225	92	139	21	25	11	1.9	3.4	1.4	1.1
10	0.02	11	129	59	85	18	22	9.2	1.5	0.80	1.1	0.71
11	0.04	342	123	189	46	18	17	8.5	3.4	0.39	10	0.36
12	13	549	60	123	37	21	24	58	13	0.97	7.4	0.23
13	42	66	39	403	100	18	64	20	87	113	1.3	0.20
14	17	35	27	220	217	16	24	107	176	57	2.5	0.25
15	98	24	21	72	88	19	19	32	34	89	0.59	0.59
16	14	21	19	48	75	12	13	15	11	38	0.35	20
17	4.1	18	17	32	43	13	16	11	6.6	15	1.4	12
18	1,230	17	16	27	31	19	11	8.9	4.8	10	4.7	2.2
19	304	592	14	25	26	33	10	55	3.2	8.9	45	0.82
20	52	116	14	25	28	30	12	50	2.4	156	9.2	77
21	25	48	12	28	44	16	17	16	2.2	34	3.8	8.3
22	16	35	50	24	25	12	123	11	1.9	39	2.3	3.4
23	104	28	85	17	21	234	595	8.6	1.2	14	0.84	3.2
24	79	149	152	17	27	54	128	6.8	0.87	7.3	0.27	3.7
25	23	60	43	23	24	34	64	5.5	0.46	4.6	0.13	1.7
26	15	32	24	38	21	29	227	5.0	0.78	3.3	47	103
27	115	45	18	21	18	66	124	4.5	0.32	2.1	13	12
28	28	82	17	15	70	1,690	52	30	0.26	1.6	4.8	4.5
29	18	31	136	67	---	167	45	13	13	1.5	2.2	46
30	35	73	695	66	---	90	38	8.9	5.3	0.74	708	7.4
31	17	---	938	41	---	60	---	13	---	0.36	249	---
TOTAL	2,249.60	3,190	3,497	6,876	1,910	2,910	2,116	653.9	422.99	1,029.86	1,161.34	368.76
MEAN	72.6	106	113	222	68.2	93.9	70.5	21.1	14.1	33.2	37.5	12.3
MAX	1,230	592	938	1,590	410	1,690	595	107	176	377	708	103
MIN	0.00	11	12	15	18	12	10	4.5	0.26	0.36	0.11	0.20

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2005, BY WATER YEAR (WY)

MEAN	41.4	49.0	77.9	94.3	86.5	68.2	60.2	62.9	29.5	33.3	28.1	26.7
MAX	99.1	106	113	222	151	102	118	149	55.0	76.6	71.1	63.9
(WY)	(2002)	(2005)	(2005)	(2005)	(2000)	(2002)	(2002)	(2002)	(2000)	(2001)	(2003)	(2003)
MIN	7.91	5.68	31.8	21.9	44.8	22.5	10.9	9.25	9.79	4.00	2.89	1.01
(WY)	(2001)	(2000)	(2000)	(2001)	(2001)	(2001)	(2001)	(1999)	(1999)	(2002)	(2002)	(1999)

03277075 GUNPOWDER CREEK AT CAMP ERNST ROAD NEAR UNION, KY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1999 - 2005	
ANNUAL TOTAL	25,934.95		26,385.45			
ANNUAL MEAN	70.9		72.3		57.2	
HIGHEST ANNUAL MEAN					72.3	2005
LOWEST ANNUAL MEAN					32.8	2001
HIGHEST DAILY MEAN	2,140	Jan 4	1,690	Mar 28	2,140	Jan 4, 2004
LOWEST DAILY MEAN	0.00	Jul 1	0.00	Oct 5	0.00	Sep 10, 1999
ANNUAL SEVEN-DAY MINIMUM	0.01	Oct 5	0.01	Oct 5	0.00	Sep 10, 1999
MAXIMUM PEAK FLOW			4,630	Mar 28	6,590	May 8, 2002
MAXIMUM PEAK STAGE			7.48	Mar 28	8.22	May 8, 2002
INSTANTANEOUS LOW FLOW			0.00	Oct 5	0.00	Oct 5, 2004
10 PERCENT EXCEEDS	149		145		121	
50 PERCENT EXCEEDS	18		21		15	
90 PERCENT EXCEEDS	0.38		0.86		0.94	



03277075 GUNPOWDER CREEK AT CAMP ERNST ROAD NEAR UNION, KY—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 2000 to current year.

COOPERATION.--Northern Kentucky Sanitation District No. 1.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: November 2000 to current year.
pH: November 2000 to current year.
WATER TEMPERATURES: November 2000 to current year.
DISSOLVED OXYGEN: November 2000 to current year.
TURBIDITY: November 2000 to current year.

INSTRUMENTATION.--Water-quality monitor with telemetry. New turbidity probe installed summer 2004, range 0-3000 FNU.

REMARKS.--
SPECIFIC CONDUCTANCE: Records rated excellent. No data for the period Mar. 28 to Apr. 3, 2005, due to vandalism. Also missing Oct. 29, 2004 and Apr. 4, 2005.
pH: Records rated excellent. No data for the period Mar. 28 to Apr. 3, 2005, due to vandalism.
WATER TEMPERATURES: Records rated excellent. No data for the period Mar. 28 to Apr. 3, 2005, due to vandalism.
DISSOLVED OXYGEN: Records rated good. No data for the period Mar. 28 to Apr. 3, 2005, due to vandalism. Also missing Oct. 26-28, 2004, Feb. 13-23, 2005.
TURBIDITY: Records rated fair. No data for the period Mar. 28 to Apr. 3, 2005, due to vandalism. Also missing Oct. 29 to Dec. 9, 2004, Jan. 7-10, 16-28, Feb. 16-22, Apr. 4-8, 15-21, 28-30, May 1-11, 13, 17-18, 22-25, 31, June 1-8, 17-30, July 4-12, 28-31, Aug. 1-5, 10, 12-18, 20-25, and Sept. 2-15, 2005.

EXTREMES FOR PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded, 6310 microsiemens, Jan. 29, 2003; minimum recorded, 118 microsiemens, July 18, 2001.
pH: Maximum recorded, 10.4 units, Aug. 12, 2001; minimum recorded, 6.5 units, Aug. 23, 2003.
WATER TEMPERATURES: Maximum recorded, 32.9°C, Jul. 25, 2005; minimum recorded, 0.0°C, several days in Dec., Jan., Feb., and Mar., of each year of record.
DISSOLVED OXYGEN: Maximum recorded, 20.0 mg/L, Oct. 4, 7-8, 11, 16-17, 2004; minimum recorded, 0.7 mg/L, Aug. 14, 2003.
TURBIDITY: Maximum recorded, 2610 FNU, Jan 5, 2005; minimum recorded, 0.0 FNU, several days in Nov. and Dec. 2002, Feb., July, Aug., Sept. 2003.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 6010 microsiemens, Jan. 29, 2005; minimum recorded, 166 microsiemens, Oct. 18, 2004.
pH: Maximum recorded, 9.2 units, Feb. 23, 2005; minimum recorded, 7.3 units, Aug. 12, 2005.
WATER TEMPERATURES: Maximum recorded, 32.9°C, Jul. 25, 2005; minimum recorded, 0.0°C, Dec. 16, 19-30, 2004, and Jan. 17-31, and Mar. 2-3, 2005.
DISSOLVED OXYGEN: Maximum recorded, 20.0 mg/L, Oct. 4, 7-8, 11, 16-17, 2004; minimum recorded, 1.3 mg/L, Feb. 10, 2005.
TURBIDITY: Maximum recorded, 2610 FNU, Jan. 5, 2005; minimum recorded, 2.0 FNU, May 19, 2005.

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	683	665	676	575	513	533	470	323	396	685	550	636
2	689	670	677	572	272	415	530	470	504	809	666	730
3	739	689	721	489	346	431	551	527	539	791	298	510
4	762	739	752	503	277	387	563	538	552	505	297	432
5	779	739	768	520	425	477	578	550	561	321	244	281
6	780	745	773	562	520	544	586	439	504	397	203	292
7	787	773	779	565	526	546	531	350	434	481	397	445
8	783	745	775	562	542	554	523	459	490	510	362	426
9	777	753	769	574	557	567	557	275	459	515	450	487
10	781	750	769	589	567	578	514	338	448	547	508	525
11	786	748	778	599	212	490	532	458	495	567	416	484
12	786	557	760	415	208	311	539	465	504	535	436	481
13	575	331	385	532	415	490	559	535	548	592	268	481
14	541	485	519	543	520	532	588	555	574	488	296	415
15	585	342	451	566	527	547	593	575	582	514	480	493
16	524	424	480	577	537	563	608	581	590	951	509	616
17	565	520	541	585	555	567	602	578	591	1,280	951	1,150
18	588	166	363	592	552	574	596	577	586	1,270	903	1,080
19	460	207	367	647	204	360	620	579	596	906	732	788
20	550	453	507	477	373	436	680	619	651	1,180	665	763
21	619	545	586	517	475	497	759	680	717	4,220	1,180	2,540
22	618	583	602	556	514	533	2,030	679	1,300	4,450	4,000	4,190
23	642	322	576	566	535	552	1,560	1,070	1,320	4,120	2,950	3,550
24	530	321	433	569	345	458	1,830	1,490	1,620	3,220	2,340	2,910
25	598	527	561	523	426	485	1,900	1,760	1,870	2,350	1,810	2,090
26	605	561	596	552	521	538	1,760	1,590	1,690	2,470	2,020	2,210
27	626	363	450	572	520	551	1,840	1,580	1,730	2,080	1,580	1,810
28	540	485	520	524	411	442	1,980	1,790	1,910	1,770	1,510	1,630
29	---	---	---	546	489	522	4,270	1,820	2,630	6,010	1,320	2,660
30	607	542	571	581	432	551	3,340	588	1,560	4,790	3,790	4,240
31	545	493	514	---	---	---	588	436	488	4,110	1,780	2,660
MONTH				647	204	501	4,270	275	885	6,010	203	1,360

03277075 GUNPOWDER CREEK AT CAMP ERNST ROAD NEAR UNION, KY—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	1,780	1,340	1,570	987	872	927	---	---	---	615	579	598
2	1,410	1,160	1,250	997	906	946	---	---	---	602	566	585
3	3,620	1,150	1,760	982	863	908	---	---	---	632	574	593
4	3,680	1,550	2,390	873	806	845	---	---	---	607	585	595
5	1,550	1,120	1,290	1,240	792	916	621	524	566	662	598	627
6	1,140	1,000	1,070	1,330	1,120	1,250	638	562	588	607	587	598
7	1,250	959	1,010	1,120	897	1,000	716	608	652	634	600	620
8	1,470	720	840	1,270	945	1,110	754	628	670	680	627	645
9	913	743	800	1,090	937	996	673	610	628	648	629	637
10	879	820	844	1,030	850	934	678	623	643	668	648	660
11	872	852	863	956	839	876	658	627	640	676	660	668
12	863	840	848	1,980	830	1,140	719	618	668	670	555	621
13	1,010	800	859	3,360	1,980	2,820	749	622	685	706	651	672
14	904	665	792	2,450	1,360	1,930	769	562	625	710	467	563
15	799	742	787	1,460	1,260	1,380	697	600	627	594	496	550
16	864	772	811	1,260	1,010	1,130	636	604	621	657	594	629
17	865	823	850	1,070	964	1,030	718	618	658	697	656	677
18	823	789	800	1,260	985	1,140	681	660	670	730	693	712
19	790	770	779	1,300	818	1,070	696	680	689	736	437	668
20	770	719	739	1,720	1,140	1,260	736	694	703	533	432	485
21	1,100	759	990	1,310	1,020	1,120	741	696	715	637	533	595
22	999	843	910	1,040	911	991	744	412	647	684	635	663
23	849	784	824	970	639	799	430	295	369	710	683	699
24	1,010	787	829	816	694	743	578	425	511	725	707	718
25	1,560	1,010	1,390	789	723	748	584	531	558	724	708	717
26	1,440	1,040	1,210	820	749	777	623	333	525	722	697	711
27	1,040	873	956	867	703	789	530	351	445	715	685	703
28	976	828	879	---	---	---	576	495	538	719	593	667
29	---	---	---	---	---	---	606	548	573	604	591	598
30	---	---	---	---	---	---	621	570	591	693	598	619
31	---	---	---	---	---	---	---	---	---	699	598	644
MONTH	3,680	665	1,030							736	432	637
		JUNE			JULY			AUGUST			SEPTEMBER	
1	744	616	655	649	194	407	668	641	653	619	511	575
2	748	712	730	607	531	571	661	645	651	663	618	644
3	724	698	712	664	607	639	671	652	659	692	660	680
4	738	702	720	673	656	665	686	660	671	715	688	699
5	723	677	702	673	645	662	677	661	670	718	693	704
6	719	656	692	714	669	682	805	239	500	719	641	703
7	708	625	669	784	714	757	608	446	548	747	706	719
8	676	604	645	771	724	751	588	415	462	749	705	730
9	650	600	625	788	731	758	502	434	480	722	698	712
10	635	531	600	748	665	706	601	502	580	750	701	735
11	697	589	655	691	651	672	747	263	585	763	733	752
12	700	409	664	668	648	657	571	263	413	757	727	743
13	534	340	465	649	317	444	605	571	586	737	716	729
14	560	220	458	548	456	494	603	560	584	739	714	726
15	569	388	486	544	288	413	617	576	605	794	731	772
16	660	569	617	532	489	517	638	593	624	798	385	721
17	701	660	680	620	532	576	697	609	670	484	348	408
18	723	701	707	668	619	647	732	592	708	548	484	519
19	724	691	710	652	612	629	592	371	476	575	548	567
20	727	699	715	639	224	486	491	431	465	579	324	393
21	730	708	720	530	343	456	532	491	505	464	388	429
22	751	707	737	574	527	553	535	460	522	507	464	486
23	729	660	688	552	517	530	535	418	526	608	507	535
24	753	729	740	581	552	568	556	521	545	663	608	620
25	753	719	739	587	558	572	567	556	561	669	594	635
26	772	734	756	610	575	592	649	301	468	594	367	428
27	801	772	786	620	588	608	385	332	362	527	430	485
28	805	780	791	642	608	624	426	385	400	586	527	556
29	822	581	661	638	609	622	436	426	431	604	383	461
30	695	581	651	657	622	643	452	201	339	495	425	461
31	---	---	---	671	636	654	511	306	407	---	---	---
MONTH	822	220	673	788	194	599	805	201	537	798	324	611
YEAR	6,010	166	759									

03277075 GUNPOWDER CREEK AT CAMP ERNST ROAD NEAR UNION, KY—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8.3	8.0	8.5	8.1	8.4	8.0	8.2	8.1	8.0	7.8	8.7	7.9
2	8.2	8.0	8.1	7.8	8.6	8.1	8.2	8.0	7.8	7.7	8.8	8.1
3	8.3	8.1	8.2	7.9	8.7	8.2	8.0	7.7	8.1	7.8	8.7	8.1
4	8.3	8.1	8.1	7.9	8.7	8.2	7.8	7.6	8.1	7.8	8.9	8.1
5	8.3	8.1	8.4	8.1	8.7	8.3	7.8	7.7	7.8	7.7	8.8	8.1
6	8.3	8.2	8.5	8.2	8.4	8.0	8.0	7.8	7.8	7.7	8.9	8.1
7	8.4	8.2	8.5	8.2	8.0	7.9	8.1	8.0	7.9	7.7	8.8	8.0
8	8.4	8.1	8.5	8.2	8.5	7.8	8.1	7.9	8.1	7.5	8.7	7.9
9	8.4	8.1	8.6	8.2	8.3	7.9	8.2	8.0	7.7	7.6	8.6	8.1
10	8.3	8.1	8.7	8.3	8.5	7.8	8.3	8.1	7.9	7.6	8.6	8.0
11	8.4	8.1	8.5	7.8	8.5	8.3	8.3	8.1	8.1	7.8	8.6	8.0
12	8.4	8.1	8.1	7.8	8.8	8.3	8.4	8.1	8.1	7.9	8.6	8.0
13	8.1	7.8	8.4	8.1	8.8	8.3	8.3	7.9	8.1	7.6	8.7	8.0
14	8.2	7.8	8.5	8.2	8.8	8.4	8.3	7.9	7.7	7.5	8.7	8.1
15	7.9	7.8	8.6	8.2	8.7	8.4	8.3	8.2	8.2	7.6	8.6	8.0
16	8.3	7.9	8.6	8.2	8.8	8.4	8.4	8.2	8.1	7.9	8.6	8.0
17	8.4	8.0	8.5	8.2	8.8	8.4	8.3	8.2	8.6	8.0	8.5	8.0
18	8.1	7.7	8.7	8.2	8.8	8.4	8.3	8.2	8.7	8.2	8.4	8.0
19	8.1	7.8	8.3	7.8	8.8	8.4	8.3	8.2	8.7	8.4	8.2	7.8
20	8.1	8.0	8.3	8.0	8.8	8.5	8.3	8.2	8.6	8.4	8.4	7.9
21	8.2	8.1	8.4	8.1	8.8	8.5	8.2	8.1	8.6	8.3	8.2	7.9
22	8.3	8.1	8.5	8.2	8.5	8.3	8.2	8.0	9.0	8.3	8.2	7.9
23	8.3	7.9	8.5	8.2	8.4	8.2	8.3	8.1	9.2	8.6	7.9	7.6
24	8.2	7.8	8.3	8.0	8.4	8.2	8.3	8.1	9.0	8.1	7.9	7.6
25	8.3	8.0	8.5	8.0	8.5	8.2	8.3	8.2	9.0	8.1	8.1	7.7
26	8.3	8.1	8.6	8.2	8.5	8.2	8.3	8.2	9.1	8.1	8.3	7.8
27	8.2	7.9	8.6	8.2	8.6	8.2	8.4	8.2	9.1	8.1	8.2	7.7
28	8.2	8.0	8.5	8.0	8.6	8.2	8.2	8.1	8.6	7.9	---	---
29	8.4	8.2	8.7	8.2	8.6	8.1	8.2	8.0	---	---	---	---
30	8.3	8.1	8.4	8.1	8.2	8.0	8.2	8.0	---	---	---	---
31	8.6	8.0	---	---	8.1	8.0	8.2	7.9	---	---	---	---
MONTH	8.6	7.7	8.7	7.8	8.8	7.8	8.4	7.6				
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	8.8	8.2	8.7	7.8	8.2	7.7	8.1	7.6	8.1	7.8
2	---	---	8.8	8.1	8.5	7.8	8.2	7.8	8.1	7.6	8.1	7.8
3	---	---	8.7	8.2	8.7	7.9	8.3	7.9	8.2	7.6	8.2	7.8
4	8.9	8.4	8.7	8.1	8.8	7.8	8.5	7.9	8.2	7.6	8.3	7.9
5	9.0	8.0	8.6	8.1	8.8	7.8	8.5	7.9	8.0	7.6	8.3	7.9
6	8.9	8.1	8.6	8.0	8.8	7.8	8.4	7.9	9.1	7.6	8.4	7.9
7	8.8	8.1	8.6	8.1	8.9	7.8	8.4	7.9	8.2	7.5	8.3	7.9
8	8.9	8.2	8.7	8.0	8.9	7.8	8.4	7.9	8.4	7.5	8.3	7.8
9	8.8	8.0	8.6	8.0	8.8	7.7	8.5	7.9	8.4	7.5	8.3	7.8
10	8.6	7.9	8.6	8.0	8.7	7.7	8.4	7.8	8.4	7.6	8.2	7.7
11	8.6	7.9	8.7	8.0	8.7	7.8	8.4	7.8	8.2	7.5	8.1	7.7
12	8.6	7.9	8.3	7.8	8.9	7.9	8.2	7.7	8.3	7.3	8.1	7.7
13	8.3	8.0	8.7	7.9	8.3	7.9	8.0	7.8	8.4	7.5	8.3	7.7
14	8.8	7.9	8.2	7.8	8.5	7.8	8.3	7.8	8.5	7.6	8.3	7.9
15	8.7	7.9	8.6	7.8	8.3	7.9	8.2	7.7	8.3	7.5	8.3	7.9
16	8.6	7.9	8.8	8.1	8.5	8.0	8.4	7.8	8.0	7.6	8.2	7.7
17	8.5	7.5	8.8	8.3	8.4	7.9	8.6	7.8	8.2	7.6	8.3	7.7
18	8.4	7.4	8.8	8.2	8.6	7.9	8.5	7.9	8.3	7.6	8.5	7.8
19	8.3	7.7	8.5	8.0	8.7	7.9	8.5	7.9	7.9	7.6	8.4	7.8
20	8.2	7.7	8.4	8.0	8.5	7.8	8.4	7.5	8.3	7.5	8.3	7.9
21	8.2	7.7	8.8	8.1	8.5	7.8	8.3	7.7	8.3	7.6	8.6	7.9
22	8.1	7.6	8.9	8.2	8.5	7.8	8.3	7.9	8.4	7.6	8.6	7.9
23	7.8	7.6	8.8	8.2	8.5	7.8	8.5	7.8	8.3	7.7	8.5	7.9
24	8.1	7.8	8.8	8.2	8.4	7.8	8.5	7.9	8.1	7.7	8.6	8.0
25	8.3	7.9	8.9	8.3	8.3	7.7	8.4	7.8	8.1	7.7	8.5	8.0
26	8.3	7.8	9.0	8.2	8.3	7.7	8.4	7.7	7.8	7.5	8.1	7.9
27	8.4	7.8	9.0	8.2	8.2	7.7	8.3	7.7	7.9	7.5	8.4	8.0
28	8.6	8.1	8.7	8.2	8.2	7.7	8.3	7.8	8.4	7.5	8.5	8.0
29	8.5	8.1	9.0	8.0	8.3	7.7	8.3	7.8	8.3	7.6	8.4	8.0
30	8.6	8.1	8.7	8.1	8.8	7.6	8.3	7.8	8.1	7.5	8.5	8.0
31	---	---	8.7	8.2	---	---	8.1	7.7	7.9	7.5	---	---
MONTH			9.0	7.8	8.9	7.6	8.6	7.5	9.1	7.3	8.6	7.7
YEAR	9.2	7.3										

03277075 GUNPOWDER CREEK AT CAMP ERNST ROAD NEAR UNION, KY—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	17.2	13.5	15.5	15.3	13.9	14.5	9.1	6.3	7.8	6.9	5.5	6.1
2	16.8	15.2	16.4	17.5	15.3	16.4	6.3	4.6	5.6	8.7	6.1	7.2
3	15.2	11.6	13.6	15.8	12.6	13.6	5.8	4.3	5.1	10.4	8.7	9.7
4	14.7	11.4	13.2	13.5	11.9	12.8	5.3	2.7	4.1	10.4	8.6	9.6
5	13.6	11.0	12.4	11.9	9.8	10.9	6.1	3.5	4.9	8.6	6.4	7.7
6	12.4	9.6	11.2	11.8	8.5	10.2	9.7	6.1	7.9	6.4	5.1	5.9
7	12.9	9.7	11.4	13.2	9.7	11.4	12.6	9.7	11.3	5.4	4.5	5.0
8	15.3	11.9	13.5	11.4	8.4	9.7	11.1	8.0	9.4	5.4	4.9	5.2
9	15.8	13.9	14.8	8.4	6.0	7.4	9.1	7.1	8.0	6.7	5.1	5.7
10	15.8	13.8	14.9	9.4	5.8	7.6	10.1	9.1	9.6	6.8	5.8	6.3
11	13.8	11.7	12.9	10.2	7.8	8.8	9.4	6.6	7.9	10.2	6.7	8.0
12	14.0	11.5	12.6	10.7	8.8	9.8	6.9	5.7	6.4	12.1	10.2	11.2
13	14.4	13.9	14.2	8.8	6.6	7.6	6.7	2.9	5.0	12.1	9.2	11.3
14	15.4	13.8	14.5	7.8	5.3	6.6	2.9	1.8	2.4	9.2	4.9	7.0
15	14.6	11.0	12.5	8.0	4.9	6.6	1.9	0.1	1.0	4.9	3.1	4.1
16	11.1	9.9	10.7	9.3	7.3	8.2	1.9	0.0	0.9	3.9	1.1	2.6
17	10.8	7.7	9.3	10.9	9.2	10.0	2.6	0.6	1.7	1.1	0.0	0.2
18	12.2	8.5	9.8	12.9	10.9	11.9	3.3	0.3	1.8	0.2	0.0	0.0
19	13.3	12.2	12.7	13.2	12.6	12.9	3.1	0.0	1.6	0.5	0.0	0.1
20	14.2	13.3	13.7	13.2	12.4	12.8	0.0	0.0	0.0	0.9	0.0	0.4
21	14.4	13.7	14.1	12.7	11.3	12.0	0.6	0.0	0.2	0.4	0.0	0.1
22	14.1	13.1	13.6	11.4	10.9	11.2	0.5	0.0	0.0	0.6	0.0	0.1
23	15.2	12.5	13.5	11.8	10.5	11.2	0.0	0.0	0.0	0.1	0.0	0.0
24	16.3	14.0	15.1	13.3	11.8	12.4	0.0	0.0	0.0	0.3	0.0	0.0
25	15.1	11.7	13.6	12.2	6.6	9.1	0.0	0.0	0.0	0.4	0.0	0.1
26	14.7	11.7	13.5	7.7	5.5	6.7	0.0	0.0	0.0	0.0	0.0	0.0
27	15.4	14.3	14.8	8.4	7.0	7.7	0.0	0.0	0.0	0.3	0.0	0.0
28	15.5	13.9	14.5	8.2	6.3	7.5	0.0	0.0	0.0	0.2	0.0	0.1
29	18.7	17.6	18.4	7.0	5.7	6.3	0.0	0.0	0.0	0.3	0.0	0.0
30	19.3	17.1	18.1	8.9	6.6	7.2	2.6	0.0	0.6	0.2	0.0	0.0
31	17.1	14.3	15.5	---	---	---	5.5	2.5	4.1	0.6	0.0	0.2
MONTH	19.3	7.7	13.7	17.5	4.9	10.0	12.6	0.0	3.5	12.1	0.0	3.7
		FEBRUARY			MARCH			APRIL			MAY	
1	2.0	0.4	1.1	4.1	1.7	2.8	---	---	---	14.0	8.5	11.4
2	1.9	0.5	1.3	3.6	0.0	1.7	---	---	---	12.2	9.6	11.2
3	4.2	1.2	2.5	4.1	0.0	1.8	---	---	---	13.3	7.7	10.9
4	4.3	0.8	2.6	5.4	0.8	2.9	15.6	13.1	14.8	15.1	8.4	12.0
5	5.4	1.5	3.5	5.2	3.9	4.4	18.1	10.2	14.6	17.2	10.0	13.8
6	5.9	2.7	4.4	8.6	2.7	5.8	18.0	12.7	15.5	18.4	11.6	15.5
7	6.1	4.6	5.4	9.4	6.2	7.7	17.5	14.6	16.2	20.3	13.0	17.0
8	8.1	6.1	7.1	8.0	3.1	5.4	18.6	13.0	16.0	22.0	16.1	19.2
9	7.7	5.4	6.7	5.2	1.3	3.1	19.5	12.0	15.9	22.9	17.5	20.6
10	5.4	2.7	4.0	3.4	0.6	2.3	20.8	13.8	17.5	22.8	18.6	20.8
11	3.5	1.3	2.3	3.2	2.3	2.6	21.8	16.6	19.2	24.9	18.8	22.0
12	5.9	1.4	3.5	5.0	1.6	3.3	20.2	15.6	17.2	23.1	18.5	19.8
13	6.4	3.9	4.9	4.3	1.9	3.3	15.6	12.5	14.0	23.1	15.9	19.5
14	8.0	6.4	7.3	6.9	0.7	3.9	16.9	9.4	13.3	21.6	17.9	19.3
15	9.7	5.3	7.3	8.0	2.0	5.2	17.6	11.0	14.7	17.9	15.3	16.7
16	9.0	6.5	7.9	7.7	4.1	6.0	19.1	11.9	15.8	16.3	14.1	15.2
17	6.5	3.7	4.9	10.1	4.3	7.1	19.9	13.1	16.7	19.1	12.3	15.9
18	4.8	2.3	3.4	11.0	4.3	7.9	22.1	15.3	18.9	21.5	14.4	18.2
19	4.7	0.6	2.8	9.0	6.9	7.7	22.1	16.4	19.6	19.9	17.3	18.1
20	5.7	3.6	4.3	9.1	5.8	7.2	23.1	16.5	20.0	18.4	17.1	17.7
21	8.3	5.7	7.2	10.3	4.3	7.2	20.8	16.0	17.9	21.4	14.8	18.2
22	7.2	5.9	6.5	7.7	5.0	6.6	17.4	13.7	15.5	19.8	16.1	18.2
23	6.4	4.6	5.5	6.8	5.4	6.2	15.3	9.2	11.5	22.5	16.3	19.3
24	5.2	2.9	3.9	9.6	4.7	6.9	9.3	7.5	8.4	20.5	16.3	18.5
25	4.0	0.6	2.4	8.9	6.9	8.0	14.4	7.8	10.9	21.2	15.2	18.2
26	6.5	2.3	4.3	9.7	7.5	8.5	13.0	11.1	12.2	23.7	15.2	19.5
27	6.7	2.6	4.8	8.8	7.3	7.9	12.1	9.3	10.9	24.6	17.5	20.9
28	5.8	4.1	5.2	---	---	---	12.3	9.0	10.9	20.8	16.5	19.2
29	---	---	---	---	---	---	11.8	10.9	11.4	22.9	16.0	19.6
30	---	---	---	---	---	---	12.4	10.9	11.6	21.2	17.3	18.4
31	---	---	---	---	---	---	---	---	---	23.1	15.4	19.2
MONTH	9.7	0.4	4.5							24.9	7.7	17.5

03277075 GUNPOWDER CREEK AT CAMP ERNST ROAD NEAR UNION, KY—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	23.0	17.9	20.6	27.6	22.6	24.6	28.3	23.1	25.8	25.1	20.8	22.9
2	21.1	18.5	19.4	26.6	22.1	24.6	28.9	23.7	26.3	24.8	21.1	23.3
3	23.4	17.9	20.6	28.2	21.5	25.1	29.6	24.3	26.9	24.0	20.0	22.3
4	25.9	20.0	22.9	30.3	24.0	27.2	30.1	24.8	27.5	23.9	19.2	21.6
5	28.5	21.1	24.8	28.1	25.3	26.8	27.9	25.6	26.3	23.9	19.0	21.6
6	29.6	23.4	26.5	29.7	23.3	26.5	25.6	23.4	24.6	24.5	19.4	22.1
7	29.7	23.5	26.6	28.1	23.6	25.7	27.9	23.1	25.1	24.4	19.9	22.3
8	30.0	23.4	26.7	29.2	22.2	25.6	28.5	23.3	25.8	24.4	19.4	22.0
9	30.2	24.3	27.3	28.7	22.5	25.7	28.5	23.1	25.9	25.6	21.1	23.3
10	28.9	24.4	26.5	28.3	21.8	25.2	28.8	23.3	26.2	25.6	21.6	23.8
11	26.5	24.3	25.5	26.6	23.1	24.8	28.9	25.0	26.8	24.9	20.8	23.1
12	26.4	23.4	24.7	25.2	23.9	24.5	29.8	24.3	27.0	24.4	20.0	22.5
13	26.9	22.9	24.6	24.0	21.6	22.2	30.4	25.0	27.6	24.4	20.4	22.6
14	27.3	22.4	24.2	24.4	21.7	22.9	27.9	24.5	26.4	23.7	20.4	22.3
15	25.5	21.1	23.3	26.5	23.1	24.6	26.6	24.4	25.5	24.6	20.9	22.9
16	25.3	20.7	23.1	27.0	24.1	25.6	25.9	24.1	24.6	24.1	22.3	23.2
17	25.3	18.9	22.2	27.6	24.7	26.0	27.5	22.2	24.8	22.7	20.8	21.9
18	24.0	18.9	21.6	29.6	24.9	27.2	27.1	23.1	24.9	22.8	19.0	21.0
19	24.2	18.6	21.5	30.2	26.0	28.1	26.7	23.1	25.1	22.1	19.0	20.6
20	24.6	19.1	22.1	29.2	25.4	26.8	29.8	24.7	26.9	22.9	20.5	21.6
21	26.0	19.1	22.7	28.9	24.4	26.5	29.3	24.6	26.8	23.2	19.9	21.7
22	28.1	21.5	24.6	27.5	24.3	26.1	27.5	23.4	25.3	23.9	19.8	22.0
23	27.2	20.5	24.1	29.2	23.9	26.7	25.5	21.3	23.5	24.5	22.1	23.2
24	27.3	20.8	24.4	30.6	25.1	27.9	24.6	20.2	22.5	24.3	21.3	22.8
25	28.2	22.8	25.6	32.9	26.5	29.5	24.5	19.9	22.2	23.8	22.4	23.1
26	29.4	23.5	26.6	32.7	27.4	30.1	23.5	22.0	22.7	22.9	21.0	21.8
27	29.1	24.7	27.0	29.7	24.2	26.7	24.8	22.6	23.5	21.2	18.6	20.2
28	29.3	24.6	27.0	26.6	21.2	24.0	26.9	22.2	24.6	21.2	17.5	19.6
29	29.6	24.2	26.9	26.8	21.1	24.1	25.1	23.3	24.0	20.5	16.9	18.5
30	31.3	25.3	28.1	27.5	21.3	24.5	23.8	21.6	22.8	16.9	13.7	15.6
31	---	---	---	27.9	22.1	25.1	23.7	21.6	22.6	---	---	---
MONTH	31.3	17.9	24.4	32.9	21.1	25.8	30.4	19.9	25.2	25.6	13.7	21.8
YEAR	32.9	0.0	14.3									

03277075 GUNPOWDER CREEK AT CAMP ERNST ROAD NEAR UNION, KY—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	19.9	11.9	16.7	11.0	8.1	9.0	12.8	10.5	11.7	14.0	12.4	13.4
2	17.4	11.3	14.8	8.5	7.8	8.1	14.0	11.6	12.6	12.6	9.2	11.5
3	19.8	12.8	17.2	9.6	8.1	8.9	14.8	11.7	12.9	11.2	8.6	9.9
4	20.0	13.6	17.6	9.5	8.7	9.0	15.5	12.3	13.5	10.6	7.9	9.8
5	19.9	13.7	17.5	10.8	9.2	9.8	15.3	11.6	13.2	11.8	10.1	11.0
6	19.9	15.0	18.3	10.9	9.0	9.9	11.9	9.6	11.0	12.6	11.2	12.2
7	20.0	15.2	19.3	10.9	8.7	9.6	9.9	9.1	9.4	12.4	11.4	12.0
8	20.0	14.4	18.8	11.7	8.8	10.1	13.1	9.2	10.9	12.5	11.1	12.0
9	19.9	14.6	18.0	12.7	9.7	11.0	11.7	10.4	10.9	11.5	10.3	11.1
10	19.6	13.6	17.4	13.1	9.7	11.2	11.4	10.0	10.5	11.6	10.7	11.1
11	20.0	13.9	17.9	11.6	9.5	10.2	12.1	10.0	11.2	11.0	9.4	10.4
12	19.0	13.0	16.2	11.1	9.8	10.5	13.6	11.0	11.9	9.4	8.3	9.1
13	15.6	11.6	13.8	11.9	10.3	11.0	14.5	11.0	12.6	9.8	8.3	8.7
14	14.9	11.2	13.4	12.8	10.9	11.6	15.8	12.9	14.0	10.5	9.6	10.0
15	16.0	11.0	14.0	13.2	10.8	11.8	16.2	13.4	14.6	11.8	10.4	11.0
16	20.0	10.8	15.7	12.8	10.1	11.1	16.7	13.6	14.9	12.3	10.6	11.6
17	20.0	13.5	16.9	11.6	9.4	10.3	16.3	13.5	14.5	13.7	12.3	12.7
18	18.1	13.4	16.5	12.7	8.9	10.2	16.4	12.9	14.5	14.2	12.6	13.4
19	16.3	13.4	14.8	10.5	8.8	9.9	16.4	12.7	14.4	13.2	12.0	12.7
20	15.6	11.9	13.6	10.8	9.4	9.9	19.3	14.4	16.3	12.5	11.9	12.2
21	14.3	11.3	13.2	11.2	9.5	10.1	18.5	15.0	16.3	13.0	11.9	12.3
22	16.2	11.0	13.8	11.5	9.8	10.3	16.4	14.9	15.5	12.3	11.3	11.8
23	17.3	11.5	14.7	11.7	9.6	10.4	16.7	14.3	15.5	13.4	11.5	12.2
24	19.1	10.2	12.5	9.9	9.0	9.4	17.2	14.8	16.0	13.1	11.3	12.0
25	18.5	9.5	13.0	11.9	9.2	10.8	18.1	14.8	16.3	13.4	11.7	12.5
26	---	---	---	13.8	11.2	12.3	17.3	14.5	15.8	12.6	11.4	11.9
27	---	---	---	13.5	10.6	11.8	18.1	14.8	16.2	13.0	10.1	11.3
28	---	---	---	12.8	10.7	11.6	18.6	14.7	16.3	13.4	9.9	11.4
29	10.6	8.1	9.3	14.3	11.4	12.4	17.9	14.6	15.8	13.3	10.8	11.8
30	9.8	7.7	8.3	12.8	10.5	11.5	16.0	14.9	15.4	10.9	8.9	10.1
31	11.3	7.8	9.1	---	---	---	15.0	13.8	14.4	10.3	8.8	9.5
MONTH				14.3	7.8	10.5	19.3	9.1	13.8	14.2	7.9	11.4
		FEBRUARY			MARCH			APRIL			MAY	
1	10.9	8.5	10	15.1	10.2	12.3	---	---	---	13.9	9.4	11.3
2	9.8	7.5	8.8	17.0	11.7	13.8	---	---	---	14.7	9.1	11.6
3	10.2	1.6	7.7	17.1	11.7	13.8	---	---	---	14.8	9.7	11.9
4	6.4	1.6	4.7	17.0	11.1	13.5	15.5	8.9	12.0	14.7	8.3	11.0
5	6.8	5.0	6.2	15.6	10.5	12.3	14.8	7.9	10.8	12.8	7.3	9.9
6	8.5	6.1	7.4	16.3	9.5	12.5	13.9	7.3	10.0	12.7	7.2	9.2
7	8.7	1.8	7.5	14.5	9.3	10.9	11.5	6.8	8.5	10.8	6.0	8.2
8	6.9	1.4	4.8	14.5	9.2	11.5	12.6	6.6	9.2	9.6	5.5	7.5
9	6.8	1.5	3.7	15.2	10.0	12.6	13.8	7.3	10.1	9.8	5.0	6.9
10	6.7	1.3	5.1	15.1	10.0	12.2	12.3	5.6	8.9	8.7	4.9	6.3
11	9.7	6.7	8.3	14.5	10.1	11.8	9.8	5.2	7.2	9.1	4.7	6.4
12	9.4	6.5	8.2	15.2	10.6	12.3	10.2	5.7	7.5	7.4	4.8	6.0
13	---	---	---	16.3	10.4	12.9	10.4	6.8	8.5	9.9	4.7	6.9
14	---	---	---	15.8	10.0	12.8	12.6	6.6	9.5	6.8	4.5	5.4
15	---	---	---	14.3	7.5	10.9	13.2	6.4	8.7	8.6	5.1	6.8
16	---	---	---	14.1	7.4	10.4	12.4	6.0	8.7	10.6	6.1	8.1
17	---	---	---	13.4	8.0	10.4	11.8	7.1	9.2	10.8	6.3	8.3
18	---	---	---	11.1	5.4	8.4	11.4	6.7	8.6	10.2	5.6	7.6
19	---	---	---	9.0	4.8	6.9	10.7	6.6	8.3	8.2	5.2	6.4
20	---	---	---	9.4	5.8	7.6	11.1	6.2	8.2	8.3	6.0	7.3
21	---	---	---	10.4	3.5	7.2	10.0	6.7	8.2	10.7	6.0	8.1
22	---	---	---	7.4	3.0	5.0	9.3	7.8	8.4	11.6	5.6	8.3
23	---	---	---	7.8	4.3	6.2	10.9	8.4	10.2	11.8	5.0	7.6
24	16.9	11.0	13.2	9.6	6.6	8.0	11.9	10.6	11.2	12.2	5.8	8.3
25	17.7	11.4	13.9	10.4	6.8	8.1	12.1	9.1	10.9	12.0	6.3	8.6
26	17.5	11.0	13.5	11.4	6.1	8.5	11.8	9.0	10.0	12.5	5.5	8.0
27	17.0	10.8	13.4	10.4	4.6	7.1	11.4	9.8	10.5	10.7	4.8	7.0
28	13.6	10.1	11.3	---	---	---	12.9	9.8	11.1	9.0	4.7	6.6
29	---	---	---	---	---	---	12.0	9.2	10.3	11.2	4.6	7.3
30	---	---	---	---	---	---	13.5	9.0	10.7	9.8	4.4	6.4
31	---	---	---	---	---	---	---	---	---	12.7	6.0	8.6
MONTH										14.8	4.4	8.0

03277075 GUNPOWDER CREEK AT CAMP ERNST ROAD NEAR UNION, KY—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER—CONTINUED
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	13.7	4.9	8.4	9.5	5.8	8.3	10.1	5.5	7.3	8.4	6.5	7.5
2	11.0	4.6	7.2	9.7	6.9	8.3	10.0	5.4	7.2	8.6	6.5	7.3
3	12.6	5.6	8.5	10.9	6.9	8.8	10.6	5.2	7.2	9.5	6.5	7.8
4	11.5	4.3	7.2	11.6	6.8	8.6	10.5	5.3	7.3	10.3	7.0	8.3
5	11.5	3.4	6.7	11.3	6.2	8.3	9.5	5.1	6.9	10.6	7.2	8.5
6	10.5	2.6	5.9	10.8	6.4	8.1	7.7	5.8	6.8	11.0	6.9	8.4
7	11.6	2.9	6.5	10.7	6.7	8.1	9.6	6.4	7.6	10.5	6.7	8.2
8	11.2	3.0	6.3	13.0	6.2	8.9	9.7	6.1	7.5	9.9	6.8	8.0
9	10.5	2.7	5.9	13.0	6.0	8.6	10.5	5.8	7.6	10.0	6.6	7.9
10	9.8	2.8	5.4	12.7	5.9	8.6	11.4	5.9	8.1	9.7	6.3	7.7
11	9.6	3.4	6.0	10.7	5.3	7.7	10.2	5.4	7.2	9.3	6.5	7.6
12	9.9	3.3	5.9	8.6	5.1	6.8	9.6	5.2	6.9	10.1	6.7	7.9
13	7.4	4.0	5.5	8.5	6.1	7.7	10.3	5.1	7.2	10.2	6.7	8.2
14	8.7	5.0	6.6	9.0	6.9	7.9	10.2	5.3	7.4	9.9	6.5	7.9
15	8.3	6.5	7.3	8.7	6.6	7.7	9.5	5.3	7.1	9.8	6.6	7.9
16	9.3	6.5	7.6	8.7	5.9	7.2	8.2	5.4	6.7	8.6	6.0	6.9
17	10.2	6.8	8.3	9.4	5.6	6.8	10.1	6.0	7.7	8.3	6.2	7.0
18	11.2	7.2	8.9	9.9	5.1	7.0	10.2	5.8	7.4	9.8	6.1	7.6
19	11.9	7.5	9.3	10.4	5.1	7.2	8.3	5.9	7.0	10.1	6.4	7.7
20	12.3	7.3	9.4	9.5	5.1	6.7	9.7	6.2	7.5	7.9	6.6	7.2
21	12.9	7.7	9.6	8.9	6.4	7.4	10.4	5.9	7.5	9.3	6.4	7.6
22	13.6	7.5	9.4	9.2	6.3	7.7	11.0	6.2	7.7	9.8	6.3	7.6
23	13.8	7.1	9.2	10.0	6.1	7.7	10.3	5.9	7.6	9.4	6.0	7.2
24	13.0	6.9	9.1	10.5	5.8	7.5	9.8	6.4	7.6	10.3	6.3	7.8
25	11.6	6.3	8.4	10.3	5.3	7.1	9.8	6.4	7.7	9.7	6.1	7.4
26	11.1	6.1	8.2	10.3	4.9	6.9	7.9	6.1	7.0	8.1	6.5	7.5
27	10.2	5.6	7.5	9.0	4.7	6.6	8.6	7.1	7.7	9.2	6.9	7.8
28	10.5	5.6	7.5	10.6	5.4	7.7	10.2	6.7	8.0	9.8	6.8	8.1
29	9.5	5.8	7.5	10.9	5.9	7.8	8.9	6.2	7.3	8.6	6.9	7.9
30	12.3	5.5	8.0	10.4	5.8	7.4	7.8	6.0	7.0	9.9	7.6	8.6
31	---	---	---	10.1	5.7	7.3	8.6	7.0	7.8	---	---	---
MONTH	13.8	2.6	7.6	13.0	4.7	7.7	11.4	5.1	7.4	11.0	6.0	7.8
YEAR	20.0	1.3	9.8									

03277075 GUNPOWDER CREEK AT CAMP ERNST ROAD NEAR UNION, KY—Continued

TURBIDITY, WATER, MONOCHROME NEAR INFRA-RED LED LIGHT, 780-900 NM, DETECTION ANGLE 90 +/ -2.5 DEGREES, FNU
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	6.0	2.0	3.1	---	---	---	---	---	---	76	28	44
2	16	3.0	3.5	---	---	---	---	---	---	37	20	25
3	13	2.0	3.0	---	---	---	---	---	---	2,230	19	450
4	5.0	2.0	2.7	---	---	---	---	---	---	560	72	180
5	15	2.0	2.5	---	---	---	---	---	---	2,610	190	850
6	9.0	2.0	3.9	---	---	---	---	---	---	2,590	1,750	2,430
7	5.0	2.0	3.3	---	---	---	---	---	---	---	---	---
8	13	3.0	3.8	---	---	---	---	---	---	---	---	---
9	6.0	3.0	3.3	---	---	---	---	---	---	---	---	---
10	6.0	2.0	3.3	---	---	---	45	12	21	---	---	---
11	10	2.0	3.2	---	---	---	120	27	36	300	20	140
12	350	2.0	37	---	---	---	34	12	20	140	29	55
13	300	47	130	---	---	---	14	9.0	11	650	26	160
14	54	14	28	---	---	---	10	7.0	8.8	290	45	98
15	300	12	170	---	---	---	9.0	7.0	7.5	53	21	34
16	140	34	70	---	---	---	9.0	7.0	7.4	---	---	---
17	35	13	23	---	---	---	16	6.0	7.1	---	---	---
18	2,500	10	700	---	---	---	9.0	6.0	7.0	---	---	---
19	380	44	110	---	---	---	12	5.0	6.7	---	---	---
20	81	28	45	---	---	---	7.0	5.0	6.0	---	---	---
21	160	25	60	---	---	---	7.0	5.0	5.8	---	---	---
22	82	18	29	---	---	---	45	6.0	26	---	---	---
23	1,390	17	160	---	---	---	28	10	18	---	---	---
24	310	24	77	---	---	---	17	6.0	7.9	---	---	---
25	29	14	20	---	---	---	19	5.0	6.1	---	---	---
26	690	13	32	---	---	---	27	4.0	5.1	---	---	---
27	290	28	99	---	---	---	12	4.0	4.4	---	---	---
28	31	20	25	---	---	---	13	4.0	4.3	---	---	---
29	---	---	---	---	---	---	81	4.0	22	79	4.8	35
30	---	---	---	---	---	---	780	50	220	64	15	30
31	---	---	---	---	---	---	270	72	170	130	14	41

MONTH

	FEBRUARY			MARCH			APRIL			MAY		
1	69	13	27	83	14	40	---	---	---	---	---	---
2	200	21	35	16	7.0	10	---	---	---	---	---	---
3	1,190	18	130	13	6.0	7.6	---	---	---	---	---	---
4	130	25	39	41	5.0	8.2	---	---	---	---	---	---
5	130	24	39	28	6.0	8.1	---	---	---	---	---	---
6	48	26	35	22	5.0	6.8	---	---	---	---	---	---
7	350	34	65	230	5.0	17	---	---	---	---	---	---
8	1,100	54	280	51	16	32	---	---	---	---	---	---
9	89	31	56	16	6.0	9.2	9.0	3.0	5.5	---	---	---
10	64	18	32	8.0	5.0	6.2	11	3.0	4.1	---	---	---
11	45	15	19	6.0	5.0	5.3	6.0	3.0	3.9	---	---	---
12	28	14	17	12	5.0	7.2	7.0	3.0	4.4	180	8.9	63
13	170	14	59	6.0	5.0	5.5	120	4.0	29	---	---	---
14	440	56	150	5.0	4.0	4.6	23	7.5	13	600	3.0	100
15	76	24	41	5.0	4.0	4.8	---	---	---	66	13	31
16	---	---	---	6.0	4.0	4.9	---	---	---	19	6.0	9.9
17	---	---	---	5.0	4.0	4.7	---	---	---	---	---	---
18	---	---	---	7.0	5.0	5.7	---	---	---	---	---	---
19	---	---	---	91	5.0	23	---	---	---	400	2.0	93
20	---	---	---	68	14	35	---	---	---	270	29	110
21	---	---	---	14	6.0	9.2	---	---	---	37	7.0	17
22	---	---	---	130	5.0	12	2,340	15	310	---	---	---
23	23	7.0	9.6	1,140	68	280	1,100	86	380	---	---	---
24	35	7.0	11	160	28	69	93	28	54	---	---	---
25	19	6.0	8.0	39	20	26	72	17	28	---	---	---
26	9.0	6.0	7.2	34	16	19	1,560	13	160	15	3.6	5.4
27	18	5.0	8.0	700	16	73	200	27	81	13	2.4	4.7
28	250	5.0	44	---	---	---	---	---	---	85	3.2	22
29	---	---	---	---	---	---	---	---	---	14	2.6	10
30	---	---	---	---	---	---	---	---	---	8.3	2.6	4.7
31	---	---	---	---	---	---	---	---	---	---	---	---

MONTH

03277075 GUNPOWDER CREEK AT CAMP ERNST ROAD NEAR UNION, KY—Continued

TURBIDITY, WATER, MONOCHROME NEAR INFRA-RED LED LIGHT, 780-900 NM, DETECTION ANGLE 90 +/ -2.5 DEGREES, FNU—CONTINUED

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	2,560	34	810	---	---	---	44	11	26
2	---	---	---	180	60	100	---	---	---	---	---	---
3	---	---	---	70	37	51	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	480	3.1	170	---	---	---
7	---	---	---	---	---	---	1,380	16	130	---	---	---
8	---	---	---	---	---	---	150	80	110	---	---	---
9	17	13	14	---	---	---	99	19	44	---	---	---
10	120	25	56	---	---	---	---	---	---	---	---	---
11	25	19	21	---	---	---	360	4.4	32	---	---	---
12	2,060	20	310	---	---	---	---	---	---	---	---	---
13	1,620	140	450	370	12	150	---	---	---	---	---	---
14	2,520	49	700	160	42	86	---	---	---	---	---	---
15	2,600	100	560	1,790	40	430	---	---	---	---	---	---
16	100	46	68	170	58	100	---	---	---	370	2.9	51
17	---	---	---	58	14	32	---	---	---	130	28	72
18	---	---	---	44	7.6	13	---	---	---	28	9.8	16
19	---	---	---	71	5.8	9.2	210	25	85	16	4.8	7.3
20	---	---	---	2,580	5.9	540	---	---	---	440	8.8	130
21	---	---	---	370	43	120	---	---	---	67	18	36
22	---	---	---	200	35	77	---	---	---	19	7.7	13
23	---	---	---	40	14	26	---	---	---	15	5.6	7.6
24	---	---	---	29	8.3	14	---	---	---	11	3.6	4.9
25	---	---	---	13	5.8	8.6	---	---	---	18	2.6	5.1
26	---	---	---	23	5.2	7.5	660	7.1	230	160	7.6	59
27	---	---	---	10	4.7	6.5	440	130	280	24	7.5	13
28	---	---	---	---	---	---	130	38	74	22	4.5	7.7
29	---	---	---	---	---	---	47	15	27	170	4.5	76
30	---	---	---	---	---	---	1,720	16	520	50	13	25
31	---	---	---	---	---	---	200	43	100	---	---	---

MONTH

YEAR

THIS PAGE IS INTENTIONALLY BLANK.

03277130 MUD LICK CREEK AT HIGHWAY 42 NEAR BEAVERLICK, KY

LOCATION.--Lat 38°50'42", long 84°43'15", Boone County, Hydrologic Unit 05090203, at bridge on Highway 42, 2.8 mi southwest of Beaverlick, 2.9 mi upstream from the mouth, and 3.0 mi downstream from the confluence of Fullers Creek and McCoys Fork.

DRAINAGE AREA.--36.4 mi^2.

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--December 2000 to current year.

GAGE.--Water-stage recorder with telemetry and crest stage gage. Datum of gage is 487.73 ft above NGVD of 1929.

REMARKS.--Records fair except for those below 1.0 ft^3/s cfs and those estimated which are poor.

COOPERATION.--Northern Kentucky Sanitation District No. 1.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.93	23	244	259	e32	47	45	25	5.3	45	0.21	13
2	0.90	239	74	124	e33	28	72	24	5.2	6.4	0.17	4.8
3	0.84	121	49	1,630	e34	25	53	19	5.8	3.4	0.13	2.8
4	0.78	145	36	539	e35	24	41	15	4.4	2.4	0.24	1.8
5	0.74	66	27	1,540	e36	24	36	13	3.6	2.0	0.34	1.3
6	0.70	40	43	1,110	e37	22	30	12	3.1	1.7	0.29	1.0
7	0.69	29	127	156	e37	48	28	11	2.7	1.5	0.26	0.90
8	0.72	21	63	249	236	90	24	10	2.4	1.3	0.19	0.82
9	0.70	16	115	110	103	43	20	9.3	2.4	1.2	0.13	0.77
10	0.71	15	112	71	78	35	18	8.5	2.8	1.00	0.07	0.70
11	0.71	378	81	216	53	31	17	7.9	5.9	0.91	0.12	0.67
12	0.79	596	63	161	44	29	16	8.1	4.1	0.99	0.64	0.77
13	2.9	91	45	340	67	25	40	8.0	20	5.4	0.55	0.86
14	4.4	52	34	240	182	21	23	14	6.7	17	0.34	0.74
15	7.1	37	27	88	99	20	17	13	11	24	0.28	0.69
16	12	29	25	61	68	20	15	8.1	4.4	6.9	0.28	0.76
17	4.1	23	22	43	50	19	14	6.8	3.0	4.5	0.31	0.78
18	571	20	19	e39	39	17	13	6.1	2.4	3.3	0.29	0.77
19	271	381	18	37	33	18	12	57	2.1	2.8	1.6	0.70
20	78	107	14	30	31	21	11	50	2.0	24	1.6	2.1
21	35	54	e14	27	34	16	10	13	2.0	5.8	3.4	2.3
22	20	40	e17	23	27	15	65	9.2	2.1	3.4	1.1	0.96
23	24	33	e20	19	24	43	389	7.8	2.1	2.3	0.62	0.73
24	71	116	e20	20	26	28	100	6.7	2.0	1.1	0.42	0.69
25	28	73	e20	21	25	24	50	5.7	1.7	0.72	0.31	0.68
26	19	45	e20	23	23	23	109	5.2	1.4	0.53	2.2	2.4
27	124	35	e22	18	21	36	96	5.1	1.3	0.46	3.2	2.9
28	40	52	22	17	32	2,210	45	6.7	1.2	0.37	1.0	1.3
29	26	33	48	e17	---	181	35	8.1	1.3	0.30	0.65	1.8
30	28	53	630	e24	---	91	32	6.0	1.2	0.25	329	2.1
31	23	---	956	e29	---	61	---	5.5	---	0.22	139	---
TOTAL	1,397.71	2,963	3,027	7,281	1,539	3,335	1,476	404.8	115.6	171.15	488.94	52.59
MEAN	45.1	98.8	97.6	235	55.0	108	49.2	13.1	3.85	5.52	15.8	1.75
MAX	571	596	956	1,630	236	2,210	389	57	20	45	329	13
MIN	0.69	15	14	17	21	15	10	5.1	1.2	0.22	0.07	0.67

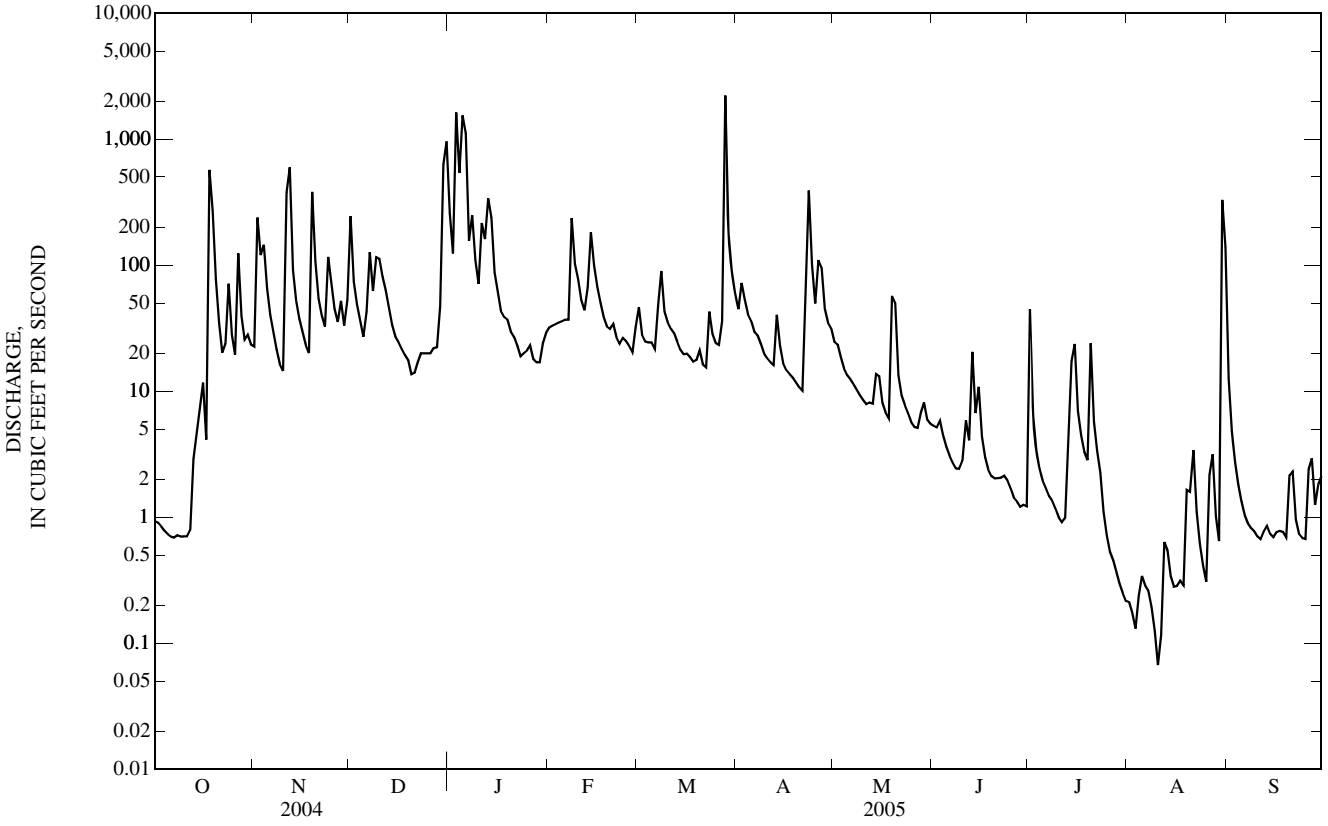
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2005, BY WATER YEAR (WY)

MEAN	29.6	63.6	84.6	108	70.6	67.9	63.8	91.5	20.2	31.5	20.7	22.1
MAX	52.5	98.8	114	235	121	108	165	180	41.2	69.6	57.3	80.2
(WY)	(2002)	(2005)	(2002)	(2005)	(2003)	(2005)	(2002)	(2002)	(2001)	(2001)	(2003)	(2003)
MIN	6.55	27.0	53.3	19.6	44.9	28.6	11.9	8.49	3.85	0.76	0.79	1.75
(WY)	(2004)	(2003)	(2001)	(2001)	(2002)	(2001)	(2001)	(2001)	(2005)	(2002)	(2002)	(2005)

03277130 MUD LICK CREEK AT HIGHWAY 42 NEAR BEAVERLICK, KY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 2001 - 2005	
ANNUAL TOTAL	24,407.86		22,251.79			
ANNUAL MEAN	66.7		61.0		62.0	
HIGHEST ANNUAL MEAN					67.8	2002
LOWEST ANNUAL MEAN					58.9	2004
HIGHEST DAILY MEAN	2,510	Jan 4	2,210	Mar 28	2,510	Jan 4, 2004
LOWEST DAILY MEAN	0.60	Jul 3	0.07	Aug 10	0.00	Jul 8, 2002
ANNUAL SEVEN-DAY MINIMUM	0.65	Jun 30	0.20	Aug 5	0.00	Aug 2, 2002
MAXIMUM PEAK FLOW			8,720	Mar 28	12,600	Apr 21, 2002
MAXIMUM PEAK STAGE			8.98	Mar 28	10.26	Apr 21, 2002
10 PERCENT EXCEEDS	113		109		109	
50 PERCENT EXCEEDS	22		19		18	
90 PERCENT EXCEEDS	1.3		0.70		0.97	

e Estimated



03277130 MUD LICK CREEK AT HIGHWAY 42 NEAR BEAVERLICK, KY—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 2000 to current year.

COOPERATION.--Northern Kentucky Sanitation District No. 1.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: December 2000 to current year.
pH: December 2000 to current year.
WATER TEMPERATURES: December 2000 to current year.
DISSOLVED OXYGEN: December 2000 to current year.
TURBIDITY: December 2000 to current year.

INSTRUMENTATION.--Water-quality monitor with telemetry. New turbidity probe installed summer 2004, range 0-3000 FNU.

REMARKS.--
SPECIFIC CONDUCTANCE: Records rated good. No missing record.
pH: Records rated excellent. No missing record.
WATER TEMPERATURES: Records rated excellent. No missing record.
DISSOLVED OXYGEN: Records rated poor. Missing periods are Oct. 13-28, 2004, Jan. 14-16, Mar. 30-31, Apr. 1-8, 28-30, May 1-3, June 15, July 10-11, 20-22, Aug. 20-31, and Sept. 1, 2005.
TURBIDITY: Records rated poor. Missing periods are Apr. 4-19, May 4-6, 15-19, 23-29, June 26-27, July 23-27, Aug. 3 to Sept. 19, and Sept. 24-26, 2005.

EXTREMES FOR PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded, 1790 microsiemens, Jan. 30, 2005; minimum recorded, 58 microsiemens, Mar. 28, 2005.
pH: Maximum recorded, 9.0 units, Dec. 2, 3, 5, 6, and 9, 2000; minimum recorded, 6.2 units, July 1, 2005.
WATER TEMPERATURES: Maximum recorded, 34.4°C, July 25, 2005; minimum recorded, 0.0°C, several days in Dec., Jan., Feb., and Mar., of each year of record.
DISSOLVED OXYGEN: Maximum recorded, 18.4 mg/L, Dec. 7, 2002; minimum recorded, 1.5 mg/L, Sept. 8, 2002.
TURBIDITY: Maximum recorded, 2600 FNU, Oct. 18, 2004; minimum recorded, <2.0 FNU, Feb. 25 and April 2, 6-8, Oct. 31, Nov. 1, 2, 4, 5, 14, 16, 20, 21, 2002; Mar. 30, Oct. 9-14, Dec. 20-30, 27-20, 2003; and Sept. 26, 27, 30, Oct. 1-15, and Dec. 28-29, 2004.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 1790 microsiemens, Jan. 30, 2005; minimum recorded, 58 microsiemens, Mar. 28, 2005.
pH: Maximum recorded, 8.9 units, May 2, June 19, and Aug. 23, 2005; minimum recorded, 6.2 units, July 1, 2005.
WATER TEMPERATURES: Maximum recorded, 34.4°C, July 25, 2005; minimum recorded, 0.0°C, several days in Dec. 2004, Jan. and Mar 3, 2005.
DISSOLVED OXYGEN: Maximum recorded, 17.0 mg/L, Dec. 28, 2004; minimum recorded, 1.8 mg/L, June 9, 2005.
TURBIDITY: Maximum recorded, 2600 FNU, Oct. 18, 2004; minimum recorded, <2.0 FNU, Oct. 1-15, and Dec. 28-29, 2004.

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	570	557	565	582	563	574	438	349	386	473	344	415
2	575	568	572	598	365	480	471	430	454	545	472	506
3	574	559	569	492	397	450	484	471	481	547	187	334
4	574	565	571	496	409	460	492	483	487	322	229	299
5	576	567	572	511	455	490	504	491	499	304	186	246
6	576	568	573	535	511	525	509	499	505	349	212	275
7	576	561	571	548	534	541	508	408	451	409	349	386
8	573	559	567	555	541	546	475	415	452	412	339	372
9	577	565	573	557	542	551	496	412	472	445	395	425
10	581	560	574	560	538	554	474	390	431	470	445	459
11	581	561	573	570	227	451	492	474	484	481	301	428
12	584	532	573	387	227	309	497	484	489	444	333	397
13	574	558	568	446	387	420	513	497	506	460	289	421
14	644	571	596	469	446	456	517	505	511	412	289	365
15	799	620	707	481	469	476	529	512	521	444	393	427
16	793	602	640	494	474	484	540	529	534	482	418	464
17	602	589	594	507	494	498	548	535	539	554	476	510
18	593	172	425	518	505	511	552	541	546	573	520	564
19	410	209	329	520	268	364	563	542	551	554	514	531
20	490	321	433	447	365	414	590	555	575	521	508	511
21	493	328	431	473	447	463	626	584	594	554	497	523
22	540	493	520	490	473	483	656	536	586	837	554	708
23	556	528	546	499	489	495	762	656	716	924	743	843
24	548	454	488	500	405	451	693	644	666	1,020	884	946
25	532	481	507	464	410	443	734	692	724	884	763	844
26	556	519	546	487	464	479	733	688	707	763	707	722
27	529	378	442	500	487	496	689	645	666	795	724	749
28	530	464	501	513	480	496	672	652	661	800	700	769
29	563	530	547	504	481	494	1,180	669	730	1,000	688	745
30	591	563	569	517	435	506	1,500	366	901	1,790	694	1,340
31	595	568	581	---	---	---	366	291	312	1,750	1,270	1,570
MONTH	799	172	543	598	227	479	1,500	291	553	1,790	186	584

03277130 MUD LICK CREEK AT HIGHWAY 42 NEAR BEAVERLICK, KY—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	1,270	776	990	705	585	675	513	224	266	491	476	484
2	776	682	729	685	597	649	447	236	338	489	484	487
3	866	662	685	620	564	601	417	244	336	505	484	491
4	976	685	874	604	549	581	395	382	388	524	505	517
5	814	651	713	594	569	582	501	383	426	537	521	529
6	651	609	633	601	533	579	498	482	489	558	536	544
7	645	604	611	718	459	599	511	489	499	569	552	560
8	640	206	495	637	566	591	521	507	513	583	566	573
9	583	551	567	581	562	572	528	510	520	597	578	585
10	609	581	595	576	558	566	535	517	527	604	585	596
11	590	573	582	581	563	571	544	532	538	611	586	600
12	586	572	578	614	552	567	560	543	552	617	588	605
13	637	546	586	594	557	567	570	505	545	616	580	600
14	667	492	570	663	593	638	564	542	554	614	556	599
15	542	499	524	664	595	629	568	547	559	614	598	607
16	557	537	547	608	569	590	567	555	563	618	582	602
17	571	545	557	587	533	560	578	564	569	607	566	588
18	566	541	553	567	544	558	587	573	578	607	569	588
19	563	535	553	583	566	577	604	581	588	614	229	544
20	580	553	567	637	583	602	617	600	606	485	318	433
21	592	568	582	672	637	655	630	616	622	534	485	506
22	628	592	614	741	641	674	638	274	578	578	534	556
23	612	539	580	741	599	642	382	311	343	600	578	585
24	611	547	565	664	653	659	398	342	371	611	593	601
25	697	564	602	659	638	646	431	398	418	616	599	609
26	704	665	690	639	612	622	444	352	416	622	596	611
27	700	553	629	653	294	607	419	355	384	623	599	615
28	615	571	589	298	58	179	448	419	438	622	596	607
29	---	---	---	281	199	230	467	448	459	636	605	618
30	---	---	---	286	161	273	487	460	478	641	618	632
31	---	---	---	271	230	243	---	---	---	633	602	622
MONTH	1,270	206	620	741	58	558	638	224	482	641	229	571
		JUNE			JULY			AUGUST			SEPTEMBER	
1	635	602	623	526	333	385	555	539	547	527	453	493
2	628	592	614	402	350	376	554	538	547	559	525	543
3	626	595	614	432	402	414	552	494	539	576	559	565
4	637	607	622	446	424	435	556	458	521	591	570	579
5	639	600	623	462	436	451	562	539	552	598	567	586
6	647	586	622	468	437	455	557	533	547	606	566	589
7	645	556	612	476	452	464	557	533	547	607	565	589
8	638	543	601	478	458	469	556	532	545	605	403	586
9	628	536	595	481	468	474	553	296	500	604	567	587
10	628	559	607	487	478	483	322	137	182	602	569	586
11	645	618	634	493	481	488	515	390	488	596	571	585
12	652	550	642	493	474	490	558	481	522	600	577	590
13	687	418	514	532	448	481	578	558	567	605	587	598
14	493	416	449	603	529	580	586	560	575	608	592	603
15	532	493	521	543	449	497	596	576	587	613	602	608
16	515	492	504	507	484	491	606	592	599	623	586	612
17	516	484	505	522	506	514	610	581	598	627	619	624
18	523	486	508	528	500	517	612	590	602	631	622	627
19	523	465	502	534	500	522	650	460	590	632	618	628
20	523	477	503	545	354	506	685	626	666	638	558	606
21	522	496	511	402	325	352	690	593	647	763	638	700
22	527	502	513	505	386	458	594	567	580	770	743	758
23	525	505	515	562	505	530	587	565	578	746	678	717
24	531	504	519	584	547	564	589	570	580	702	669	688
25	533	403	482	592	536	570	594	570	582	692	639	681
26	538	432	524	591	528	564	586	538	570	668	638	656
27	544	528	538	581	554	567	544	516	528	660	627	641
28	552	463	538	573	535	554	516	482	498	661	647	656
29	539	523	532	566	525	548	498	479	490	658	618	633
30	544	524	535	558	528	544	496	254	397	646	629	641
31	---	---	---	553	535	544	453	298	401	---	---	---
MONTH	687	403	554	603	325	493	690	137	538	770	403	618
YEAR	1,790	58	549									

03277130 MUD LICK CREEK AT HIGHWAY 42 NEAR BEAVERLICK, KY—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8.4	7.4	8.4	8.0	8.2	7.9	7.9	7.8	8.3	8.2	8.6	8.0
2	7.9	7.4	8.2	7.9	8.4	8.0	8.0	7.9	8.3	8.2	8.6	8.1
3	8.3	7.4	8.5	7.7	8.3	8.1	8.0	7.6	8.4	8.2	8.5	8.1
4	8.3	7.4	8.2	8.1	8.3	8.0	7.9	7.7	8.4	8.2	8.5	8.0
5	8.5	7.6	8.3	8.1	8.3	8.1	7.7	7.6	8.4	8.2	8.5	8.0
6	8.3	7.5	8.3	8.2	8.3	8.0	7.8	7.6	8.5	8.2	8.6	8.1
7	8.4	7.6	8.3	8.2	8.1	7.8	8.0	7.8	8.4	8.2	8.6	8.0
8	8.4	7.4	8.4	8.2	8.3	7.9	8.0	7.8	8.3	8.0	8.3	7.8
9	8.4	7.8	8.4	8.2	8.1	7.9	8.1	8.0	8.4	8.1	8.5	8.0
10	8.4	7.5	8.5	8.2	8.1	7.9	8.1	8.1	8.6	8.2	8.4	8.0
11	8.5	7.4	8.3	7.6	8.2	8.0	8.2	7.9	8.5	8.2	8.4	8.0
12	8.4	7.5	8.1	7.6	8.3	8.0	8.1	7.8	8.4	8.1	8.5	8.1
13	7.7	7.4	8.3	8.0	8.3	8.0	8.1	7.8	8.3	8.1	8.5	8.0
14	7.9	7.4	8.3	8.1	8.3	8.0	8.1	7.8	8.1	8.0	8.5	8.1
15	7.6	7.3	8.3	8.2	8.3	8.0	8.2	8.1	8.6	8.0	8.4	8.1
16	7.8	7.4	8.3	8.2	8.3	8.1	8.2	8.1	8.6	8.1	8.5	8.0
17	8.1	7.5	8.3	8.1	8.3	8.1	8.2	8.2	8.6	8.1	8.4	8.1
18	7.6	7.3	8.4	8.1	8.3	8.1	8.3	8.2	8.6	8.1	8.4	8.1
19	8.1	7.3	8.2	7.7	8.4	8.1	8.4	8.3	8.5	8.1	8.2	7.9
20	8.1	7.4	8.1	7.9	8.5	8.1	8.4	8.3	8.4	8.1	8.3	7.9
21	7.8	7.6	8.1	8.0	8.4	8.2	8.4	8.4	8.6	8.1	8.3	8.0
22	8.2	7.3	8.2	8.0	8.3	8.1	8.4	8.4	8.7	8.1	8.3	7.9
23	8.3	7.4	8.2	8.0	8.3	8.0	8.4	8.3	8.8	8.2	8.0	7.8
24	7.8	7.7	8.1	7.9	8.3	8.0	8.4	8.3	8.7	8.2	8.3	7.8
25	7.9	7.3	8.3	8.0	8.3	8.0	8.4	8.3	8.7	8.2	8.2	7.9
26	8.3	7.3	8.3	8.1	8.3	8.0	8.4	8.3	8.7	8.2	8.3	7.9
27	7.9	7.5	8.3	8.1	8.4	8.0	8.3	8.2	8.7	8.3	8.1	7.7
28	8.2	7.7	8.3	8.1	8.4	8.1	8.3	8.2	8.4	8.1	7.7	7.5
29	8.3	8.1	8.4	8.1	8.4	8.0	8.3	8.3	---	---	7.8	7.6
30	8.3	8.1	8.3	8.1	8.0	7.8	8.3	8.2	---	---	8.0	7.7
31	8.4	8.1	---	---	7.8	7.7	8.3	8.2	---	---	8.0	7.8
MONTH	8.5	7.3	8.5	7.6	8.5	7.7	8.4	7.6	8.8	8.0	8.6	7.5
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.1	7.7	8.8	8.3	8.5	7.8	8.3	6.2	8.2	7.5	8.2	8.0
2	8.1	7.8	8.9	8.3	8.4	7.8	7.9	7.5	8.2	7.5	8.2	7.9
3	7.9	7.7	8.8	8.4	8.4	7.8	8.4	7.6	8.2	7.4	8.3	8.0
4	7.8	7.6	8.8	8.4	8.4	7.8	8.4	7.6	8.3	7.4	8.4	8.0
5	8.2	7.5	8.7	8.3	8.5	7.7	8.6	7.5	8.3	7.5	8.6	8.0
6	8.2	7.7	8.7	8.3	8.5	7.8	8.6	7.7	8.3	7.4	8.7	8.0
7	8.2	7.7	8.6	8.2	8.6	7.7	8.5	7.7	8.3	7.5	8.7	8.0
8	8.4	7.7	8.6	8.1	8.6	7.5	8.4	7.7	8.4	7.4	8.6	8.0
9	8.4	7.9	8.6	8.0	8.6	7.5	8.3	7.7	8.4	7.5	8.6	7.9
10	8.3	7.8	8.6	8.0	8.5	7.5	8.3	7.6	8.4	7.5	8.6	7.8
11	8.3	7.8	8.5	7.9	8.4	7.5	8.2	7.7	8.4	7.4	8.5	7.8
12	8.3	7.9	8.5	7.9	8.5	7.7	8.0	7.6	8.2	7.3	8.4	7.8
13	8.2	7.9	8.7	7.9	8.0	7.8	8.0	7.6	8.4	7.5	8.4	7.8
14	8.5	7.9	8.5	7.9	8.1	7.7	8.1	7.9	8.5	7.4	8.3	7.8
15	8.5	8.0	8.6	8.0	8.3	7.9	8.1	7.9	8.4	7.4	8.3	7.8
16	8.5	8.1	8.7	8.1	8.6	7.9	8.2	7.9	8.1	7.4	8.2	7.8
17	8.5	8.1	8.8	8.1	8.8	7.9	8.5	7.9	8.5	7.5	8.1	7.8
18	8.4	8.0	8.8	8.0	8.8	7.9	8.8	7.9	8.5	7.5	8.3	7.8
19	8.4	8.0	8.6	7.8	8.9	7.9	8.8	7.9	8.3	7.3	8.3	7.8
20	8.4	8.0	8.0	7.8	8.8	7.9	8.6	7.9	8.4	7.7	8.2	7.8
21	8.3	8.0	8.2	7.8	8.4	7.9	8.1	7.8	8.5	7.7	8.4	7.9
22	8.4	7.8	8.3	7.9	8.3	7.5	8.2	7.8	8.8	7.7	8.7	7.9
23	7.8	7.7	8.4	7.9	8.3	7.4	8.5	8.0	8.9	7.7	8.6	7.8
24	8.2	7.7	8.4	8.0	8.4	7.4	8.7	7.9	8.8	7.7	8.8	7.8
25	8.5	8.1	8.4	7.9	8.4	7.3	8.7	7.9	8.7	7.8	8.5	7.8
26	8.5	8.1	8.4	7.9	8.3	7.4	8.7	7.8	8.6	7.6	8.3	7.8
27	8.6	8.1	8.4	7.8	8.3	7.4	8.5	7.8	8.3	7.7	8.5	8.0
28	8.7	8.2	8.3	7.8	8.3	7.4	8.6	7.8	8.7	7.6	8.7	8.0
29	8.7	8.2	8.4	7.8	8.2	7.3	8.6	7.8	8.5	7.6	8.5	7.9
30	8.8	8.3	8.3	7.8	8.3	7.3	8.5	7.8	7.9	7.6	8.6	8.0
31	---	---	8.5	7.8	---	---	8.3	7.7	8.1	7.9	---	---
MONTH	8.8	7.5	8.9	7.8	8.9	7.3	8.8	6.2	8.9	7.3	8.8	7.8
YEAR	8.9	6.2										

03277130 MUD LICK CREEK AT HIGHWAY 42 NEAR BEAVERLICK, KY—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	21.3	14.6	18.1	15.6	14.2	14.8	9.4	6.7	8.3	7.0	5.8	6.5
2	19.5	15.3	18.0	16.8	15.3	15.9	6.7	5.2	6.0	8.7	6.4	7.4
3	19.6	12.1	15.7	15.6	12.7	13.8	5.9	4.5	5.2	9.9	8.7	9.5
4	19.3	12.4	15.8	13.5	12.3	12.9	5.1	3.1	4.2	10.1	8.9	9.6
5	18.5	11.7	15.0	12.3	9.8	11.0	5.6	3.4	4.6	9.0	7.5	8.4
6	18.4	10.9	14.4	11.1	8.2	9.8	9.3	5.6	7.4	7.5	5.6	6.8
7	18.3	11.3	14.7	12.2	9.1	10.7	12.7	9.3	11.1	5.8	4.9	5.4
8	18.4	13.1	15.9	11.0	8.2	9.8	11.2	8.2	9.7	6.1	5.8	6.0
9	19.2	15.0	17.0	8.9	6.4	7.6	9.3	7.4	8.1	7.1	5.7	6.3
10	20.2	14.4	17.2	9.4	5.7	7.5	10.2	9.3	9.8	7.3	6.1	6.7
11	18.0	12.1	15.0	10.5	7.2	8.5	9.5	7.0	8.3	10.4	7.2	8.5
12	15.4	12.1	13.8	11.3	9.6	10.5	7.0	6.1	6.6	12.1	10.4	11.3
13	14.7	14.1	14.4	9.6	6.9	8.1	6.7	3.7	5.4	12.0	9.6	11.5
14	16.3	13.9	14.8	7.5	5.2	6.5	3.7	2.0	2.7	9.6	5.3	7.4
15	14.6	11.7	12.9	7.3	4.8	6.2	2.0	0.4	1.1	5.3	3.8	4.4
16	11.9	9.9	11.4	8.9	7.0	7.9	1.2	0.0	0.5	4.0	1.2	2.9
17	12.7	7.9	10.2	10.6	8.9	9.8	2.2	0.2	1.2	1.2	0.0	0.2
18	12.6	8.5	9.9	12.5	10.6	11.6	2.4	0.0	1.4	0.1	0.0	0.0
19	14.0	12.5	13.3	13.2	12.0	12.8	2.3	0.0	1.5	0.1	0.0	0.0
20	14.6	13.9	14.2	13.2	12.6	13.0	0.1	0.0	0.0	0.2	0.0	0.1
21	15.0	14.4	14.6	12.9	11.4	12.2	0.6	0.0	0.1	0.8	0.0	0.1
22	14.5	13.5	14.1	11.4	11.1	11.2	0.3	0.0	0.0	0.4	0.0	0.1
23	14.4	13.0	13.6	11.5	10.5	11.1	0.0	0.0	0.0	0.1	0.0	0.0
24	16.5	14.3	15.2	13.3	11.5	12.3	0.0	0.0	0.0	0.1	0.0	0.0
25	15.1	12.3	13.9	12.3	7.1	9.6	0.0	0.0	0.0	0.6	0.0	0.1
26	14.4	12.0	13.5	7.5	5.9	6.8	0.0	0.0	0.0	0.2	0.0	0.1
27	15.3	14.0	14.7	8.2	7.2	7.7	0.0	0.0	0.0	0.9	0.0	0.1
28	16.5	14.3	15.4	8.1	6.5	7.6	0.0	0.0	0.0	0.1	0.0	0.0
29	18.2	16.1	17.0	6.7	5.9	6.3	0.0	0.0	0.0	0.3	0.0	0.0
30	19.5	17.4	18.2	8.8	6.5	7.1	4.0	0.0	0.8	0.3	0.0	0.1
31	17.4	14.8	15.9	---	---	---	5.8	4.0	5.0	0.8	0.0	0.3
MONTH	21.3	7.9	14.8	16.8	4.8	10.0	12.7	0.0	3.5	12.1	0.0	3.9
		FEBRUARY			MARCH			APRIL			MAY	
1	1.9	0.1	0.8	3.8	1.7	2.8	13.4	9.8	11.0	13.2	9.2	11.4
2	1.4	0.1	0.9	3.4	0.3	1.9	9.8	7.5	8.5	12.0	10.2	11.3
3	3.6	1.2	2.2	4.2	0.0	2.0	12.2	6.0	8.9	12.6	8.7	10.9
4	3.9	0.9	2.4	4.9	0.9	2.8	14.7	8.3	11.4	15.2	8.8	11.9
5	4.8	1.4	3.1	5.0	3.5	4.1	17.3	11.0	14.0	17.6	10.6	14.0
6	5.1	2.4	3.9	8.4	2.9	5.7	17.0	12.8	15.2	19.0	12.1	15.5
7	5.4	4.2	4.7	8.8	6.2	7.3	17.6	14.8	16.2	20.2	13.4	16.9
8	8.0	5.2	6.9	7.5	3.5	5.5	19.2	14.4	16.6	23.1	16.0	19.4
9	7.8	5.7	7.0	4.2	1.4	2.9	19.3	13.0	16.2	23.4	17.5	20.5
10	5.7	2.7	4.1	2.9	0.8	2.1	20.9	14.2	17.5	23.5	18.6	20.8
11	3.4	1.4	2.3	3.1	2.1	2.5	20.7	16.8	18.9	25.3	18.5	21.9
12	5.0	1.1	3.1	4.7	2.0	3.4	19.1	16.1	17.4	22.7	19.4	20.9
13	5.9	3.6	4.4	4.4	2.7	3.7	16.1	12.6	14.4	23.9	17.0	20.5
14	7.8	5.9	7.0	6.5	1.4	4.0	16.6	10.1	13.3	21.6	19.0	20.4
15	9.1	5.2	7.1	7.5	2.5	5.1	18.0	11.5	14.7	19.0	16.3	17.8
16	8.5	6.4	7.8	7.4	4.6	5.9	19.2	12.2	15.6	17.9	15.0	16.4
17	6.4	3.5	4.9	9.7	4.4	6.9	20.1	13.0	16.5	20.2	13.2	16.7
18	4.9	2.1	3.3	10.6	4.8	7.7	21.7	14.9	18.2	22.1	14.5	18.4
19	3.5	0.6	2.3	8.0	6.5	7.3	21.8	16.2	18.9	20.0	16.2	18.1
20	5.0	2.9	3.6	9.6	5.7	7.4	22.7	16.2	19.5	18.9	16.1	17.4
21	7.4	5.0	6.3	9.9	5.0	7.3	19.9	16.1	18.0	21.4	15.9	18.5
22	6.8	5.8	6.3	7.5	5.4	6.6	18.2	13.4	15.7	20.1	16.3	18.3
23	6.7	4.8	5.7	6.5	5.7	6.3	13.8	9.5	11.6	21.9	16.4	19.1
24	5.1	3.1	4.2	9.6	5.0	7.0	9.5	7.7	8.4	20.7	16.4	18.5
25	4.2	1.2	2.8	9.0	7.1	8.1	13.8	7.2	10.3	20.7	15.6	18.2
26	6.1	2.1	4.0	9.8	7.8	8.6	13.0	10.8	12.0	23.4	15.3	19.2
27	5.9	3.0	4.6	8.5	7.1	7.9	11.6	9.0	10.5	24.3	17.6	20.6
28	5.4	3.8	4.8	8.3	7.1	7.8	11.7	8.9	10.6	23.0	17.7	20.0
29	---	---	---	11.8	5.8	8.8	11.7	10.9	11.3	23.4	16.7	20.1
30	---	---	---	14.1	9.2	11.7	12.6	11.3	11.8	20.4	17.6	18.4
31	---	---	---	16.2	12.4	13.9	---	---	---	24.3	16.1	19.8
MONTH	9.1	0.1	4.3	16.2	0.0	6.0	22.7	6.0	14.1	25.3	8.7	17.8

03277130 MUD LICK CREEK AT HIGHWAY 42 NEAR BEAVERLICK, KY—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	22.4	17.3	19.9	29.1	22.8	24.8	33.1	24.0	28.5	24.2	20.8	22.6
2	20.2	18.1	19.2	28.2	22.4	25.1	33.8	24.8	29.2	25.8	21.6	23.5
3	23.4	17.9	20.4	29.7	21.7	25.5	34.0	25.6	29.8	25.3	20.3	22.7
4	26.8	19.3	22.7	31.7	23.5	27.5	33.7	26.2	29.9	25.3	19.1	22.0
5	28.8	20.7	24.6	28.5	24.9	26.8	29.8	26.1	27.9	26.3	18.7	22.2
6	30.2	22.7	26.5	32.8	23.9	28.0	31.0	24.9	27.7	27.0	19.3	22.9
7	30.8	23.3	26.9	30.8	23.7	27.3	32.0	24.5	27.9	27.3	19.6	23.2
8	31.1	23.0	27.0	32.2	22.9	27.5	31.8	24.9	28.3	27.0	19.6	23.2
9	32.4	23.8	28.0	31.8	23.2	27.7	33.2	24.4	28.6	28.1	21.1	24.5
10	31.6	24.7	27.8	32.0	22.8	27.6	33.2	24.7	28.8	28.8	21.7	25.1
11	27.2	24.1	25.4	27.9	24.2	26.1	33.0	26.0	28.8	29.3	21.2	25.1
12	27.1	23.4	25.1	26.4	24.5	25.4	31.6	24.7	27.9	28.6	20.5	24.5
13	26.1	23.1	24.5	24.6	22.5	23.1	32.9	24.7	28.2	27.7	20.7	24.2
14	27.1	23.0	24.9	23.8	22.1	22.8	31.1	24.8	27.9	25.7	20.7	23.3
15	26.3	22.2	24.2	24.9	22.5	23.7	28.7	24.9	27.0	27.3	21.5	24.4
16	26.6	21.4	23.6	26.4	23.5	24.9	26.8	24.8	25.5	26.9	23.0	24.7
17	26.0	18.8	22.5	28.3	24.2	25.8	30.5	22.7	26.5	25.6	21.6	23.5
18	24.7	19.0	22.1	30.4	24.6	27.3	29.4	24.1	26.7	25.7	19.9	22.7
19	25.7	18.3	22.2	31.5	25.4	28.2	29.9	23.4	26.4	25.9	19.5	22.5
20	26.4	18.9	22.8	29.9	24.4	26.5	31.2	25.0	27.4	25.8	21.1	23.0
21	28.0	19.1	23.7	28.3	23.5	25.6	29.5	24.8	26.8	25.7	20.7	22.7
22	30.3	21.7	25.8	28.0	24.6	26.2	29.5	23.3	26.0	26.6	19.8	23.0
23	30.4	21.2	26.0	30.3	24.5	27.3	29.1	21.5	25.0	26.1	21.8	23.8
24	31.4	22.0	26.8	32.0	25.1	28.4	29.5	20.3	24.6	27.0	21.6	24.0
25	32.0	24.2	28.3	34.4	25.9	29.9	30.0	20.0	25.0	24.5	22.5	23.6
26	31.5	24.9	28.4	34.0	26.9	30.4	27.4	23.3	24.8	23.6	21.8	22.7
27	32.0	25.7	29.0	29.9	24.5	27.3	25.9	22.8	24.0	23.6	19.5	21.4
28	33.8	25.5	29.4	30.3	22.4	25.9	29.2	22.5	25.3	24.1	17.5	20.6
29	32.5	25.5	28.9	31.2	21.6	26.3	25.0	23.3	24.1	21.2	17.2	19.5
30	34.2	26.0	29.8	31.7	22.0	26.9	23.5	21.9	22.5	19.6	14.8	17.0
31	---	---	---	32.1	22.8	27.5	23.2	21.4	22.2	---	---	---
MONTH	34.2	17.3	25.2	34.4	21.6	26.6	34.0	20.0	26.7	29.3	14.8	22.9
YEAR	34.4	0.0	14.7									

03277130 MUD LICK CREEK AT HIGHWAY 42 NEAR BEAVERLICK, KY—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	12.1	4.8	8.1	11.0	8.3	9.1	11.2	9.6	10.5	11.7	11.2	11.5
2	7.5	3.7	5.9	8.9	8.2	8.5	12.8	10.6	11.7	11.4	10.5	11.1
3	11.4	4.7	7.7	9.2	8.6	8.9	13.1	10.8	12.0	10.8	10.3	10.5
4	10.9	5.2	7.8	9.5	8.5	9.0	13.8	11.2	12.4	10.9	9.9	10.6
5	10.6	5.3	7.8	10.2	8.9	9.5	14.0	11.0	12.1	11.1	10.7	10.9
6	10.4	6.0	8.0	10.7	9.2	9.9	11.7	9.2	10.5	11.5	10.9	11.2
7	10.7	6.3	8.2	10.8	9.0	9.7	9.8	8.4	9.1	11.6	11.0	11.4
8	10.9	5.7	8.0	11.6	9.0	10.1	11.5	8.7	9.9	11.4	10.8	11.2
9	10.2	5.2	7.2	12.5	9.9	11.0	10.9	9.5	10.1	11.7	10.1	10.9
10	10.8	4.7	7.5	12.8	9.9	11.1	10.9	9.0	9.7	10.9	10.1	10.6
11	11.8	5.5	8.3	10.9	9.8	10.2	11.6	9.8	10.6	10.2	9.2	10
12	11.4	5.0	7.4	10.5	10.1	10.3	13.1	10.6	11.4	9.8	9.0	9.4
13	---	---	---	11.6	10.5	11.1	13.9	10.7	12.0	10.4	8.8	9.5
14	---	---	---	12.4	11.1	11.6	14.9	12.0	13.2	---	---	---
15	---	---	---	12.6	10.9	11.7	15.5	12.8	13.9	---	---	---
16	---	---	---	12.1	10.3	11.1	15.9	13.3	14.3	---	---	---
17	---	---	---	11.6	9.9	10.5	15.6	13.2	14.0	13.8	12.7	13.5
18	---	---	---	12.3	9.4	10.5	15.8	12.6	13.9	13.8	13.1	13.5
19	---	---	---	9.6	9.2	9.4	15.7	12.3	13.7	13.4	13.2	13.3
20	---	---	---	10.1	9.2	9.5	16.8	13.6	14.9	13.4	13.1	13.2
21	---	---	---	10.4	9.3	9.7	16.4	13.5	14.6	13.6	13.2	13.3
22	---	---	---	10.7	9.7	10	14.5	13.1	13.7	13.6	13.0	13.2
23	---	---	---	11.0	9.6	10.1	15.5	13.1	14.1	13.9	13.4	13.6
24	---	---	---	10.1	9.2	9.5	16.1	13.4	14.5	13.8	13.3	13.5
25	---	---	---	11.5	9.5	10.6	16.6	13.4	14.7	13.6	13.0	13.3
26	---	---	---	12.6	10.9	11.6	16.3	13.4	14.5	13.4	13.0	13.2
27	---	---	---	12.3	10.5	11.2	16.8	13.5	14.8	13.9	13.2	13.6
28	---	---	---	12.5	10.5	11.2	17.0	13.5	14.8	14.1	13.4	13.7
29	9.8	8.1	8.8	13.2	11.1	11.9	16.3	13.3	14.3	13.7	13.2	13.4
30	9.6	7.9	8.4	12.3	10.4	11.3	13.8	12.3	13.2	13.5	13.1	13.3
31	10.8	7.9	9.1	---	---	---	12.4	11.6	12.0	13.6	13.0	13.3
MONTH				13.2	8.2	10.3	17.0	8.4	12.7			
		FEBRUARY			MARCH			APRIL			MAY	
1	13.5	12.7	13.1	14.5	10.3	12.2	---	---	---	---	---	---
2	13.5	12.4	13.0	15.7	11.4	13.1	---	---	---	---	---	---
3	13.1	11.9	12.5	15.7	11.5	13.2	---	---	---	---	---	---
4	13.3	11.8	12.5	15.4	10.7	12.7	---	---	---	14.6	9.8	12.0
5	13.2	11.3	12.3	14.4	10.0	11.6	---	---	---	13.6	9.0	11.2
6	13.1	11.0	12.0	14.8	9.3	11.8	---	---	---	12.8	8.3	10.4
7	12.4	10.7	11.4	13.2	8.8	10.3	---	---	---	12.2	7.4	9.7
8	11.1	10.1	10.6	10.9	9.3	10.1	---	---	---	11.4	6.5	8.8
9	11.1	9.9	10.4	14.0	10.1	11.9	13.0	8.7	10.5	11.2	6.1	8.3
10	12.7	10.5	11.6	14.4	10.7	12.2	12.4	7.9	10	11.3	6.1	8.1
11	13.9	11.6	12.5	13.7	10.6	11.8	11.6	7.6	9.2	12.5	5.8	8.6
12	13.8	10.9	12.3	14.2	10.2	11.9	10.4	7.4	8.5	12.3	5.5	8.3
13	12.7	10.5	11.4	14.5	10.0	11.9	9.8	7.9	8.8	14.3	5.2	9.5
14	10.6	9.9	10.2	14.5	10.2	12.1	12.7	8.4	10.3	10.4	5.2	7.5
15	12.5	9.2	10.8	14.0	9.5	11.6	12.8	8.2	10.1	11.4	6.9	8.9
16	12.6	9.2	10.5	13.7	9.3	11.0	11.9	7.7	9.6	13.2	7.2	9.7
17	13.9	9.9	11.7	12.7	8.7	10.5	11.0	7.0	8.9	13.7	5.9	9.9
18	14.6	11.0	12.4	12.1	8.2	10	9.9	6.5	8.0	14.4	5.1	9.3
19	15.2	11.3	12.9	10.2	8.2	9.0	10.9	6.5	8.2	11.2	4.9	7.7
20	13.2	10.4	11.6	11.6	8.5	9.7	11.1	6.7	8.5	8.3	6.7	7.3
21	13.9	9.8	11.1	11.7	8.4	9.8	10.0	6.6	8.1	9.5	6.2	7.8
22	14.7	9.6	11.4	11.3	8.3	9.6	10.3	7.8	9.0	9.4	5.7	7.3
23	15.6	9.9	12.1	9.8	8.7	9.1	11.1	9.4	10.2	10.5	5.6	7.9
24	15.3	10.1	12.1	11.9	8.2	9.9	12.1	10.3	11.4	11.3	5.9	8.3
25	16.2	11.1	13.1	10.9	8.0	9.1	11.9	8.8	10.5	11.7	6.3	8.6
26	15.6	10.8	12.8	11.0	8.0	9.0	11.1	8.6	10	12.9	6.1	9.0
27	15.2	10.3	12.2	10.0	8.0	8.8	12.7	9.3	11.1	13.0	5.6	8.4
28	12.9	9.8	11.0	10.7	9.2	10	13.2	9.5	11.0	12.2	5.6	8.3
29	---	---	---	10.9	8.9	10.2	12.7	8.7	10.4	12.1	5.6	8.5
30	---	---	---	---	---	---	---	---	---	10.3	5.4	7.5
31	---	---	---	---	---	---	---	---	---	13.4	6.1	9.3
MONTH	16.2	9.2	11.8									

03277130 MUD LICK CREEK AT HIGHWAY 42 NEAR BEAVERLICK, KY—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER—CONTINUED
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	14.0	5.8	9.2	7.4	5.6	6.5	9.5	3.6	6.4	---	---	---
2	12.5	4.9	8.1	7.6	6.0	6.8	9.4	3.5	6.4	7.8	6.0	6.7
3	12.6	5.6	8.5	8.8	5.8	7.3	8.7	3.3	6.0	8.0	5.9	6.8
4	11.9	5.0	8.2	9.5	4.6	6.7	8.7	3.3	5.8	9.2	6.0	7.3
5	12.0	4.4	7.8	10.1	4.0	6.6	8.9	3.5	5.8	11.3	6.0	8.0
6	12.2	4.0	7.7	10.4	5.3	7.6	9.8	3.4	6.2	12.8	6.2	8.7
7	13.8	3.4	7.9	9.7	4.8	7.0	10.0	3.7	6.5	12.7	6.0	8.7
8	16.7	2.6	8.4	9.4	4.8	7.1	10.6	3.5	6.9	12.6	5.9	8.6
9	16.7	1.8	8.0	9.3	4.6	7.0	11.3	4.1	7.5	11.9	5.1	8.1
10	13.7	2.1	6.8	---	---	---	10.8	5.3	7.7	11.2	4.8	7.6
11	8.5	2.4	5.8	---	---	---	8.8	4.5	7.1	10.0	4.6	7.0
12	10.8	3.7	6.5	7.7	4.3	6.1	8.9	3.2	5.7	9.4	4.5	6.8
13	6.7	4.5	6.1	7.7	5.6	6.7	10.6	4.4	6.7	9.5	5.0	7.0
14	7.7	5.6	6.4	7.9	7.0	7.5	10.8	3.4	6.7	8.8	4.8	6.5
15	8.5	---	---	7.6	6.9	7.3	9.5	3.1	6.1	9.7	4.5	6.8
16	9.9	6.1	7.7	8.1	6.5	7.3	8.2	2.9	5.2	9.1	4.3	6.4
17	11.0	6.0	8.2	9.9	6.4	7.6	11.2	3.7	7.4	9.5	5.1	6.9
18	11.3	5.4	8.3	11.0	6.1	8.2	10.4	3.3	6.8	10.7	5.5	7.8
19	12.1	5.6	8.6	11.9	6.0	8.3	8.9	3.9	6.0	10.9	5.9	8.1
20	12.0	5.2	8.5	---	---	---	---	---	---	9.6	6.4	7.7
21	13.9	4.9	9.3	---	---	---	---	---	---	9.8	6.9	8.1
22	13.8	5.0	9.2	---	---	---	---	---	---	11.9	6.6	8.6
23	13.1	4.5	8.8	9.3	5.2	7.0	---	---	---	12.2	5.9	8.3
24	14.2	3.6	8.5	11.2	5.0	7.5	---	---	---	13.5	5.9	8.7
25	11.8	3.1	7.4	12.3	4.6	7.8	---	---	---	11.6	5.7	8.0
26	10.8	3.1	6.9	12.0	4.3	7.6	---	---	---	9.8	6.1	7.6
27	9.8	3.0	6.5	10.2	3.9	6.5	---	---	---	10.3	7.2	8.5
28	10.6	3.0	6.4	11.6	4.6	7.6	---	---	---	12.3	7.5	9.3
29	10.2	2.8	6.1	11.0	4.5	7.4	---	---	---	11.8	7.5	9.2
30	10.4	2.9	6.5	10.1	4.2	7.0	---	---	---	12.4	8.5	10.1
31	---	---	---	9.8	4.1	6.8	---	---	---	---	---	---
MONTH	16.7									13.5	4.3	7.9
YEAR	17.0	1.8	9.6									

03277130 MUD LICK CREEK AT HIGHWAY 42 NEAR BEAVERLICK, KY—Continued

TURBIDITY, WATER, MONOCHROME NEAR INFRA-RED LED LIGHT, 780-900 NM, DETECTION ANGLE 90 +/ -2.5 DEGREES, FNU
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	6.0	<2.0	2.1	57	10	14	660	35	170	130	46	71
2	14	<2.0	3.9	740	23	180	45	10	22	54	26	36
3	14	<2.0	3.4	1,160	32	170	15	6.0	8.8	2,590	29	710
4	9.0	<2.0	3.4	290	37	110	35	4.0	5.7	850	98	200
5	14	<2.0	5.7	76	16	38	26	2.0	3.6	1,520	170	410
6	11	<2.0	3.1	77	9.0	23	87	2.0	11	470	97	220
7	12	<2.0	0.4	26	7.0	11	230	8.0	100	110	44	66
8	10	<2.0	0.4	12	3.0	7.0	98	13	37	440	47	130
9	8.0	<2.0	0.6	18	3.0	6.1	310	8.0	76	58	29	40
10	3.0	<2.0	0.4	17	2.0	3.6	210	27	82	50	24	30
11	7.2	<2.0	1.2	1,090	2.0	230	33	17	23	1,480	22	270
12	81	<2.0	3.7	1,080	56	210	27	12	18	370	53	120
13	13	<2.0	2.3	60	22	37	16	7.0	10	790	43	180
14	11	<2.0	2.2	33	11	18	11	5.0	6.7	470	56	130
15	18	<2.0	4.4	600	8.0	110	7.0	4.0	5.5	64	24	41
16	34	6.0	11	370	9.0	49	7.0	4.0	5.0	31	22	26
17	14	3.0	8.1	58	7.0	9.8	6.0	3.0	4.4	25	17	21
18	2,600	2.0	880	14	7.0	7.8	9.0	3.0	3.8	28	13	18
19	1,470	74	270	650	9.0	230	5.0	3.0	3.4	17	13	14
20	1,030	59	280	140	28	52	4.0	2.0	3.3	17	11	13
21	340	39	93	32	15	21	4.0	2.0	3.2	15	10	11
22	56	26	37	44	9.0	14	26	4.0	17	12	8.0	9.8
23	170	26	53	13	8.0	10	27	10	16	12	8.0	10
24	440	55	200	180	8.0	99	31	5.0	8.7	12	7.0	9.0
25	650	40	230	100	20	45	8.0	3.0	5.0	11	6.0	7.8
26	1,270	65	560	23	9.0	14	11	2.0	3.5	10	7.0	7.9
27	1,060	56	270	16	5.0	8.2	6.0	2.0	2.8	8.0	6.0	7.0
28	62	22	35	34	9.0	18	6.0	<2.0	2.1	9.0	6.0	7.5
29	27	13	19	17	5.0	9.6	52	<2.0	8.3	17	6.0	8.8
30	120	15	26	180	3.0	17	1,000	45	280	30	14	18
31	76	13	23	---	---	---	450	110	240	26	14	18
MONTH	2,600	2.0	98	1,160	2.0	59	1,000	2.0	38	2,590	6.0	92
		FEBRUARY			MARCH			APRIL			MAY	
1	23	14	16	41	11	23	66	11	19	15	6.8	9.2
2	33	14	20	16	4.0	7.5	40	13	23	19	7.9	10
3	28	10	14	6.0	3.0	4.1	31	12	20	14	8.0	9.6
4	31	13	19	5.0	3.0	3.3	---	---	---	---	---	---
5	20	10	13	5.0	3.0	3.7	---	---	---	---	---	---
6	16	10	13	5.0	3.0	3.7	---	---	---	---	---	---
7	35	11	14	780	3.0	86	---	---	---	48	20	27
8	440	35	200	350	33	180	---	---	---	110	33	57
9	62	22	38	33	7.0	16	---	---	---	210	43	130
10	40	15	25	8.0	4.0	5.9	---	---	---	170	29	87
11	20	9.0	13	5.0	3.0	3.8	---	---	---	34	11	60
12	15	8.0	9.5	7.0	3.0	3.4	---	---	---	79	12	31
13	56	9.0	24	4.0	3.0	3.0	---	---	---	53	9.5	24
14	270	49	150	4.0	2.0	2.9	---	---	---	58	12	24
15	120	23	50	7.0	2.0	3.4	---	---	---	---	---	---
16	34	13	21	4.0	2.0	3.4	---	---	---	---	---	---
17	16	8.0	12	5.0	2.0	3.3	---	---	---	---	---	---
18	11	6.0	8.2	5.0	3.0	3.3	---	---	---	---	---	---
19	14	5.0	6.5	7.0	3.0	4.1	---	---	---	---	---	---
20	7.0	5.0	5.9	4.0	3.0	3.4	14	5.0	5.8	1,970	110	430
21	11	6.0	7.2	3.0	2.0	3.0	10	5.1	6.0	160	39	78
22	8.0	5.0	6.4	54	2.0	5.2	2,300	5.2	190	88	30	40
23	7.0	5.0	5.7	81	15	30	980	130	360	---	---	---
24	7.0	4.0	4.9	15	5.0	9.9	190	27	66	---	---	---
25	8.0	3.0	4.1	6.0	3.0	4.0	53	18	29	---	---	---
26	4.0	3.0	3.4	4.0	3.0	3.1	480	12	120	---	---	---
27	4.0	3.0	3.8	2,510	3.0	84	230	24	93	---	---	---
28	34	3.0	11	2,580	190	970	24	9.6	16	---	---	---
29	---	---	---	190	57	110	20	6.7	9.7	---	---	---
30	---	---	---	72	27	47	19	6.8	9.6	28	10	14
31	---	---	---	98	18	41	---	---	---	23	10	14
MONTH	440	3.0	26	2,580	2.0	54						

03277130 MUD LICK CREEK AT HIGHWAY 42 NEAR BEAVERLICK, KY—Continued

TURBIDITY, WATER, MONOCHROME NEAR INFRA-RED LED LIGHT, 780-900 NM, DETECTION ANGLE 90 +/ -2.5 DEGREES, FNU—CONTINUED

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	18	10	11	2,560	38	1,560	45	18	27	---	---	---
2	19	9.1	11	780	210	400	34	13	20	---	---	---
3	23	9.2	12	240	110	160	---	---	---	---	---	---
4	94	9.4	26	140	40	83	---	---	---	---	---	---
5	28	10	14	78	32	45	---	---	---	---	---	---
6	27	11	16	60	24	41	---	---	---	---	---	---
7	26	8.7	15	54	22	34	---	---	---	---	---	---
8	25	7.8	13	51	23	31	---	---	---	---	---	---
9	24	5.8	11	82	22	32	---	---	---	---	---	---
10	20	7.0	10	85	19	29	---	---	---	---	---	---
11	24	6.0	13	54	22	29	---	---	---	---	---	---
12	75	9.2	16	65	21	32	---	---	---	---	---	---
13	740	21	310	150	34	74	---	---	---	---	---	---
14	800	110	380	610	81	170	---	---	---	---	---	---
15	180	78	120	930	290	530	---	---	---	---	---	---
16	90	50	67	510	120	240	---	---	---	---	---	---
17	62	35	46	370	64	96	---	---	---	---	---	---
18	50	26	37	100	36	58	---	---	---	---	---	---
19	47	20	29	55	20	35	---	---	---	---	---	---
20	30	18	21	1,700	24	400	---	---	---	110	11	35
21	30	14	19	1,460	260	750	---	---	---	94	16	25
22	33	14	18	410	140	200	---	---	---	100	21	54
23	28	13	16	---	---	---	---	---	---	350	75	190
24	38	10	16	---	---	---	---	---	---	---	---	---
25	32	11	15	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	190	40	98
28	31	11	16	230	140	180	---	---	---	180	41	120
29	28	9.7	15	260	120	160	---	---	---	470	48	180
30	38	10	16	470	55	250	---	---	---	310	48	140
31	---	---	---	82	25	38	---	---	---	---	---	---
MONTH												
YEAR	2,600	2.0	76									

< Actual value is known to be less than the value shown

THIS PAGE IS INTENTIONALLY BLANK.

03277200 OHIO RIVER AT MARKLAND DAM NEAR WARSAW, KY

LOCATION.--Lat 38°46'29", long 84°57'52", Gallatin County, Hydrologic Unit 05090203, at left end of Markland Dam, 0.4 mi upstream from Stephens Creek, 3.4 mi west of Warsaw, and at mile 531.5.

DRAINAGE AREA.--83,170 mi^2, approximately.

PERIOD OF RECORD.--May 1970 to current year.

REVISED RECORDS.--WDR KY-88-1: 1987.

GAGE.--Water-stage recorder with telemetry in tailwater gage. Datum of headwater gage 0.5 mi upstream is 443 ft Ohio River datum. Datum of tailwater gage 0.4 mi downstream is 35 ft lower. Records of Markland Dam gate operations, headwater gage readings, and turbine flow are furnished by U.S. Army Corps of Engineers.

REMARKS.--Records good except for estimated period and those below 20,000 ft^3/s, which are poor. Daily discharge computed from head, gate openings, turbine flow, and tailwater rating. Flow regulated by Ohio River system of locks, dams, and reservoirs upstream from station.

COOPERATION.--U.S. Army Corps of Engineers, Louisville District.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 26, 1937, reached a stage of 76.1 ft (tailwater gage).

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

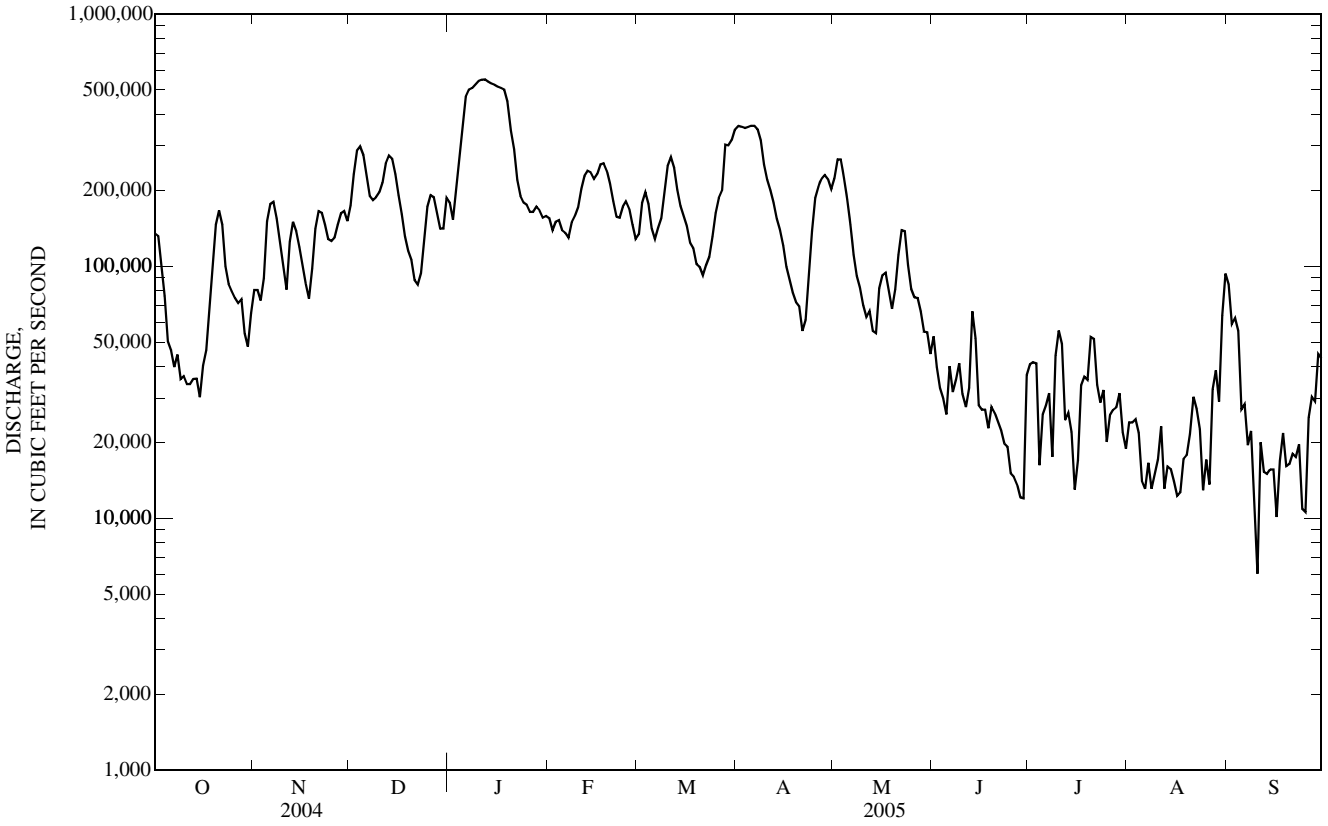
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	135,000	80,600	174,000	179,000	155,000	134,000	360,000	223,000	52,700	40,700	24,000	84,600
2	132,000	80,400	232,000	153,000	139,000	178,000	357,000	265,000	39,800	41,600	24,000	58,800
3	101,000	73,100	287,000	203,000	150,000	196,000	353,000	265,000	32,800	41,200	24,700	62,300
4	76,200	89,600	298,000	271,000	152,000	176,000	356,000	223,000	29,900	16,200	21,800	55,300
5	50,300	151,000	276,000	351,000	139,000	141,000	361,000	184,000	25,800	25,800	14,100	27,000
6	46,300	176,000	230,000	471,000	136,000	128,000	361,000	146,000	40,100	28,000	13,100	28,300
7	39,800	180,000	190,000	502,000	130,000	142,000	349,000	111,000	31,700	31,300	16,600	19,500
8	44,600	155,000	183,000	509,000	149,000	155,000	315,000	91,300	35,500	17,500	13,100	22,200
9	35,700	124,000	188,000	525,000	158,000	197,000	253,000	81,900	41,200	44,200	15,000	11,800
10	36,700	101,000	196,000	542,000	171,000	250,000	220,000	69,900	31,100	55,500	17,100	6,020
11	34,100	80,800	215,000	549,000	202,000	271,000	200,000	62,800	27,600	49,100	23,200	20,000
12	34,100	125,000	255,000	550,000	228,000	246,000	178,000	66,300	32,900	24,500	13,100	15,300
13	35,700	150,000	275,000	539,000	239,000	201,000	154,000	55,300	66,200	26,200	16,100	15,000
14	35,800	138,000	267,000	530,000	235,000	173,000	139,000	54,200	51,800	22,000	15,700	15,600
15	30,200	119,000	232,000	524,000	222,000	158,000	121,000	81,600	28,100	13,000	14,000	15,600
16	40,400	100,000	191,000	515,000	232,000	144,000	99,400	92,100	27,000	17,000	12,300	10,100
17	46,500	85,100	161,000	509,000	253,000	124,000	88,500	94,300	27,000	33,700	12,700	16,900
18	69,600	74,300	131,000	501,000	256,000	118,000	78,500	80,600	22,800	36,500	17,200	21,800
19	98,000	97,900	115,000	450,000	239,000	102,000	72,000	67,700	27,700	35,400	17,800	16,100
20	146,000	141,000	106,000	345,000	212,000	99,400	69,400	81,000	26,200	52,400	21,600	16,400
21	166,000	165,000	88,100	291,000	181,000	92,200	55,400	111,000	24,200	51,500	30,300	18,000
22	146,000	163,000	84,600	220,000	157,000	101,000	61,200	139,000	22,300	33,900	27,100	17,500
23	100,000	146,000	93,800	190,000	156,000	109,000	92,600	138,000	19,800	28,800	22,600	19,600
24	85,200	128,000	128,000	179,000	172,000	131,000	138,000	101,000	19,200	32,200	12,900	10,900
25	79,600	126,000	172,000	175,000	181,000	163,000	186,000	81,100	15,100	20,100	17,100	10,600
26	74,800	130,000	191,000	164,000	169,000	187,000	207,000	75,300	14,600	25,600	13,600	25,100
27	71,500	146,000	188,000	164,000	146,000	200,000	222,000	74,900	13,600	26,900	32,500	30,300
28	73,900	162,000	163,000	172,000	128,000	303,000	230,000	65,900	12,100	27,500	38,700	29,100
29	54,100	165,000	141,000	166,000	---	302,000	221,000	55,000	12,000	31,300	29,000	44,800
30	48,000	151,000	141,000	156,000	---	316,000	202,000	54,800	37,000	21,900	63,800	43,000
31	65,000	---	187,000	158,000	---	348,000	---	44,900	---	18,900	93,400	---
TOTAL	2,232,100	3,803,800	5,779,500	10,753,000	5,087,000	5,585,600	6,100,000	3,336,900	887,800	970,400	728,200	787,520
MEAN	72,000	126,800	186,400	346,900	181,700	180,200	203,300	107,600	29,590	31,300	23,490	26,250
MAX	166,000	180,000	298,000	550,000	256,000	348,000	361,000	265,000	66,200	55,500	93,400	84,600
MIN	30,200	73,100	84,600	153,000	128,000	92,200	55,400	44,900	12,000	13,000	12,300	6,020

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2005, BY WATER YEAR (WY)

MEAN	47,830	86,650	139,600	152,000	176,100	206,100	180,700	141,800	93,870	58,190	45,030	44,300
MAX	144,100	230,600	288,700	346,900	291,200	338,500	292,200	370,100	219,100	109,500	146,200	193,500
(WY)	(1980)	(1986)	(1973)	(2005)	(1975)	(1997)	(1972)	(1996)	(1981)	(1972)	(1980)	(2004)
MIN	13,910	16,810	29,220	34,060	77,100	98,440	61,160	43,510	15,030	13,890	13,060	9,033
(WY)	(1992)	(1999)	(1999)	(1977)	(1992)	(1990)	(1986)	(1976)	(1999)	(1999)	(1988)	(1999)

03277200 OHIO RIVER AT MARKLAND DAM NEAR WARSAW, KY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1970 - 2005	
ANNUAL TOTAL	58,747,400		46,051,820			
ANNUAL MEAN	160,500		126,200		114,300	
HIGHEST ANNUAL MEAN					169,100	2004
LOWEST ANNUAL MEAN					60,450	1988
HIGHEST DAILY MEAN	509,000	Jan 8	550,000	Jan 12	579,000	Mar 6, 1997
LOWEST DAILY MEAN	19,800	Aug 19	6,020	Sep 10	3,210	Sep 3, 2002
ANNUAL SEVEN-DAY MINIMUM	24,200	Aug 14	13,900	Sep 10	7,310	Jul 1, 1988
MAXIMUM PEAK FLOW			551,000	Jan 12	582,000	Mar 6, 1997
MAXIMUM PEAK STAGE			51.43	Jan 12	60.72	Mar 6, 1997
10 PERCENT EXCEEDS	366,000		266,000		260,000	
50 PERCENT EXCEEDS	136,000		94,300		81,200	
90 PERCENT EXCEEDS	39,700		17,400		20,200	



03277300 NORTH FORK KENTUCKY RIVER AT WHITESBURG, KY

LOCATION.--Lat 37°07'03", long 82°49'29", Letcher County, Hydrologic Unit 05100201, on downstream side of bridge on State Highway 15 at Whitesburg, 0.6 mile downstream from Solomon Branch, and at mile 405.4

DRAINAGE AREA.--66.4 mi^2.

PERIOD OF RECORD.--October 1952 to September 1954 and October 1957 to September 1975 (crest-stage partial-record), October 1987 to September 1998 (gage heights only), October 1998 to current year.

GAGE.--Water-stage recorder with telemetry. Datum of gage is 1,127.924 ft above NGVD of 1929. Prior to October 1, 1998, crest-stage gage and recording gage at same site and datum 1.0 ft higher.

REMARKS.--Records good except for those estimated, which are poor. Small diversions by City of Whitesburg waterworks.

COOPERATION.--Kentucky River Authority and U.S. Army Corps of Engineers, Louisville District.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	46	e600	64	159	247	198	356	31	24	33	9.4
2	23	40	245	59	137	183	576	220	38	32	16	8.1
3	27	36	152	58	134	153	547	163	34	18	13	7.1
4	22	214	116	63	119	137	327	137	32	15	11	6.2
5	20	154	96	91	110	164	254	118	29	15	10	5.6
6	19	94	197	97	104	153	209	109	27	16	19	5.2
7	18	71	320	103	99	146	179	99	26	189	16	4.8
8	17	56	209	185	98	250	159	90	27	109	20	4.7
9	16	45	316	173	96	222	142	83	34	40	29	4.4
10	16	40	414	140	115	190	126	77	37	26	17	4.2
11	16	37	390	147	101	185	115	73	29	21	13	3.9
12	16	77	311	180	97	191	112	67	27	19	11	4.0
13	43	75	222	162	100	187	134	63	25	e18	10	4.3
14	39	64	167	297	140	172	212	59	25	e25	11	3.2
15	29	55	141	227	136	153	158	56	35	e39	9.6	3.2
16	27	50	124	177	144	168	135	47	24	e28	22	3.2
17	25	46	112	144	137	169	121	46	21	e22	35	17
18	22	44	102	123	125	165	111	45	20	e120	15	5.5
19	57	48	95	118	114	152	104	41	19	64	13	4.3
20	42	45	83	115	112	143	96	78	19	53	17	3.8
21	33	54	84	110	135	132	93	51	24	30	12	3.5
22	29	56	79	103	130	124	100	47	19	24	9.6	3.5
23	26	68	128	93	122	128	94	87	17	19	9.8	3.3
24	30	77	118	85	120	128	100	52	16	17	9.0	3.1
25	26	92	103	85	112	124	93	44	15	15	8.2	3.2
26	24	85	95	90	104	122	86	41	15	15	9.6	3.6
27	206	74	83	84	97	117	89	41	16	22	14	7.4
28	137	66	75	76	234	278	79	37	17	32	9.9	4.7
29	91	54	76	138	---	404	164	34	19	32	12	6.3
30	70	100	72	241	---	276	431	33	22	20	9.6	8.9
31	54	---	67	195	---	232	---	32	---	17	8.2	---
TOTAL	1,243	2,063	5,392	4,023	3,431	5,595	5,344	2,526	739	1,136	452.5	159.6
MEAN	40.1	68.8	174	130	123	180	178	81.5	24.6	36.6	14.6	5.32
MAX	206	214	600	297	234	404	576	356	38	189	35	17
MIN	16	36	67	58	96	117	79	32	15	15	8.2	3.1

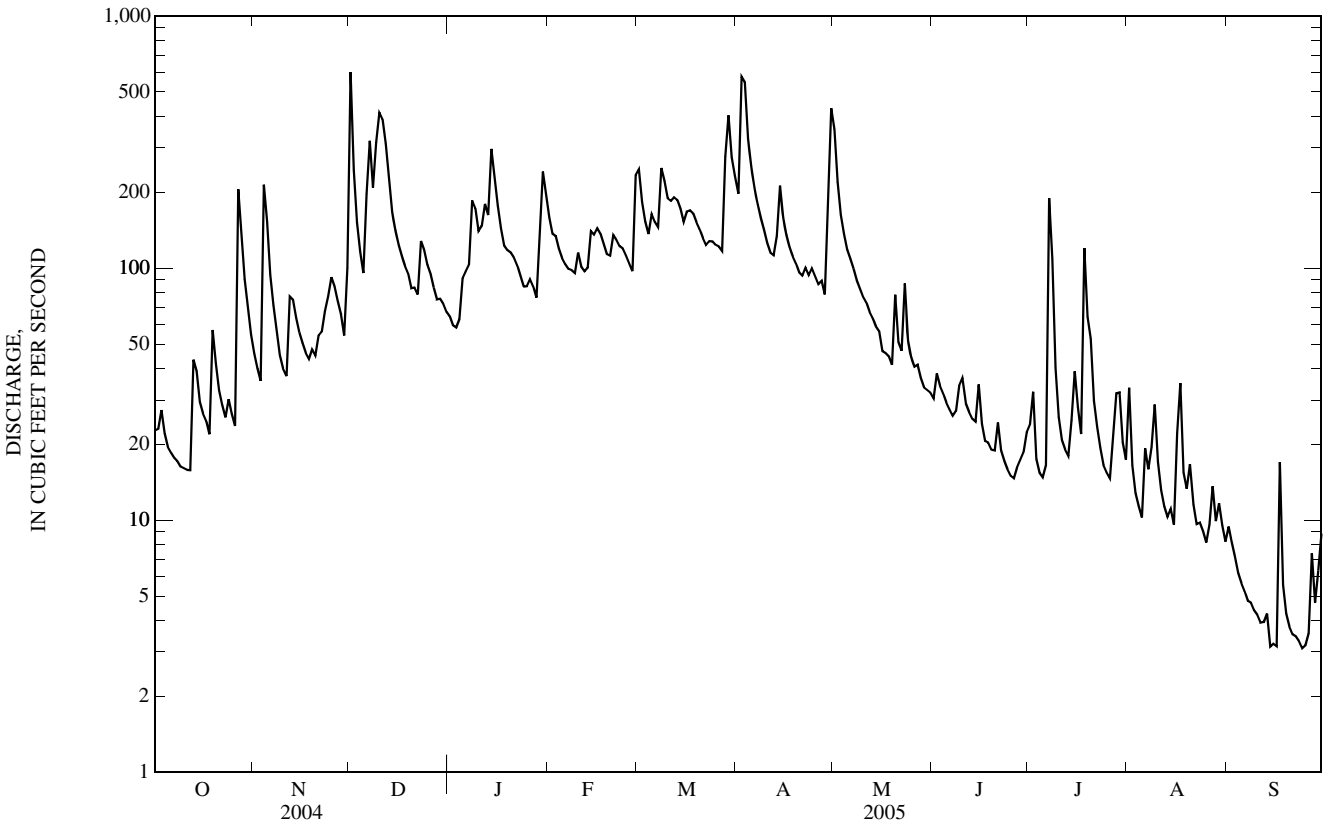
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2005, BY WATER YEAR (WY)

MEAN	16.6	36.3	63.9	102	117	122	142	92.6	66.6	54.0	26.5	24.4
MAX	40.1	94.0	174	201	275	180	270	134	174	126	61.4	62.2
(WY)	(2005)	(2004)	(2005)	(2004)	(2003)	(2005)	(2003)	(2003)	(2004)	(2000)	(2003)	(2004)
MIN	9.08	9.90	13.6	24.6	56.8	45.5	80.2	52.9	17.6	13.4	7.66	5.32
(WY)	(2000)	(2002)	(2000)	(2000)	(2000)	(2000)	(2001)	(1999)	(1999)	(1999)	(1999)	(2005)

03277300 NORTH FORK KENTUCKY RIVER AT WHITESBURG, KY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1999 - 2005	
ANNUAL TOTAL	39,097.7		32,104.1			
ANNUAL MEAN	107		88.0		71.6	
HIGHEST ANNUAL MEAN					101	2003
LOWEST ANNUAL MEAN					45.8	2000
HIGHEST DAILY MEAN	1,120	Jan 2	600	Dec 1	1,960	Feb 16, 2003
LOWEST DAILY MEAN	9.7	Sep 6	3.1	Sep 24	1.9	Oct 8, 1999
ANNUAL SEVEN-DAY MINIMUM	11	Sep 1	3.4	Sep 20	3.4	Sep 20, 2005
MAXIMUM PEAK FLOW			850	Dec 1	7,730	Jan 29, 1957
MAXIMUM PEAK STAGE			4.27	Dec 1	14.90	Jan 29, 1957
10 PERCENT EXCEEDS	220		189		146	
50 PERCENT EXCEEDS	76		64		40	
90 PERCENT EXCEEDS	22		9.7		8.7	

e Estimated



03280000 NORTH FORK KENTUCKY RIVER AT JACKSON, KY

LOCATION.--Lat 37°32'46", long 83°22'21", Breathitt County, Hydrologic Unit 05100201, on left bank at city water plant on Highway 30 Bridge at Jackson, 3.1 mi downstream from Quicksand Creek, and at mile 306.0.

DRAINAGE AREA.--1,101 mi^2.

PERIOD OF RECORD.--June 1928 to September 1931, December 1936 to February 1937, April 1938 to current year. Gage-height records collected at same site during periods 1904-07, 1921-31, and February to December 1934 (above 8.0 ft only), January 1935 to September 1976 are published in reports of National Weather Service.

REVISED RECORDS.--The maximum discharges for some water years have been revised as shown in the following table. They supersede figures published in WRD 1995 through 2004. WSP 853: 1929(M). WSP 1335: 1928(M), 1929, 1931(M). WSP 1435: 1954-55. WSP 1505: 1948. WSP 1555: Drainage area.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft^3/s and maximum (*):

Date	Discharge (ft^3/s)	Gage height (ft)	Date	Discharge (ft^3/s)	Gage height (ft)
May 19, 1995	21,700	26.20	Apr 5, 2000	14,800	19.07
Feb 9, 1996	13,800	19.94	Feb 17, 2001	16,200	20.66
Mar 4, 1997	23,500	27.65	Mar 19, 2002	19,600	24.10
Apr 20, 1989	30,700	33.28	Feb 17, 2003	35,900	37.29
Jan 24, 1999	12,000	15.67	May 31, 2004	29,200	32.04

GAGE.--Water-stage recorder with telemetry. Datum of gage is 697.67 ft above NGVD of 1929. See WDR KY-90-1 for history of changes prior to Aug. 22, 1980.

REMARKS.--Records good. Small diversions by City of Jackson waterworks. Flow regulated by Carr Fork Lake (station 03277446) beginning January 1976.

COOPERATION.--U.S. Army Corps of Engineers, Louisville District and Kentucky River Authority.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	534	1,190	12,600	955	2,870	4,440	3,470	13,000	e395	388	228	218
2	482	1,030	9,740	920	2,090	3,860	9,640	5,510	e370	750	208	168
3	576	865	4,540	884	1,950	3,030	10,500	3,660	414	486	200	137
4	496	3,040	3,380	944	1,750	2,550	6,860	2,590	687	394	207	114
5	485	4,790	2,420	1,850	1,600	2,360	4,220	1,990	617	314	169	105
6	468	2,980	2,220	2,080	1,440	2,450	3,270	1,710	435	320	191	101
7	377	2,040	3,470	2,450	1,320	2,260	2,680	1,490	390	342	212	92
8	363	1,560	4,430	8,560	1,320	2,810	2,300	1,310	425	570	204	88
9	357	1,260	6,170	5,260	1,290	3,520	1,930	1,140	369	1,160	218	83
10	365	1,060	12,000	3,660	1,340	3,150	1,600	1,020	400	569	187	78
11	365	935	7,780	2,830	1,440	2,730	1,430	941	611	427	161	73
12	364	1,070	6,140	2,730	1,370	2,560	1,330	878	894	331	166	73
13	423	1,450	4,530	2,900	1,310	2,450	1,470	784	507	320	148	70
14	532	1,460	3,430	3,570	1,850	2,240	2,040	750	401	589	146	64
15	518	1,240	2,590	3,960	2,410	1,990	2,680	742	393	483	191	61
16	524	1,090	2,130	3,160	2,300	1,750	2,130	710	394	436	146	60
17	485	966	1,820	2,510	2,380	1,760	1,750	651	357	598	260	60
18	467	953	1,580	1,960	2,090	1,790	1,510	607	304	682	238	64
19	1,560	937	1,460	1,660	1,810	1,670	1,350	575	275	924	276	69
20	1,450	1,060	1,300	1,570	1,630	1,550	1,220	946	270	1,050	286	68
21	1,020	1,120	1,150	1,500	2,800	1,430	1,120	1,290	550	936	225	88
22	798	1,140	1,130	1,400	3,240	1,300	1,060	919	428	576	197	77
23	657	1,140	1,280	1,400	2,730	1,240	1,190	844	305	446	163	64
24	759	1,320	1,660	1,150	2,100	1,510	1,270	827	269	353	143	59
25	770	2,230	1,530	1,120	1,880	1,490	1,230	767	234	298	124	55
26	702	2,180	1,400	1,180	1,550	1,360	1,140	655	216	263	118	55
27	3,130	1,840	1,280	1,180	1,480	1,310	1,140	562	202	252	139	67
28	5,020	1,640	1,110	1,030	2,070	3,340	1,100	513	208	333	149	81
29	2,970	1,430	1,100	1,250	---	6,440	1,330	477	228	350	148	90
30	2,140	1,740	1,030	3,160	---	5,210	16,900	452	418	287	313	100
31	1,610	---	999	3,560	---	3,900	---	422	---	255	258	---
TOTAL	30,767	46,756	107,399	72,343	53,410	79,450	90,860	48,732	11,966	15,482	6,019	2,582
MEAN	992	1,559	3,464	2,334	1,908	2,563	3,029	1,572	399	499	194	86.1
MAX	5,020	4,790	12,600	8,560	3,240	6,440	16,900	13,000	894	1,160	313	218
MIN	357	865	999	884	1,290	1,240	1,060	422	202	252	118	55
CFSM	0.90	1.42	3.15	2.12	1.73	2.33	2.75	1.43	0.36	0.45	0.18	0.08
IN.	1.04	1.58	3.63	2.44	1.80	2.68	3.07	1.65	0.40	0.52	0.20	0.09

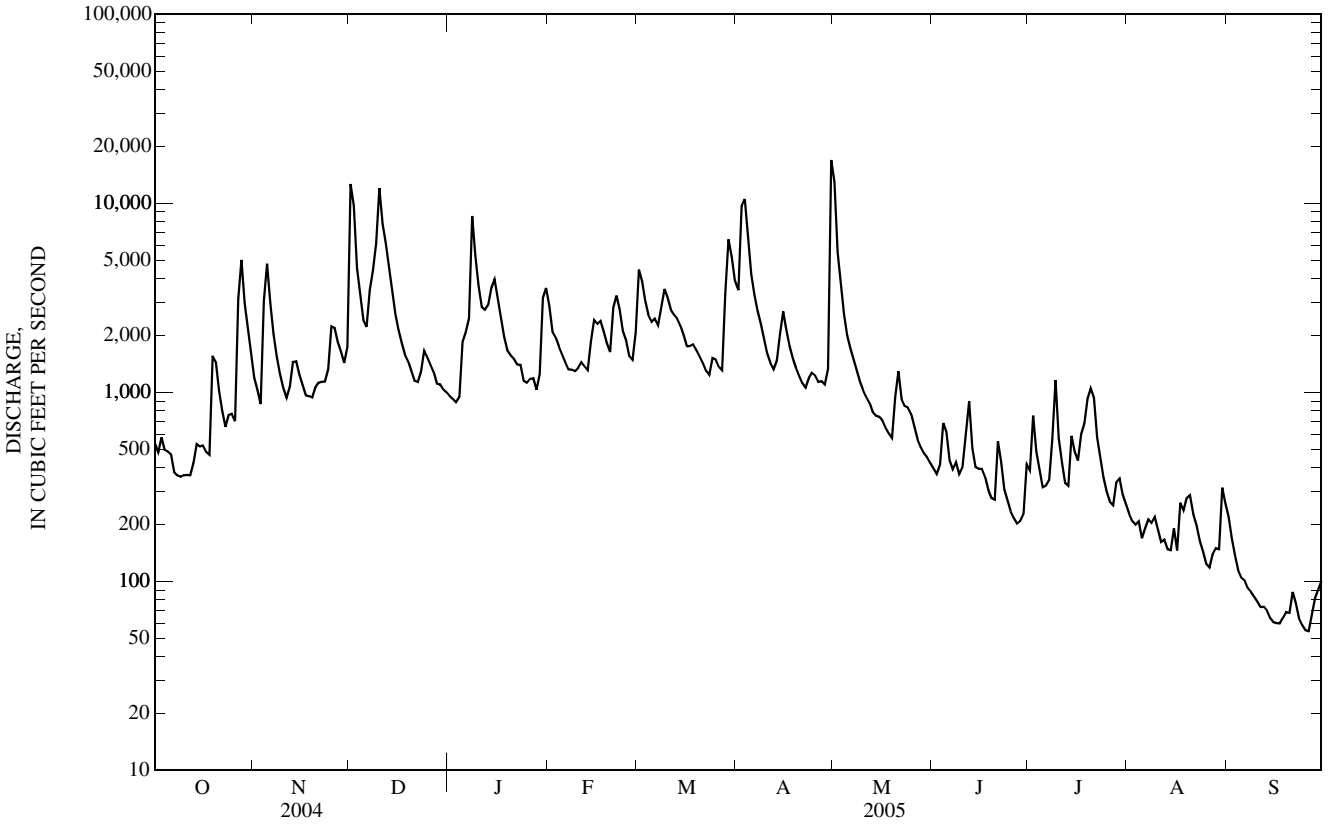
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 2005, BY WATER YEAR (WY)

MEAN	484	899	1,600	1,971	2,605	2,599	2,390	1,875	1,111	545	430	367
MAX	4,189	3,019	4,649	5,168	6,392	7,268	5,944	7,189	4,166	1,484	945	2,255
(WY)	(1990)	(1986)	(1992)	(1979)	(1994)	(1994)	(1998)	(1984)	(1989)	(2000)	(1977)	(2004)
MIN	92.8	152	196	155	790	541	452	526	136	90.2	85.6	37.5
(WY)	(1981)	(1982)	(1981)	(1981)	(1988)	(1988)	(1986)	(2001)	(1988)	(1988)	(1988)	(1999)

03280000 NORTH FORK KENTUCKY RIVER AT JACKSON, KY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1977 - 2005	
ANNUAL TOTAL	795,576		565,766			
ANNUAL MEAN	2,174		1,550		1,400	
HIGHEST ANNUAL MEAN					2,570	1994
LOWEST ANNUAL MEAN					477	1988
HIGHEST DAILY MEAN	26,300	May 31	16,900	Apr 30	52,200	May 8, 1984
LOWEST DAILY MEAN	228	Sep 7	55	Sep 25	21	Sep 20, 1999
ANNUAL SEVEN-DAY MINIMUM	270	Sep 1	64	Sep 14	26	Sep 17, 1999
MAXIMUM PEAK FLOW			20,500	Apr 30	53,500	Jan 30, 1957
MAXIMUM PEAK STAGE			25.13	Apr 30	43.10	Feb 4, 1939
INSTANTANEOUS LOW FLOW			47	Sep 15	0.00	Oct 16, 1930
ANNUAL RUNOFF (CFSM)	1.97		1.41		1.27	
ANNUAL RUNOFF (INCHES)	26.88		19.12		17.27	
10 PERCENT EXCEEDS	4,660		3,300		3,130	
50 PERCENT EXCEEDS	1,200		1,070		667	
90 PERCENT EXCEEDS	462		149		131	

e Estimated



03280700 CUTSHIN CREEK AT WOOTON, KY

LOCATION.--Lat 37°09'54", long 83°18'29", Leslie County, Hydrologic Unit 05100202, on right bank 30 ft upstream from bridge on State Highway 80, 400 ft upstream from Poundmill Branch, 600 ft upstream from Rockhouse Branch, 0.7 mi downstream from Saw Branch, 1.0 mi southwest of Wooton, and at mile 10.7.

DRAINAGE AREA.--61.3 mi^2.

PERIOD OF RECORD.--October 1957 to current year.

GAGE.--Water-stage recorder with telemetry. Datum of gage is 869.84 ft above NGVD of 1929. Prior to Dec. 26, 1957, nonrecording gage at same site and datum.

REMARKS.--Records good except for those estimated, which are poor.

COOPERATION.--U.S. Army Corps of Engineers, Louisville District and Kentucky Natural Resources and Environmental Protection Cabinet.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of January 1957 reached a stage of 19.43 ft, from floodmarks.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec 1	1100	1,640	5.45	Apr 30	1000	*2,240	*6.47
Mar 28	0830	1,540	5.28	Jul 19	1830	1,640	5.45

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	34	e1,200	47	124	242	185	460	16	17	8.0	8.5
2	23	29	367	43	96	185	922	227	26	29	6.7	7.5
3	21	27	205	42	94	147	618	151	26	9.7	5.8	4.9
4	17	336	144	47	82	122	302	111	21	6.9	5.4	3.8
5	15	170	109	61	74	220	198	89	16	23	6.6	3.6
6	13	99	139	76	69	190	149	77	14	31	14	4.1
7	12	73	287	90	65	165	126	67	19	33	20	3.1
8	11	54	260	289	65	256	107	60	14	40	9.1	4.5
9	11	40	584	233	64	218	89	52	13	16	7.9	4.6
10	9.7	33	576	167	84	182	76	47	17	11	7.2	4.1
11	10	30	e350	e575	73	165	68	43	45	9.3	5.8	3.0
12	9.4	111	e225	e325	72	147	77	37	31	12	5.7	2.9
13	19	107	e196	224	85	126	271	33	18	33	6.2	3.5
14	18	84	148	346	151	112	687	31	17	48	4.8	2.6
15	18	71	116	242	150	97	261	35	17	102	4.2	2.8
16	18	62	98	181	153	112	167	28	12	36	7.3	3.9
17	16	53	86	131	131	116	126	25	11	24	42	2.8
18	14	47	76	103	110	121	103	23	9.7	53	15	5.7
19	65	55	72	92	94	115	87	22	9.2	302	12	3.8
20	32	52	57	84	90	106	75	113	9.4	182	6.9	6.2
21	21	52	59	74	113	94	68	49	9.4	60	8.7	7.5
22	16	50	53	67	123	84	68	33	7.8	35	5.7	5.3
23	17	67	90	57	114	96	68	41	8.4	23	4.1	3.2
24	20	203	77	48	110	95	74	31	8.9	16	3.6	2.5
25	18	228	72	50	95	90	66	26	6.3	13	3.2	2.2
26	15	153	70	49	83	85	57	24	5.0	11	4.1	4.7
27	83	118	61	42	75	83	65	21	5.0	12	6.9	6.3
28	81	99	56	35	202	739	54	18	5.4	25	9.7	5.7
29	63	76	55	95	---	504	120	17	7.4	14	95	5.4
30	52	e582	53	169	---	276	1,190	16	8.2	11	22	7.9
31	42	---	49	161	---	216	---	15	---	8.0	12	---
TOTAL	799.1	3,195	5,990	4,245	2,841	5,506	6,524	2,022	433.1	1,245.9	375.6	136.6
MEAN	25.8	106	193	137	101	178	217	65.2	14.4	40.2	12.1	4.55
MAX	83	582	1,200	575	202	739	1,190	460	45	302	95	8.5
MIN	9.4	27	49	35	64	83	54	15	5.0	6.9	3.2	2.2
CFSM	0.42	1.74	3.15	2.23	1.66	2.90	3.55	1.06	0.24	0.66	0.20	0.07
IN.	0.48	1.94	3.64	2.58	1.72	3.34	3.96	1.23	0.26	0.76	0.23	0.08

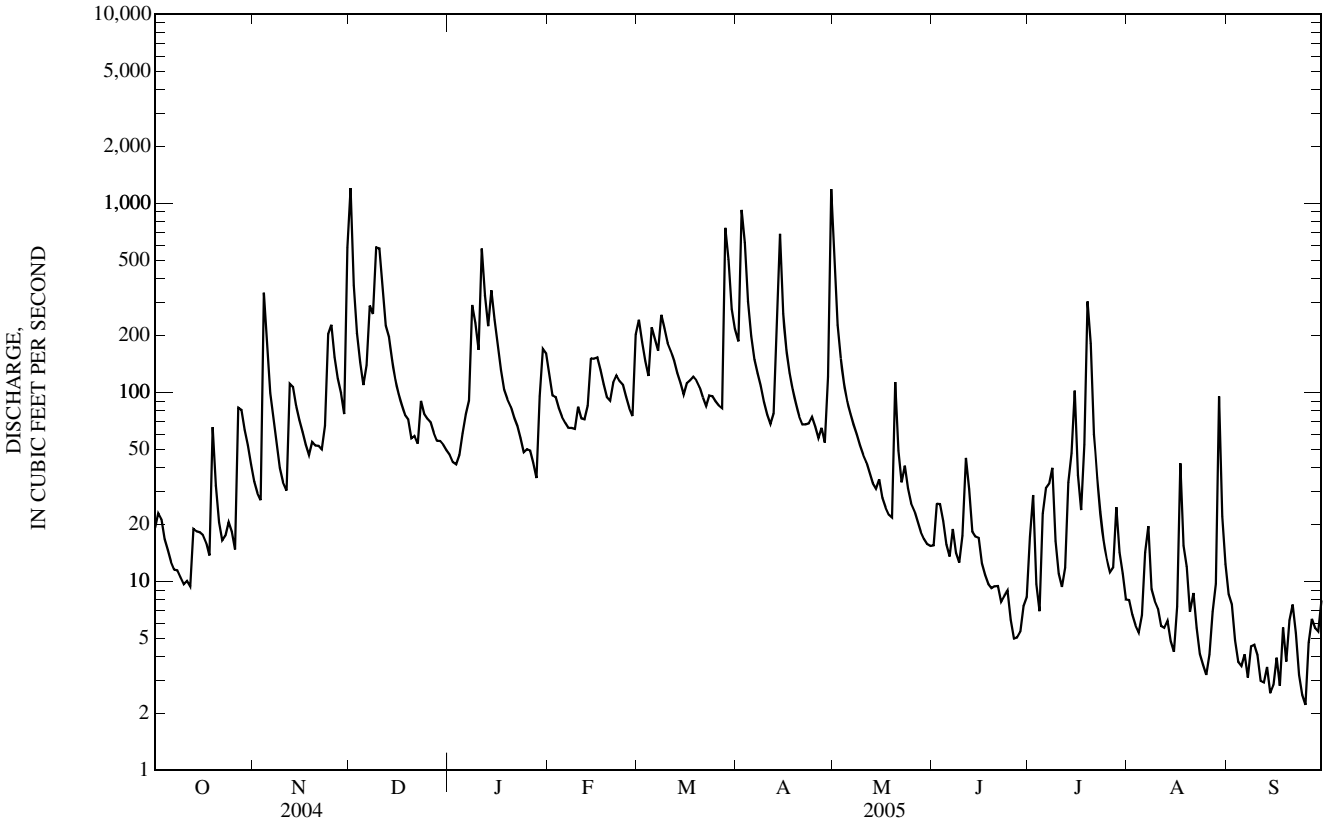
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2005, BY WATER YEAR (WY)

MEAN	25.0	60.8	107	145	169	195	167	115	58.5	32.7	23.8	21.5
MAX	287	309	359	597	425	620	471	449	423	144	107	229
(WY)	(1990)	(1978)	(1973)	(1974)	(2003)	(1975)	(1998)	(1983)	(1989)	(1958)	(1966)	(2004)
MIN	0.26	5.05	3.30	6.97	27.0	21.4	16.6	14.0	3.17	2.17	1.16	0.73
(WY)	(1964)	(2001)	(1966)	(1981)	(1968)	(1988)	(1963)	(1964)	(1988)	(1970)	(1988)	(1969)

03280700 CUTSHIN CREEK AT WOOTON, KY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1958 - 2005	
ANNUAL TOTAL	52,413.3		33,313.3			
ANNUAL MEAN	143		91.3		93.0	
HIGHEST ANNUAL MEAN					212	1974
LOWEST ANNUAL MEAN					27.6	1988
HIGHEST DAILY MEAN	3,020	Sep 17	1,200	Dec 1	4,890	May 7, 1984
LOWEST DAILY MEAN	7.1	Aug 19	2.2	Sep 25	0.00	Sep 29, 1959
ANNUAL SEVEN-DAY MINIMUM	11	Oct 6	3.1	Sep 11	0.01	Sep 11, 1964
MAXIMUM PEAK FLOW			2,520	Dec 1	14,200	Mar 12, 1963
MAXIMUM PEAK STAGE			6.94	Dec 1	16.23	Mar 12, 1963
INSTANTANEOUS LOW FLOW					0.00	Sep 29, 1959
ANNUAL RUNOFF (CFSM)	2.34		1.49		1.52	
ANNUAL RUNOFF (INCHES)	31.81		20.22		20.62	
10 PERCENT EXCEEDS	292		209		201	
50 PERCENT EXCEEDS	56		52		33	
90 PERCENT EXCEEDS	18		5.8		3.0	

e Estimated



03281000 MIDDLE FORK KENTUCKY RIVER AT TALLEGA, KY

LOCATION.--Lat 37°33'18", long 83°35'38", Lee County, Hydrologic Unit 05100202, on left bank 100 ft downstream of bridge on State Highway 708, 150 ft upstream from Lynam Creek, 0.5 mi southwest of Tallega, 8.3 mi upstream from confluence with North Fork, and at mile 8.3.

DRAINAGE AREA.--537 mi^2.

PERIOD OF RECORD.--October 1930 to March 1932, October 1939 to current year.

REVISED RECORDS.--WSP 1113: 1931, 1940. WSP 1385: 1931-32, 1948, drainage area. WSP 1505: 1946(M), 1951(M).

GAGE.--Water-stage recorder with telemetry. Datum of gage is 642.13 ft above NGVD of 1929. Prior to Feb. 6, 1940, nonrecording gage at same site and datum.

REMARKS.--Records good. Flow regulated by Buckhorn Lake beginning December 1960 (station 03280900).

COOPERATION.--U.S.Army Corps of Engineers, Louisville District, and Kentucky River Authority.

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

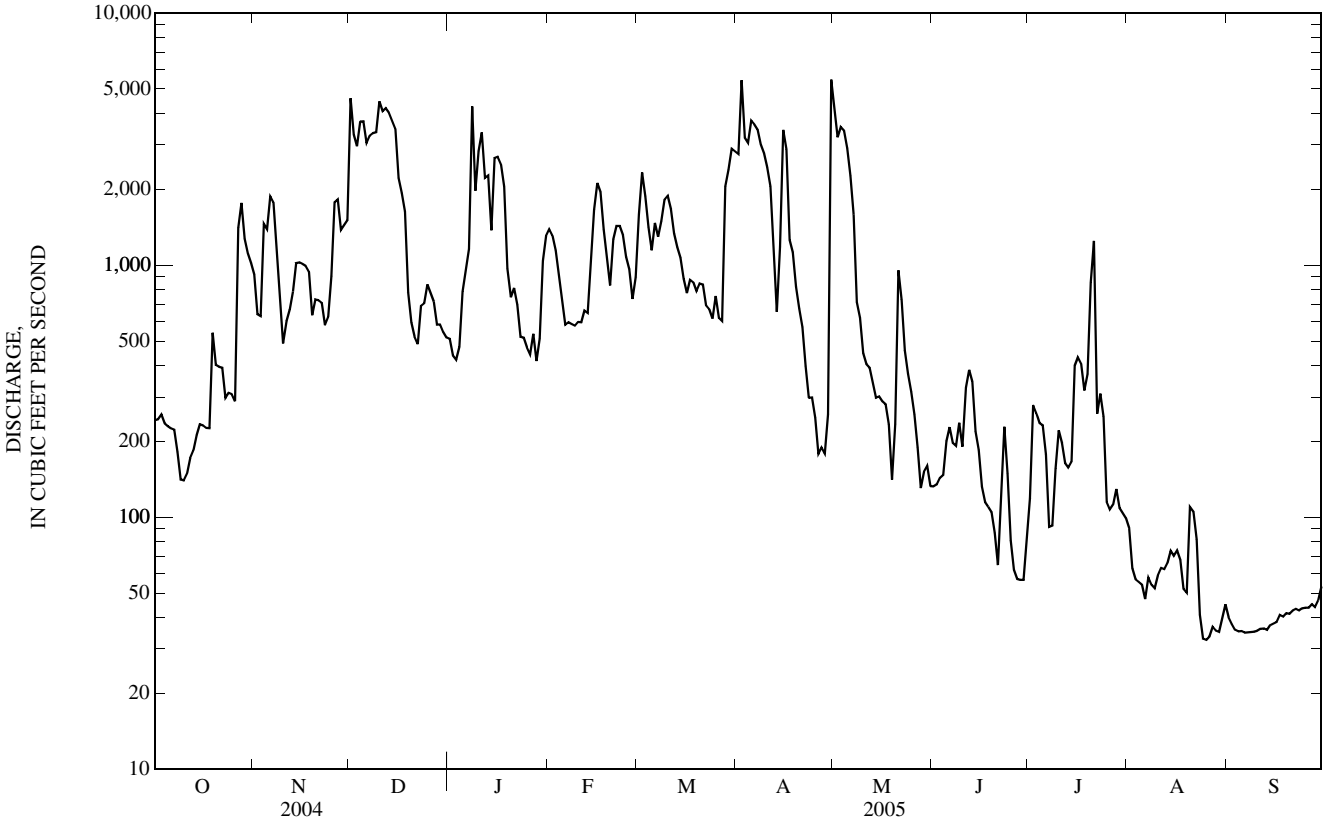
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	243	917	4,590	510	1,390	1,590	2,760	4,150	133	119	91	40
2	245	639	3,290	438	1,310	2,330	5,410	3,220	135	278	63	38
3	255	627	2,960	422	1,150	1,880	3,210	3,530	144	259	57	36
4	236	1,460	3,710	474	910	1,420	3,060	3,420	147	237	56	35
5	230	1,390	3,730	787	718	1,150	3,750	2,910	200	232	54	35
6	225	1,880	3,050	946	579	1,470	3,620	2,270	228	178	47	35
7	223	1,780	3,270	1,160	594	1,300	3,450	1,590	197	91	58	35
8	182	1,190	3,340	4,260	584	1,490	3,010	714	192	92	54	35
9	142	733	3,380	1,980	575	1,820	2,780	618	237	156	52	35
10	140	490	4,460	2,840	596	1,890	2,440	447	191	221	59	36
11	149	601	4,080	3,360	595	1,670	2,060	405	327	197	63	36
12	172	669	4,200	2,220	661	1,340	1,240	392	384	164	62	36
13	185	787	4,020	2,270	647	1,180	653	342	345	157	66	36
14	212	1,020	3,740	1,370	1,090	1,070	1,180	298	220	166	74	37
15	234	1,030	3,480	2,660	1,660	880	3,440	302	185	400	70	38
16	232	1,010	2,220	2,690	2,120	775	2,890	288	132	432	74	38
17	227	993	1,930	2,510	1,950	876	1,260	281	115	407	68	41
18	226	943	1,630	2,050	1,380	855	1,120	234	110	319	52	40
19	540	633	778	970	1,060	789	821	141	105	370	50	42
20	403	730	593	745	831	845	673	234	87	854	110	41
21	395	727	520	813	1,270	838	568	953	65	1,250	105	43
22	392	709	487	698	1,430	691	397	728	134	258	82	43
23	297	578	690	521	1,430	667	298	459	228	310	41	43
24	311	623	706	517	1,320	614	299	371	149	251	33	44
25	308	904	840	473	1,080	755	249	315	81	115	33	44
26	289	1,770	775	444	963	619	178	256	62	107	34	44
27	1,410	1,820	718	535	735	601	189	189	57	112	37	45
28	1,770	1,380	582	417	896	2,060	179	131	57	129	36	44
29	1,270	1,440	581	512	---	2,390	256	152	57	109	35	47
30	1,110	1,510	542	1,040	---	2,900	5,450	160	79	104	40	53
31	1,020	---	516	1,310	---	2,840	---	133	---	99	45	---
TOTAL	13,273	30,983	69,408	41,942	29,524	41,595	56,890	29,633	4,783	8,173	1,801	1,195
MEAN	428	1,033	2,239	1,353	1,054	1,342	1,896	956	159	264	58.1	39.8
MAX	1,770	1,880	4,590	4,260	2,120	2,900	5,450	4,150	384	1,250	110	53
MIN	140	490	487	417	575	601	178	131	57	91	33	35
CFSM	0.80	1.92	4.17	2.52	1.96	2.50	3.53	1.78	0.30	0.49	0.11	0.07
IN.	0.92	2.15	4.81	2.91	2.05	2.88	3.94	2.05	0.33	0.57	0.12	0.08

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 2005, BY WATER YEAR (WY)

MEAN	306	590	951	1,291	1,474	1,661	1,215	945	530	233	179	213
MAX	2,225	1,715	2,826	3,320	3,634	3,672	3,280	2,762	2,599	687	623	2,086
(WY)	(1990)	(1978)	(1973)	(1974)	(1994)	(1994)	(1994)	(1971)	(1989)	(1992)	(1992)	(2004)
MIN	47.5	23.8	45.5	56.8	270	241	98.7	57.9	49.1	43.6	33.9	39.8
(WY)	(1989)	(2002)	(1966)	(1981)	(1968)	(1988)	(1986)	(1986)	(1988)	(1988)	(2002)	(2005)

03281000 MIDDLE FORK KENTUCKY RIVER AT TALLEGA, KY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1961 - 2005	
ANNUAL TOTAL	499,962		329,200			
ANNUAL MEAN	1,366		902		796	
HIGHEST ANNUAL MEAN					1,492	1994
LOWEST ANNUAL MEAN					267	1988
HIGHEST DAILY MEAN	9,250	May 31	5,450	Apr 30	10,300	Feb 27, 1962
LOWEST DAILY MEAN	47	Sep 6	33	Aug 24	3.7	Nov 15, 2001
ANNUAL SEVEN-DAY MINIMUM	78	Aug 17	35	Sep 3	4.4	Nov 10, 2001
MAXIMUM PEAK FLOW			6,950	Apr 30	52,700	Jan 30, 1957
MAXIMUM PEAK STAGE			21.02	Apr 30	43.33	Jan 30, 1957
INSTANTANEOUS LOW FLOW					0.10	Oct 12, 1953
ANNUAL RUNOFF (CFSM)	2.54		1.68		1.48	
ANNUAL RUNOFF (INCHES)	34.63		22.80		20.13	
10 PERCENT EXCEEDS	3,860		2,770		2,560	
50 PERCENT EXCEEDS	626		512		306	
90 PERCENT EXCEEDS	204		45		63	



03281100 GOOSE CREEK AT MANCHESTER, KY

LOCATION.--Lat 37°09'07", long 83°45'37", Clay County, Hydrologic Unit 05100203, on left bank on downstream side of Second Street bridge at Manchester, 0.9 mi upstream from Little Goose Creek, and at mile 21.7.

DRAINAGE AREA.--163 mi^2.

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder with telemetry and crest-stage gages. Datum of gage is 819.37 ft above NGVD of 1929. Prior to September 15, 1975, nonrecording gage at same site and datum.

REMARKS.-- Records good except for those estimated, which are poor. Slight diversions by City of Manchester.

COOPERATION.--Kentucky River Authority.

EXTREMES OUTSIDE PERIOD OF RECORD.---Flood of June 28, 1947, Jan. 29, 1957, and Mar. 12, 1963, reached a stage of 40.6 ft, discharge, 38,000 ft^3/s, 37.3 ft, discharge, 29,800 ft^3/s, and 33.5 ft, discharge, 21,500 ft^3/s, respectively, present site.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec 1	1130	*5,660	*20.10	Apr 30	1215	5,300	19.37
Dec 9	2115	4,500	17.68				

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	104	4,790	140	342	711	883	1,560	26	39	11	6.3
2	38	89	1,300	131	274	545	3,610	602	29	107	8.9	5.5
3	42	80	581	130	249	412	1,920	372	33	46	7.6	4.8
4	e37	357	385	148	213	321	885	266	34	27	6.4	4.4
5	e31	425	284	440	185	383	540	207	33	58	5.4	3.9
6	27	252	333	547	169	322	384	173	27	49	4.9	3.6
7	23	184	988	662	157	294	306	146	24	45	5.1	3.3
8	21	143	1,020	2,230	161	512	267	126	28	45	4.0	3.1
9	19	111	1,960	1,130	152	546	217	109	30	43	4.0	3.1
10	18	95	2,800	613	177	455	184	96	32	24	3.6	3.1
11	17	84	1,420	535	168	382	162	84	33	20	3.2	3.0
12	17	245	886	950	165	319	158	77	26	19	3.1	2.9
13	34	368	582	772	206	262	287	70	25	65	2.9	3.1
14	47	266	394	1,980	876	218	1,390	65	26	126	2.6	e2.7
15	49	202	294	934	946	187	709	76	34	131	3.2	e2.8
16	49	167	240	570	621	195	439	62	23	114	8.7	e3.3
17	38	144	213	388	432	208	318	52	18	168	10	e2.8
18	35	125	184	282	322	198	253	46	15	153	34	e3.8
19	292	117	171	241	261	193	209	45	13	244	21	e3.1
20	169	126	142	222	241	186	177	334	12	112	9.6	e4.0
21	110	152	133	199	424	171	153	167	46	66	6.4	e5.0
22	84	142	128	173	705	160	138	107	27	72	4.7	e3.7
23	71	165	304	152	521	160	155	93	18	72	4.2	e2.5
24	77	576	376	119	400	153	145	77	14	41	3.5	e2.3
25	77	867	316	123	307	136	125	61	12	28	3.3	2.2
26	66	458	269	124	248	129	111	52	9.8	21	4.6	3.5
27	87	320	220	115	208	123	130	45	8.8	21	7.2	2.9
28	99	286	185	97	384	2,060	109	39	8.7	32	5.3	2.7
29	134	217	174	174	---	1,450	228	35	9.2	29	10	4.0
30	149	594	167	433	---	719	3,470	32	9.9	20	9.0	3.2
31	126	---	155	414	---	807	---	28	---	14	6.4	---
TOTAL	2,118	7,461	21,394	15,168	9,514	12,917	18,062	5,304	684.4	2,051	223.8	104.6
MEAN	68.3	249	690	489	340	417	602	171	22.8	66.2	7.22	3.49
MAX	292	867	4,790	2,230	946	2,060	3,610	1,560	46	244	34	6.3
MIN	17	80	128	97	152	123	109	28	8.7	14	2.6	2.2
CFSM	0.42	1.53	4.23	3.00	2.08	2.56	3.69	1.05	0.14	0.41	0.04	0.02
IN.	0.48	1.70	4.88	3.46	2.17	2.95	4.12	1.21	0.16	0.47	0.05	0.02

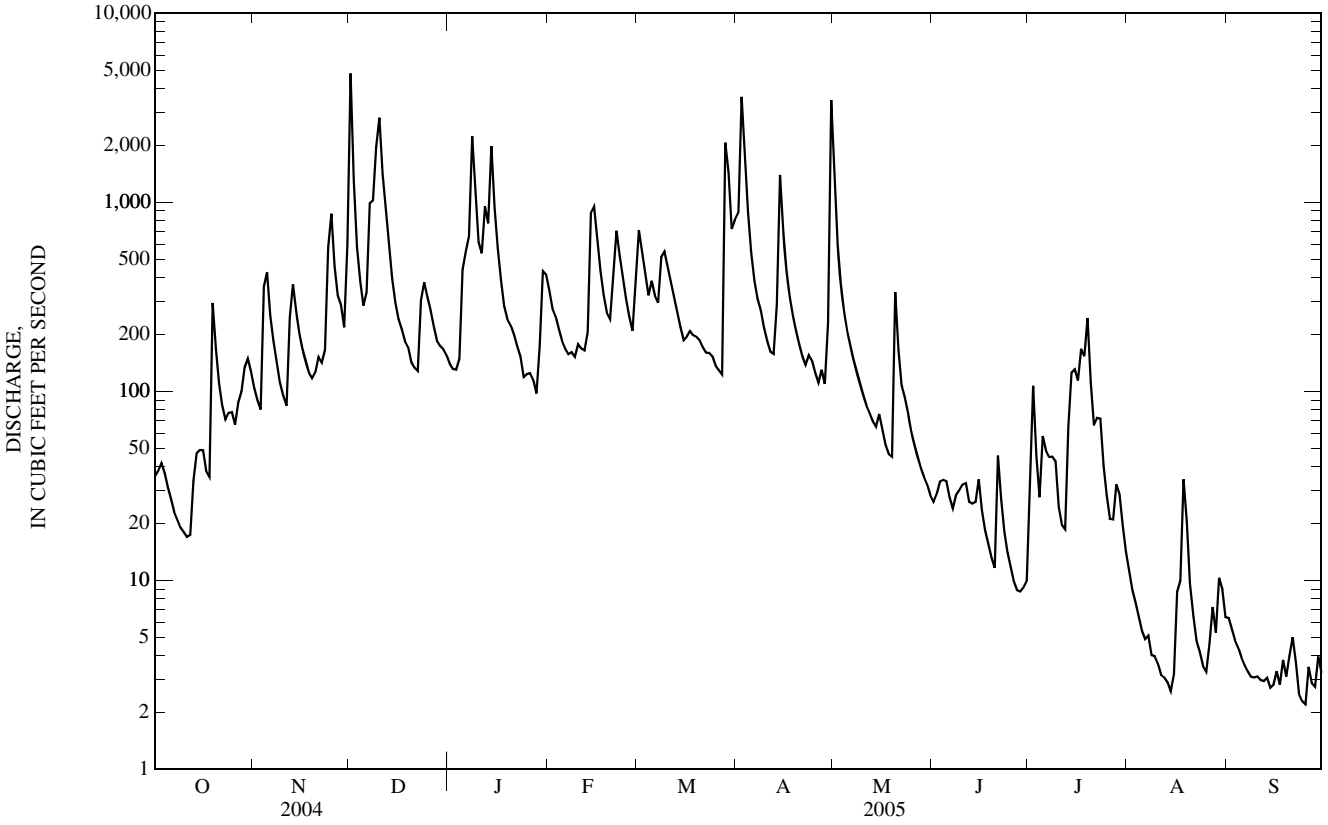
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2005, BY WATER YEAR (WY)

MEAN	76.6	189	362	439	489	512	437	295	161	91.8	52.1	50.8
MAX	600	646	1,229	1,205	1,196	1,665	1,308	1,158	975	381	178	334
(WY)	(1990)	(1978)	(1991)	(1974)	(1972)	(1975)	(1998)	(1984)	(1989)	(1965)	(1977)	(2004)
MIN	2.13	11.4	28.3	22.9	70.5	111	50.8	29.3	6.48	2.03	3.72	2.11
(WY)	(1970)	(1988)	(1966)	(1981)	(1968)	(1969)	(1986)	(1965)	(1988)	(1966)	(1988)	(1965)

03281100 GOOSE CREEK AT MANCHESTER, KY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1965 - 2005	
ANNUAL TOTAL	126,561		95,001.8			
ANNUAL MEAN	346		260		262	
HIGHEST ANNUAL MEAN					456	1994
LOWEST ANNUAL MEAN					107	1988
HIGHEST DAILY MEAN	8,110	Feb 6	4,790	Dec 1	13,700	May 7, 1984
LOWEST DAILY MEAN	13	Sep 3	2.2	Sep 25	0.00	Oct 8, 1980
ANNUAL SEVEN-DAY MINIMUM	20	Oct 6	2.8	Sep 22	0.16	Oct 4, 1980
MAXIMUM PEAK FLOW			5,660	Dec 1	19,200	May 7, 1984
MAXIMUM PEAK STAGE			20.10	Dec 1	32.85	May 7, 1984
INSTANTANEOUS LOW FLOW					0.00	Oct 8, 1980
ANNUAL RUNOFF (CFSM)	2.12		1.60		1.61	
ANNUAL RUNOFF (INCHES)	28.88		21.68		21.82	
10 PERCENT EXCEEDS	804		587		560	
50 PERCENT EXCEEDS	150		126		90	
90 PERCENT EXCEEDS	37		4.3		6.2	

e Estimated



03281500 SOUTH FORK KENTUCKY RIVER AT BOONEVILLE, KY

LOCATION.--Lat 37°28'47", long 83°40'31", Owsley County, Hydrologic Unit 05100203, on right bank 100 ft downstream from Buck Creek, 350 ft downstream from bridge on State Highway 30 at Booneville, 0.3 mi downstream from Meadow Creek, and at mile 11.7.

DRAINAGE AREA.--722 mi^2.

PERIOD OF RECORD.--March 1925 to September 1931, October 1939 to current year. Monthly discharge only for October 1939, published in WSP 1305.

REVISED RECORDS.--WSP 893: 1929(M). WSP 1335: WSP 1555: Drainage area.

GAGE.--Water-stage recorder with telemetry. Datum of gage is 642.49 ft above NGVD of 1929. See WDR KY-92-1 for history of changes prior to Nov. 27, 1929. Nov. 28, 1929 to July 26, 2000, recording gage 500 ft downstream at present site and datum.

REMARKS.--Records good except for those estimated, which are poor. Diversions by City of Booneville.

COOPERATION.--U.S. Army Corps of Engineers, Louisville District and Kentucky River Authority.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 14,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec 1	2300	18,200	27.59	May 1	0030	*20,600	*29.52
Dec 10	1045	14,100	23.72				

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	203	843	14,300	741	1,840	3,210	3,060	15,000	145	213	75	26
2	197	678	12,900	679	1,560	2,920	11,000	4,110	137	145	62	23
3	222	573	3,950	642	1,390	2,170	11,200	2,140	149	165	52	28
4	207	4,430	2,450	e680	1,250	1,790	5,250	1,460	157	158	44	26
5	184	4,920	1,780	e1,600	1,070	1,900	2,950	1,090	151	111	38	21
6	166	2,310	1,910	e1,800	949	2,090	1,980	857	144	88	33	17
7	152	1,560	4,270	e2,100	869	1,880	1,520	710	133	99	44	14
8	135	1,190	6,140	e5,800	852	2,360	1,340	599	117	108	47	11
9	123	883	5,650	e4,500	842	2,760	1,090	511	113	117	31	9.3
10	120	688	13,000	e3,000	887	2,390	883	442	144	108	23	7.8
11	113	585	7,640	e2,100	944	2,050	754	388	162	101	18	6.8
12	109	690	4,910	3,160	900	1,810	685	343	158	83	17	7.3
13	132	1,440	3,440	3,220	934	1,580	777	338	146	95	19	6.9
14	175	1,440	2,310	5,990	2,200	1,370	2,850	329	129	112	24	5.6
15	211	1,170	1,760	5,530	4,200	1,210	3,280	309	126	295	24	4.8
16	219	970	1,450	3,250	3,220	1,090	1,860	323	125	370	40	4.2
17	207	844	1,270	2,270	2,440	1,120	1,340	270	127	377	31	3.8
18	187	730	1,130	1,680	1,880	1,060	1,050	237	104	345	53	3.6
19	1,350	664	1,010	1,410	1,560	996	863	218	88	578	87	3.7
20	1,880	624	872	1,290	1,360	954	724	732	77	734	84	3.8
21	1,020	630	737	1,180	2,110	881	622	1,290	69	371	77	4.2
22	667	649	714	1,030	2,610	800	557	659	66	247	58	e3.8
23	499	633	988	899	2,490	766	554	491	92	193	44	e3.4
24	513	878	1,640	705	2,020	795	618	406	92	179	33	e3.3
25	498	2,870	1,500	632	1,680	715	567	325	72	148	26	e3.2
26	443	2,380	1,380	665	1,400	644	492	271	57	117	21	e3.1
27	2,780	1,680	1,220	637	1,190	620	523	240	47	99	18	e4.0
28	2,530	1,530	1,010	547	1,530	4,150	528	214	40	88	17	e4.5
29	1,590	1,340	929	725	---	8,130	790	189	35	77	17	e4.9
30	1,300	1,780	871	1,960	---	4,240	13,700	169	110	97	27	e5.1
31	1,080	---	779	2,180	---	2,620	---	156	---	91	28	---
TOTAL	19,212	41,602	103,910	62,602	46,177	61,071	73,407	34,816	3,312	6,109	1,212	273.1
MEAN	620	1,387	3,352	2,019	1,649	1,970	2,447	1,123	110	197	39.1	9.10
MAX	2,780	4,920	14,300	5,990	4,200	8,130	13,700	15,000	162	734	87	28
MIN	109	573	714	547	842	620	492	156	35	77	17	3.1
CFSM	0.86	1.92	4.64	2.80	2.28	2.73	3.39	1.56	0.15	0.27	0.05	0.01
IN.	0.99	2.14	5.35	3.23	2.38	3.15	3.78	1.79	0.17	0.31	0.06	0.01

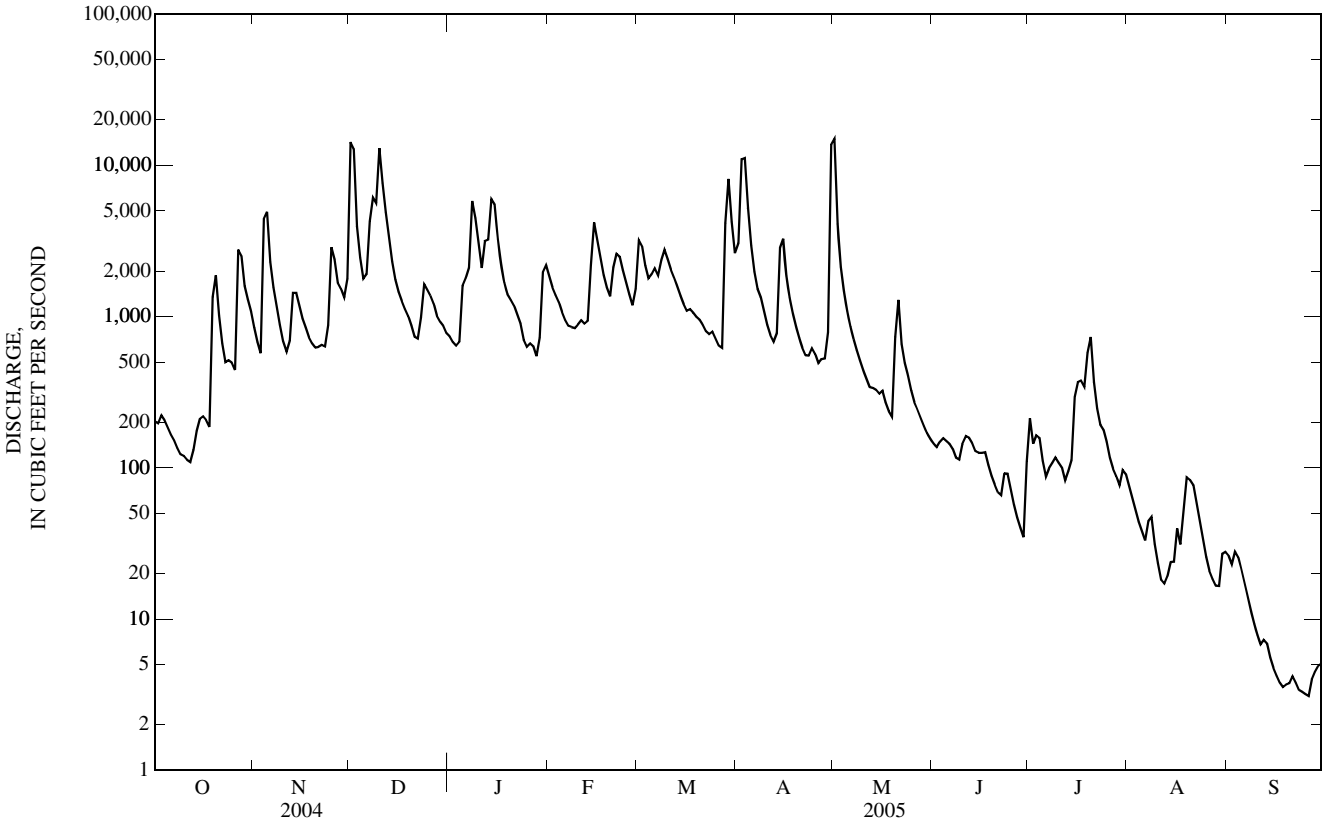
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 2005, BY WATER YEAR (WY)

MEAN	215	669	1,360	1,815	2,128	2,266	1,732	1,129	627	401	263	175
MAX	2,843	2,380	4,935	5,461	5,905	7,400	4,703	5,130	2,950	2,666	1,700	1,844
(WY)	(1990)	(1974)	(1991)	(1974)	(1956)	(1975)	(1998)	(1984)	(2003)	(1941)	(1942)	(2004)
MIN	0.08	0.32	12.1	104	178	568	222	119	36.7	3.67	4.56	0.68
(WY)	(1954)	(1954)	(1954)	(1981)	(1941)	(1988)	(1963)	(1941)	(1966)	(1944)	(1930)	(1930)

03281500 SOUTH FORK KENTUCKY RIVER AT BOONEVILLE, KY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1925 - 2005	
ANNUAL TOTAL	668,407		453,703.1			
ANNUAL MEAN	1,826		1,243		1,064	
HIGHEST ANNUAL MEAN					1,808	1994
LOWEST ANNUAL MEAN					413	1988
HIGHEST DAILY MEAN	26,400	Feb 7	15,000	May 1	51,300	Jan 30, 1957
LOWEST DAILY MEAN	109	Oct 12	3.1	Sep 26	0.00	Oct 11, 1953
ANNUAL SEVEN-DAY MINIMUM	126	Oct 7	3.5	Sep 20	0.00	Oct 11, 1953
MAXIMUM PEAK FLOW			20,600	May 1	66,100	Jan 30, 1957
MAXIMUM PEAK STAGE			29.52	May 1	43.40	Jan 30, 1957
INSTANTANEOUS LOW FLOW					0.00	Oct 11, 1953
ANNUAL RUNOFF (CFSM)	2.53		1.72		1.47	
ANNUAL RUNOFF (INCHES)	34.44		23.38		20.02	
10 PERCENT EXCEEDS	4,060		2,890		2,420	
50 PERCENT EXCEEDS	830		644		363	
90 PERCENT EXCEEDS	225		24		27	

e Estimated



03282000 KENTUCKY RIVER AT LOCK 14 AT HEIDELBERG, KY

LOCATION.--Lat 37°33'19", long 83°46'06", Lee County, Hydrologic Unit 05100204, on right bank 200 ft upstream from Lock 14 at Heidelberg, 0.3 mi upstream from Sturgeon Creek, and at mile 249.2.

DRAINAGE AREA.--2,657 mi^2.

PERIOD OF RECORD.--October 1925 to September 1931, December 1936 to February 1937, July 1938 to current year. Gage-height records collected in this vicinity since 1902 are published in reports of National Weather Service.

REVISED RECORDS.--WSP 1385: 1926-27, 1928(M), 1929, 1931(M), 1937, 1939(M), drainage area.

GAGE.--Water-stage recorder with telemetry. Datum of gage is 625.77 ft NGVD of 1929, 625.70 ft Ohio River Datum, 626.66 ft Kentucky River Datum. Prior to September 2, 1939, nonrecording gage at Lock 14 at same datum.

REMARKS.--Records fair except for those below 150 ft^3/s and for those estimated, which are poor. Flow regulated by Buckhorn Lake beginning December 1960 (station 03280800), and by Carr Fork Lake beginning January 1976 (station 03277446). Small diversions by City of Lexington waterworks.

COOPERATION.--U.S. Army Corps of Engineers, Louisville District and Kentucky River Authority.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,150	3,600	25,300	2,450	7,570	8,370	10,400	41,200	751	814	480	328
2	1,110	2,760	32,200	2,330	6,300	10,600	24,900	20,500	721	850	392	271
3	1,120	2,500	16,400	2,260	5,390	8,630	29,500	11,800	737	1,200	322	223
4	1,150	6,390	10,900	2,350	4,640	6,960	20,100	9,030	815	1,010	291	194
5	1,040	12,900	9,170	4,480	3,980	6,100	14,000	7,230	1,070	832	284	172
6	974	9,040	7,880	6,270	3,510	6,490	10,600	5,850	1,070	687	259	157
7	917	6,570	11,000	7,510	3,170	6,180	8,890	4,690	876	560	243	148
8	821	4,840	15,400	23,800	3,060	7,080	8,010	3,470	747	548	253	143
9	704	3,560	13,600	21,000	3,020	8,740	6,990	2,790	1,070	918	260	137
10	671	2,690	28,500	12,500	3,040	8,600	6,050	2,380	924	1,370	240	132
11	653	2,400	25,100	10,000	3,140	7,580	5,220	2,070	1,120	974	237	127
12	679	2,650	17,700	8,570	3,260	6,660	4,170	1,900	1,530	753	219	123
13	733	3,540	14,100	8,800	3,180	6,050	3,420	1,750	1,530	735	233	120
14	822	4,220	11,100	10,900	5,000	5,490	5,220	1,630	1,060	678	270	119
15	1,020	3,890	8,910	13,400	8,850	4,840	9,440	1,530	858	1,270	238	117
16	1,030	3,460	6,840	10,800	8,560	4,280	8,190	1,510	747	1,440	298	114
17	1,020	3,140	5,640	8,450	7,570	4,060	5,610	1,400	e721	1,440	363	112
18	964	2,900	4,950	6,900	6,390	4,080	4,480	1,270	e631	1,460	317	110
19	2,440	2,670	3,850	5,010	5,240	3,880	3,770	1,110	e531	1,730	374	109
20	4,570	2,670	3,140	4,190	4,430	3,730	3,230	1,500	e476	2,640	470	109
21	3,020	2,760	2,750	3,880	5,580	3,500	2,840	3,420	417	2,890	550	112
22	2,230	2,770	2,540	3,560	7,920	3,170	2,540	3,070	674	1,940	409	113
23	1,760	2,650	3,030	3,180	7,840	2,930	2,310	2,250	781	1,210	291	123
24	1,640	2,820	4,100	2,790	6,760	2,960	2,550	1,890	640	1,100	225	121
25	1,740	5,120	4,320	2,510	5,640	3,210	2,520	1,680	464	782	193	113
26	1,630	6,770	4,000	2,480	4,840	3,020	2,290	1,460	360	623	179	112
27	5,410	6,030	3,590	2,590	4,040	2,780	2,290	1,250	297	546	186	110
28	11,000	5,340	3,080	2,410	4,150	7,580	2,280	1,040	275	584	203	105
29	8,120	4,750	2,830	2,480	---	19,000	2,690	933	269	587	213	109
30	5,690	5,000	2,720	6,050	---	15,200	31,300	890	296	626	202	118
31	4,540	---	2,530	8,130	---	11,500	---	808	---	547	311	---
TOTAL	70,368	130,400	307,170	212,030	146,070	203,250	245,800	143,301	22,458	33,344	9,005	4,201
MEAN	2,270	4,347	9,909	6,840	5,217	6,556	8,193	4,623	749	1,076	290	140
MAX	11,000	12,900	32,200	23,800	8,850	19,000	31,300	41,200	1,530	2,890	550	328
MIN	653	2,400	2,530	2,260	3,020	2,780	2,280	808	269	546	179	105

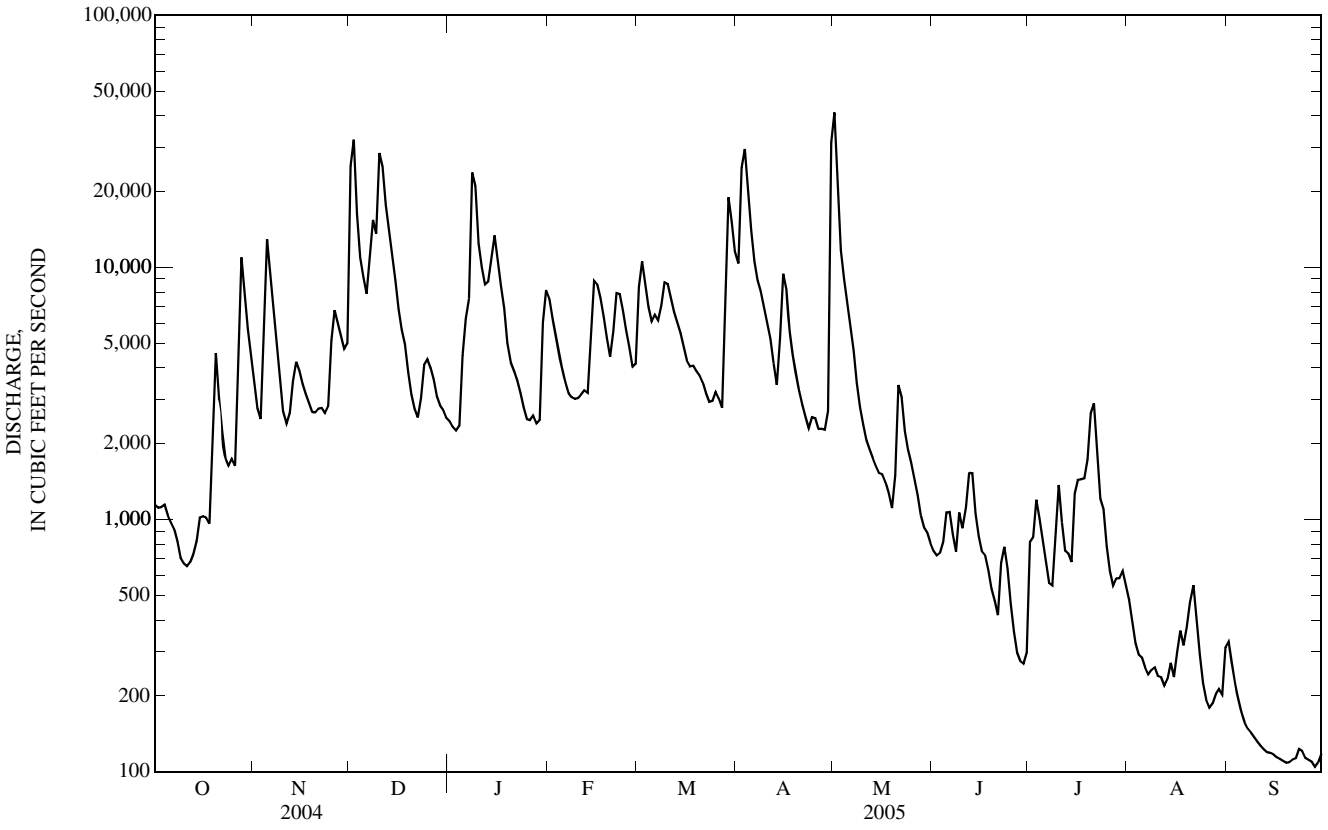
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 2005, BY WATER YEAR (WY)

MEAN	1,291	2,683	4,840	5,832	7,343	7,410	6,347	4,999	2,933	1,295	1,010	966
MAX	10,380	7,006	14,850	14,010	17,660	18,260	15,260	16,010	10,630	3,320	3,006	6,864
(WY)	(1990)	(1978)	(1991)	(1994)	(2003)	(1994)	(1998)	(1984)	(2003)	(1992)	(1977)	(2004)
MIN	232	263	582	362	2,345	1,791	855	910	247	206	154	70.1
(WY)	(2000)	(2002)	(1981)	(1981)	(1988)	(1988)	(1986)	(1986)	(1988)	(1988)	(1988)	(1999)

03282000 KENTUCKY RIVER AT LOCK 14 AT HEIDELBERG, KY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1977 - 2005	
ANNUAL TOTAL	2,165,603		1,527,397			
ANNUAL MEAN	5,917		4,185		3,894	
HIGHEST ANNUAL MEAN					6,973	1994
LOWEST ANNUAL MEAN					1,461	1988
HIGHEST DAILY MEAN	58,300	Feb 7	41,200	May 1	85,900	May 8, 1984
LOWEST DAILY MEAN	561	Aug 22	105	Sep 28	45	Jul 10, 1988
ANNUAL SEVEN-DAY MINIMUM	668	Aug 18	111	Sep 16	51	Sep 11, 1999
MAXIMUM PEAK FLOW			46,100	May 1	120,000	Feb 4, 1939
MAXIMUM PEAK STAGE			21.50	May 1	35.60	Feb 4, 1939
INSTANTANEOUS LOW FLOW					4.0	Oct 20, 1930
10 PERCENT EXCEEDS	13,600		9,280		9,770	
50 PERCENT EXCEEDS	3,240		2,550		1,670	
90 PERCENT EXCEEDS	1,030		230		283	

e Estimated



03282040 STURGEON CREEK AT CRESSMONT, KY

LOCATION.--Lat 37°30'02", long 83°48'37", Lee County, Hydrologic Unit 05100204, on right bank 30 ft downstream of bridge on State Highway 597, 0.2 mi southeast of Cressmont, 0.2 mi upstream from Elkhorn Branch, and 0.5 mi downstream from Granny Dismal Creek.

DRAINAGE AREA.--77.3 mi^2.

PERIOD OF RECORD.--October 1992 to current year.

GAGE.--Water-stage recorder with telemetry and crest-stage gages. Datum of gage is 704.53 ft above NGVD of 1929.

REMARKS.--Records good except for those estimated, which are poor.

COOPERATION.--Kentucky Natural Resources and Environmental Protection Cabinet.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct 27	0745	2,490	8.98	Mar 28	0815	2,290	8.67
Dec 7	1115	2,220	8.58	Apr 2	0215	3,090	9.80
Jan 8	0315	5,270	12.37	Apr 30	0645	*8,060	*14.73

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	101	2,120	71	180	237	356	567	6.8	21	1.9	0.92
2	23	85	487	75	146	197	1,710	283	6.6	7.0	1.4	0.78
3	30	74	287	79	136	165	661	191	7.7	4.0	0.99	0.57
4	23	603	205	90	112	143	340	142	8.5	2.8	0.77	0.48
5	19	353	157	214	98	188	231	108	7.7	2.5	0.59	0.45
6	16	217	265	288	89	161	171	92	6.4	2.7	0.48	0.37
7	14	158	1,080	474	81	151	142	76	60	2.2	0.36	0.30
8	14	116	519	2,440	83	343	132	65	47	1.9	0.33	0.27
9	13	90	706	511	77	276	103	55	21	2.2	0.29	0.25
10	12	75	965	302	80	218	86	47	14	2.3	0.29	0.21
11	12	68	507	231	71	186	75	42	12	1.4	0.42	0.18
12	13	122	322	193	67	162	77	35	12	1.1	0.46	0.16
13	33	101	239	188	78	136	95	36	9.9	32	0.39	0.14
14	25	86	178	679	405	113	160	32	8.5	34	0.38	0.12
15	22	79	142	346	381	101	130	30	7.0	53	0.32	0.10
16	22	74	118	250	265	94	111	26	5.8	36	0.45	0.09
17	19	69	106	184	194	86	98	22	5.0	26	2.2	0.08
18	17	64	93	140	152	76	87	19	e4.4	18	2.2	0.07
19	416	77	85	122	125	68	76	17	e4.0	20	1.2	0.06
20	163	73	67	112	115	65	67	75	e3.4	24	0.75	0.04
21	102	67	66	104	349	58	60	41	e2.7	15	0.61	0.03
22	73	64	65	91	267	53	70	27	2.3	11	0.41	0.02
23	60	65	210	76	206	65	74	33	2.0	10	0.34	0.01
24	94	141	184	72	170	88	76	26	1.8	6.9	0.28	0.01
25	83	193	150	64	139	70	74	19	1.6	4.9	0.28	0.00
26	69	160	132	66	112	65	66	16	1.3	3.7	0.57	0.01
27	1,150	142	108	59	99	65	98	13	1.1	3.1	0.89	0.01
28	440	175	93	47	167	1,080	81	11	0.93	4.3	0.65	0.00
29	252	146	92	131	---	538	194	9.7	0.83	4.4	0.68	0.04
30	178	589	86	280	---	298	3,800	8.6	1.1	3.3	0.78	0.02
31	132	---	77	226	---	224	---	7.7	---	2.5	0.95	---
TOTAL	3,560	4,427	9,911	8,205	4,444	5,770	9,501	2,172.0	273.36	363.2	22.61	5.79
MEAN	115	148	320	265	159	186	317	70.1	9.11	11.7	0.73	0.19
MAX	1,150	603	2,120	2,440	405	1,080	3,800	567	60	53	2.2	0.92
MIN	12	64	65	47	67	53	60	7.7	0.83	1.1	0.28	0.00
CFSM	1.49	1.91	4.14	3.42	2.05	2.41	4.10	0.91	0.12	0.15	0.01	0.00
IN.	1.71	2.13	4.77	3.95	2.14	2.78	4.57	1.05	0.13	0.17	0.01	0.00

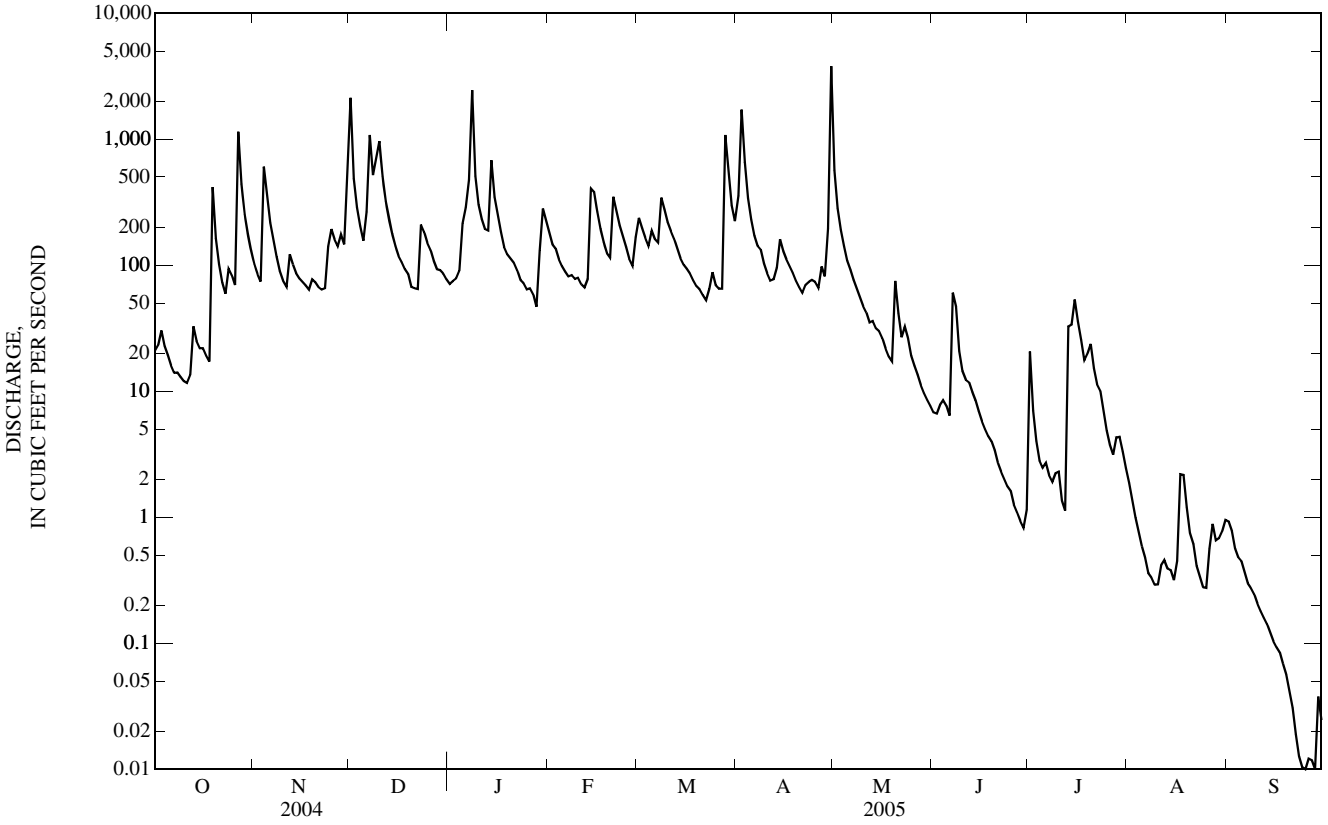
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 2005, BY WATER YEAR (WY)

MEAN	36.0	79.8	135	209	222	236	201	146	108	35.2	30.1	38.1
MAX	115	246	320	403	544	540	441	345	304	157	219	323
(WY)	(2005)	(1997)	(2005)	(1994)	(2003)	(1994)	(1998)	(1995)	(1997)	(2004)	(2003)	(2004)
MIN	1.22	2.70	16.8	30.3	76.4	65.8	49.6	22.4	2.20	1.22	0.11	0.19
(WY)	(2001)	(2001)	(2000)	(2000)	(2002)	(2003)	(1997)	(2001)	(1999)	(1999)	(1999)	(2005)

03282040 STURGEON CREEK AT CRESSMONT, KY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1993 - 2005	
ANNUAL TOTAL	73,359.2		48,654.96			
ANNUAL MEAN	200		133		122	
HIGHEST ANNUAL MEAN					195	1994
LOWEST ANNUAL MEAN					53.4	2000
HIGHEST DAILY MEAN	5,530	Sep 17	3,800	Apr 30	5,530	Sep 17, 2004
LOWEST DAILY MEAN	4.0	Sep 2	0.00	Sep 25	0.00	Aug 18, 1999
ANNUAL SEVEN-DAY MINIMUM	7.1	Aug 28	0.01	Sep 22	0.00	Aug 18, 1999
MAXIMUM PEAK FLOW			8,120	Apr 30	11,800	Sep 17, 2004
MAXIMUM PEAK STAGE			14.73	Apr 30	17.30	Sep 17, 2004
INSTANTANEOUS LOW FLOW			0.00	Sep 23	0.00	Aug 18, 1999
ANNUAL RUNOFF (CFSM)	2.59		1.72		1.58	
ANNUAL RUNOFF (INCHES)	35.30		23.41		21.50	
10 PERCENT EXCEEDS	442		281		276	
50 PERCENT EXCEEDS	84		67		43	
90 PERCENT EXCEEDS	18		0.42		1.9	

e Estimated



03282060 KENTUCKY RIVER AT LOCK 13 NEAR WILLOW, KY

LOCATION.--Lat 37°36'07", long 83°49'59", Lee County, Hydrologic Unit 05100204, on left bank at Lock 13, 1.3 mi northeast of Willow, 1.9 mi downstream of Little Willow Branch, 3.7 mi upstream of Ross Creek, 4.8 mi northwest of Heidelberg, 10.3 mi southeast of Irvine, and at mile 239.9.

DRAINAGE AREA.--2784 mi^2.

PERIOD OF RECORD.--August 2004 to current year.

GAGE.--Water-stage recorder with telemetry. Datum of gage is 608.23 ft above NGVD of 1929.

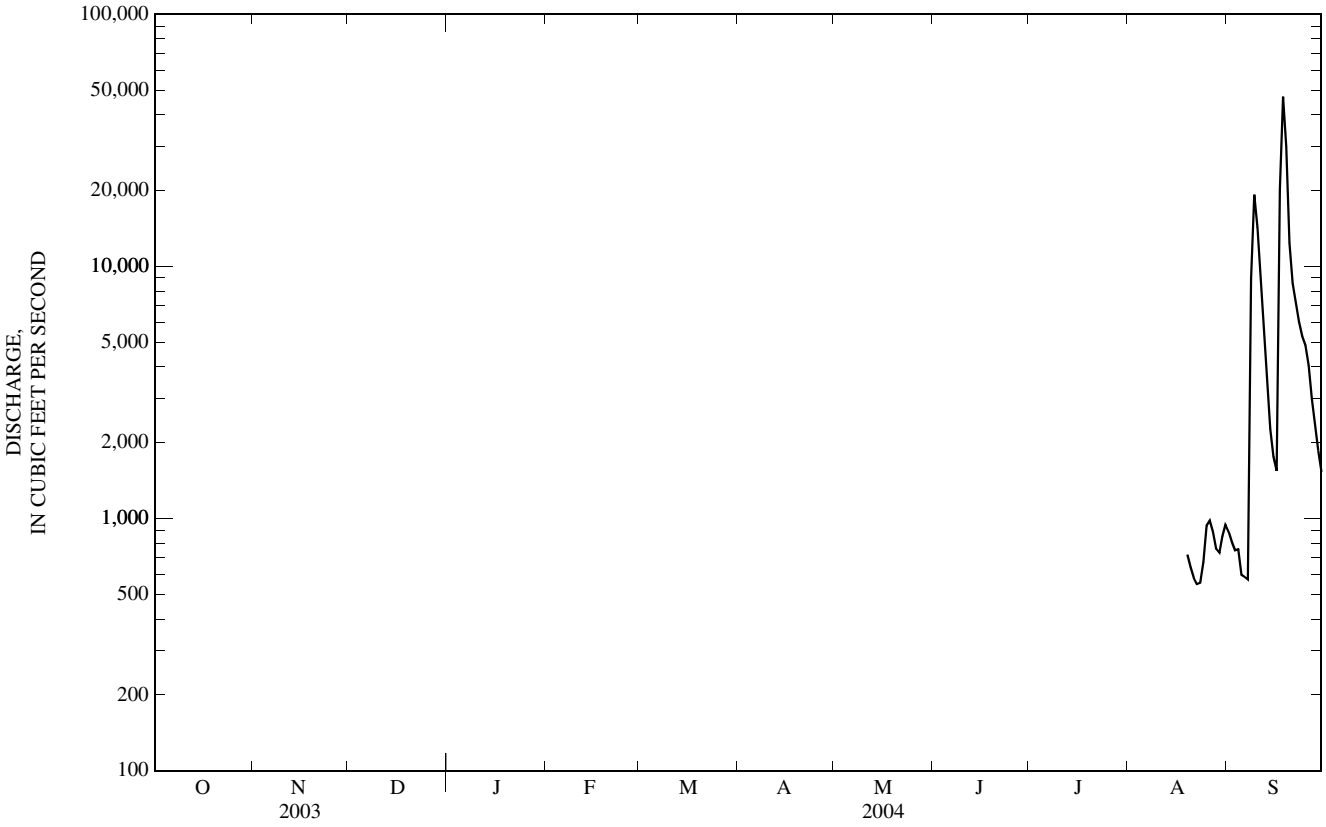
REMARKS.--Records fair. Flow regulated by Buckhorn Lake beginning December 1960 (station 03280800) and by Carr Fork Lake beginning January 1976 (station 03277446). Small diversion by City of Lexington waterworks.

COOPERATION.--Kentucky River Authority.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	---	887
2	---	---	---	---	---	---	---	---	---	---	---	808
3	---	---	---	---	---	---	---	---	---	---	---	748
4	---	---	---	---	---	---	---	---	---	---	---	756
5	---	---	---	---	---	---	---	---	---	---	---	598
6	---	---	---	---	---	---	---	---	---	---	---	588
7	---	---	---	---	---	---	---	---	---	---	---	574
8	---	---	---	---	---	---	---	---	---	---	---	8,900
9	---	---	---	---	---	---	---	---	---	---	---	19,300
10	---	---	---	---	---	---	---	---	---	---	---	14,300
11	---	---	---	---	---	---	---	---	---	---	---	8,690
12	---	---	---	---	---	---	---	---	---	---	---	5,480
13	---	---	---	---	---	---	---	---	---	---	---	3,350
14	---	---	---	---	---	---	---	---	---	---	---	2,270
15	---	---	---	---	---	---	---	---	---	---	---	1,760
16	---	---	---	---	---	---	---	---	---	---	---	1,550
17	---	---	---	---	---	---	---	---	---	---	---	20,200
18	---	---	---	---	---	---	---	---	---	---	---	47,100
19	---	---	---	---	---	---	---	---	---	---	719	29,800
20	---	---	---	---	---	---	---	---	---	---	641	12,400
21	---	---	---	---	---	---	---	---	---	---	583	8,570
22	---	---	---	---	---	---	---	---	---	---	550	7,140
23	---	---	---	---	---	---	---	---	---	---	557	6,020
24	---	---	---	---	---	---	---	---	---	---	672	5,270
25	---	---	---	---	---	---	---	---	---	---	936	4,870
26	---	---	---	---	---	---	---	---	---	---	980	4,060
27	---	---	---	---	---	---	---	---	---	---	884	2,980
28	---	---	---	---	---	---	---	---	---	---	759	2,380
29	---	---	---	---	---	---	---	---	---	---	732	1,860
30	---	---	---	---	---	---	---	---	---	---	848	1,530
31	---	---	---	---	---	---	---	---	---	---	946	---
TOTAL	---	---	---	---	---	---	---	---	---	---	---	224,739
MEAN	---	---	---	---	---	---	---	---	---	---	---	7,491
MAX	---	---	---	---	---	---	---	---	---	---	---	47,100
MIN	---	---	---	---	---	---	---	---	---	---	---	574

03282060 KENTUCKY RIVER AT LOCK 13 NEAR WILLOW, KY—Continued



03282060 KENTUCKY RIVER AT LOCK 13 NEAR WILLOW, KY

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

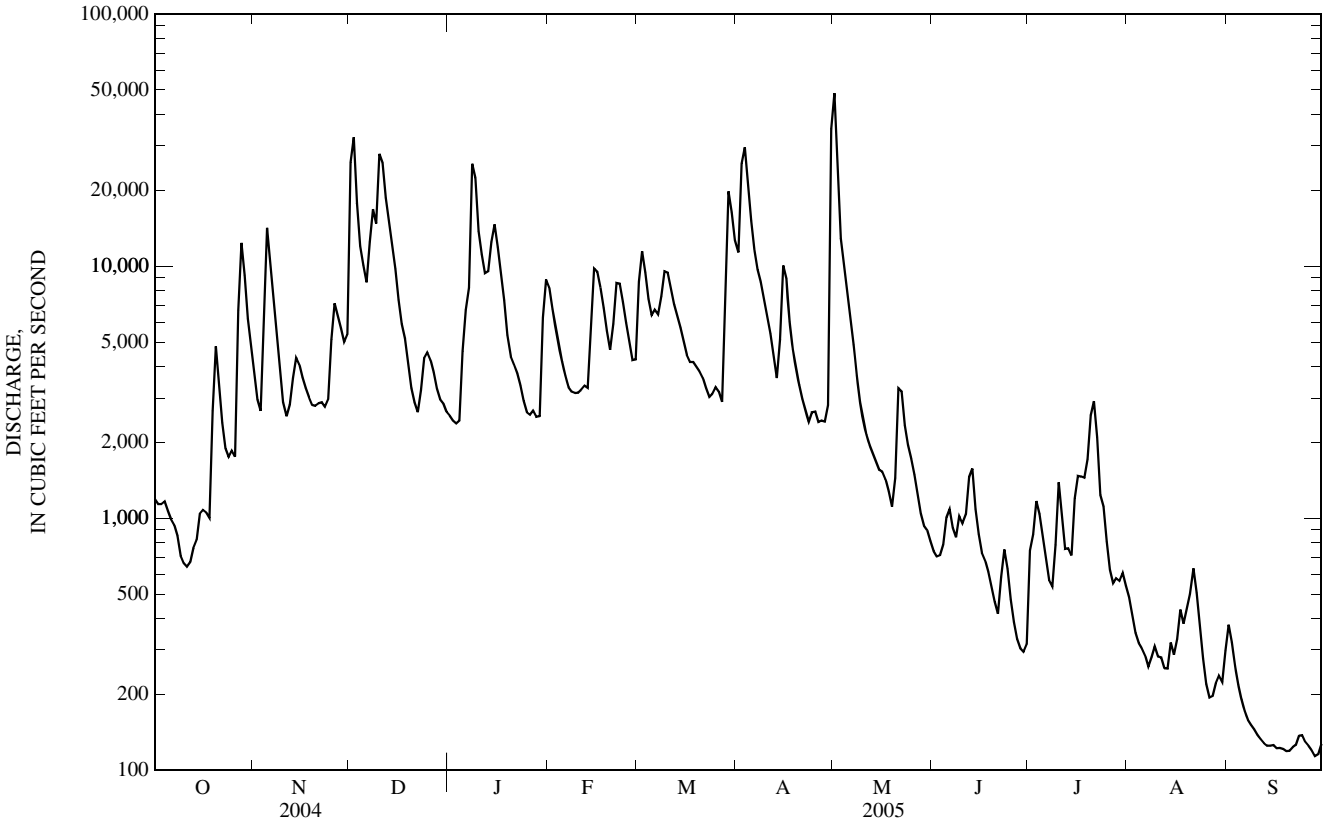
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,190	3,850	25,800	2,550	8,240	8,670	11,300	48,500	742	746	485	378
2	1,140	2,950	32,400	2,440	6,750	11,500	25,600	22,400	705	863	410	323
3	1,140	2,670	17,800	2,380	5,700	9,450	29,600	12,900	714	1,170	351	259
4	1,170	6,330	12,000	2,440	4,890	7,420	21,000	9,900	785	1,040	320	219
5	1,070	14,200	10,100	4,610	4,180	6,390	15,100	7,720	1,010	853	305	192
6	992	10,100	8,620	6,710	3,680	6,720	11,600	6,110	1,090	697	286	172
7	943	7,090	12,500	8,220	3,310	6,440	9,670	4,880	914	569	258	159
8	852	5,190	16,800	25,500	3,180	7,600	8,620	3,680	841	537	281	152
9	711	3,820	14,800	22,400	3,140	9,550	7,360	2,900	1,020	786	310	145
10	664	2,890	27,800	13,800	3,150	9,420	6,300	2,490	956	1,390	284	138
11	642	2,540	25,700	11,100	3,240	8,170	5,400	2,140	1,040	999	281	133
12	669	2,820	18,700	9,370	3,360	7,050	4,370	1,950	1,460	756	254	128
13	763	3,600	15,100	9,550	3,290	6,330	3,610	1,810	1,580	760	254	125
14	821	4,350	12,100	12,500	5,200	5,710	5,120	1,680	1,090	711	321	125
15	1,040	4,070	9,760	14,600	9,790	5,030	10,000	1,560	865	1,200	287	126
16	1,080	3,610	7,360	11,900	9,500	4,450	8,920	1,530	730	1,470	332	122
17	1,050	3,280	5,880	9,320	8,220	4,170	6,020	1,430	681	1,470	434	123
18	1,000	3,020	5,160	7,330	6,830	4,180	4,680	1,280	614	1,450	382	122
19	2,670	2,820	4,080	5,340	5,540	3,990	3,960	1,110	537	1,710	435	119
20	4,810	2,790	3,290	4,380	4,650	3,820	3,380	1,440	466	2,560	502	120
21	3,300	2,860	2,870	4,070	5,900	3,610	2,960	3,280	418	2,910	632	124
22	2,400	2,890	2,640	3,750	8,580	3,280	2,680	3,190	584	2,100	507	126
23	1,890	2,770	3,230	3,360	8,540	3,030	2,420	2,340	753	1,230	381	137
24	1,750	2,960	4,320	2,920	7,230	3,120	2,640	1,950	630	1,110	279	138
25	1,850	5,120	4,550	2,640	5,980	3,310	2,650	1,720	477	809	220	129
26	1,760	7,110	4,250	2,570	5,060	3,170	2,410	1,490	387	624	195	125
27	6,670	6,340	3,790	2,670	4,250	2,900	2,440	1,260	332	552	197	120
28	12,400	5,670	3,260	2,530	4,270	8,430	2,420	1,040	305	578	221	114
29	9,220	5,000	2,960	2,540	---	19,800	2,810	934	295	565	238	116
30	6,190	5,360	2,850	6,270	---	16,400	35,100	897	317	606	224	127
31	4,860	---	2,640	8,860	---	12,700	---	812	---	540	298	---
TOTAL	76,707	138,070	323,110	228,620	155,650	215,810	260,140	156,323	22,338	33,361	10,164	4,636
MEAN	2,474	4,602	10,420	7,375	5,559	6,962	8,671	5,043	745	1,076	328	155
MAX	12,400	14,200	32,400	25,500	9,790	19,800	35,100	48,500	1,580	2,910	632	378
MIN	642	2,540	2,640	2,380	3,140	2,900	2,410	812	295	537	195	114

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2004 - 2005, BY WATER YEAR (WY)

MEAN	2,474	4,602	10,420	7,375	5,559	6,962	8,671	5,043	745	1,076	328	3,823
MAX	2,474	4,602	10,420	7,375	5,559	6,962	8,671	5,043	745	1,076	328	7,491
(WY)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2004)
MIN	2,474	4,602	10,420	7,375	5,559	6,962	8,671	5,043	745	1,076	328	155
(WY)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)

03282060 KENTUCKY RIVER AT LOCK 13 NEAR WILLOW, KY—Continued

SUMMARY STATISTICS	FOR 2005 WATER YEAR		WATER YEARS 2004 - 2005	
ANNUAL TOTAL	1,624,929			
ANNUAL MEAN	4,452		4,452	
HIGHEST ANNUAL MEAN			4,452	2005
LOWEST ANNUAL MEAN			4,452	2005
HIGHEST DAILY MEAN	48,500	May 1	48,500	May 1, 2005
LOWEST DAILY MEAN	114	Sep 28	114	Sep 28, 2005
ANNUAL SEVEN-DAY MINIMUM	122	Sep 15	122	Sep 15, 2005
MAXIMUM PEAK FLOW	54,800	May 1	54,800	May 1, 2005
MAXIMUM PEAK STAGE	24.55	May 1	24.55	May 1, 2005
10 PERCENT EXCEEDS	10,100		10,100	
50 PERCENT EXCEEDS	2,670		2,670	
90 PERCENT EXCEEDS	259		259	



03282120 KENTUCKY RIVER AT LOCK 12 NEAR IRVINE, KY

LOCATION.--Lat 37°40'42", long 83°56'54", Estill County, Hydrologic Unit 05100205, on right upstream bank of Lock 12 at Irvine, 2.4 mi upstream from station Camp Creek, 4.7 mi downstream from Millers Creek, and at mile 220.9.

DRAINAGE AREA.--2,916 mi^2 of which 16.4 mi^2 is non-contributing.

PERIOD OF RECORD.--October 2000 to current year.

GAGE.--Water-stage recorder with telemetry. Datum of gage is 593.53 ft above NGVD of 1929 or 593.00 ft above Kentucky River Datum.

REMARKS.--Records fair except for periods of estimated records which are poor. Flow regulated by Buckhorn Lake beginning December 1960 (station 03280800), and by Carr Fork Lake beginning January 1976 (station 03277446). Small diversions by City of Lexington waterworks.

COOPERATION.--Kentucky River Authority and U.S. Army Corps of Engineers, Louisville District.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,310	4,270	21,400	2,740	8,560	7,880	11,200	40,800	802	609	491	389
2	1,200	3,320	30,100	2,690	7,200	11,200	21,400	28,700	757	874	421	357
3	1,200	2,930	19,800	2,650	6,050	9,890	28,200	13,500	756	1,080	356	300
4	1,210	5,590	12,200	2,700	5,210	7,920	21,500	10,400	808	1,100	314	257
5	1,140	13,900	10,400	4,810	4,470	6,710	15,300	8,260	959	916	295	227
6	1,040	10,700	9,090	7,260	3,930	6,830	11,900	6,570	1,140	774	284	204
7	989	7,720	11,900	8,680	3,520	6,740	10,000	5,300	1,020	623	259	190
8	918	5,700	16,200	23,700	3,340	8,180	8,990	4,130	975	550	262	179
9	799	4,220	14,300	24,200	3,300	9,690	7,760	3,170	1,070	e815	284	174
10	729	3,170	23,100	14,200	3,330	9,760	6,710	2,730	1,080	e1,360	276	168
11	697	2,690	25,600	11,400	3,390	8,620	5,760	2,320	1,020	e1,080	272	162
12	722	3,070	18,500	9,660	3,510	7,510	4,790	2,080	1,380	e850	256	156
13	852	3,650	15,000	9,600	3,540	6,770	3,960	1,920	1,640	824	243	152
14	875	4,450	12,200	11,900	5,100	6,080	4,670	1,780	1,240	798	289	148
15	1,020	4,320	10,100	14,200	9,430	5,410	9,430	1,650	957	1,030	285	142
16	1,090	3,830	7,930	12,100	9,820	4,790	9,350	1,580	808	1,500	302	141
17	1,080	3,480	6,250	9,690	8,560	4,400	6,680	1,510	738	1,490	401	139
18	1,040	3,180	5,480	7,740	7,270	4,360	5,000	1,370	668	1,480	373	137
19	2,980	3,040	4,470	5,830	5,930	4,230	4,280	1,210	587	1,670	395	135
20	5,030	2,980	3,550	4,660	5,010	4,010	3,640	1,490	508	2,370	418	133
21	3,830	3,000	3,080	4,270	5,900	3,810	3,190	2,960	450	2,930	556	134
22	2,710	3,020	2,800	3,960	8,530	3,510	2,920	3,440	522	2,400	504	136
23	2,130	2,930	3,380	3,560	8,880	3,210	2,620	2,580	761	1,400	394	141
24	1,990	3,080	4,430	3,090	7,670	3,280	2,820	2,070	696	1,170	303	148
25	2,020	4,820	4,760	2,800	6,430	3,420	2,880	1,810	539	901	247	143
26	1,930	7,180	4,510	2,660	5,440	3,410	2,650	1,580	423	677	230	141
27	6,000	6,660	4,040	2,740	4,640	3,090	2,740	1,350	355	575	224	134
28	12,400	6,040	3,530	2,680	4,390	7,220	2,670	1,130	317	601	241	128
29	10,100	5,300	3,150	2,710	---	18,200	3,190	986	303	582	268	127
30	6,890	5,680	3,030	5,910	---	16,300	27,600	930	319	606	274	131
31	5,340	---	2,830	8,850	---	13,000	---	869	---	558	285	---
TOTAL	81,261	143,920	317,110	233,640	162,350	219,430	253,800	160,175	23,598	34,193	10,002	5,253
MEAN	2,621	4,797	10,230	7,537	5,798	7,078	8,460	5,167	787	1,103	323	175
MAX	12,400	13,900	30,100	24,200	9,820	18,200	28,200	40,800	1,640	2,930	556	389
MIN	697	2,690	2,800	2,650	3,300	3,090	2,620	869	303	550	224	127
MED	1,200	4,030	7,930	5,830	5,330	6,740	5,380	2,070	759	901	285	146
AC-FT	161,200	285,500	629,000	463,400	322,000	435,200	503,400	317,700	46,810	67,820	19,840	10,420
CFSM	0.90	1.65	3.51	2.58	1.99	2.43	2.90	1.77	0.27	0.38	0.11	0.06
IN.	1.04	1.84	4.05	2.98	2.07	2.80	3.24	2.04	0.30	0.44	0.13	0.07

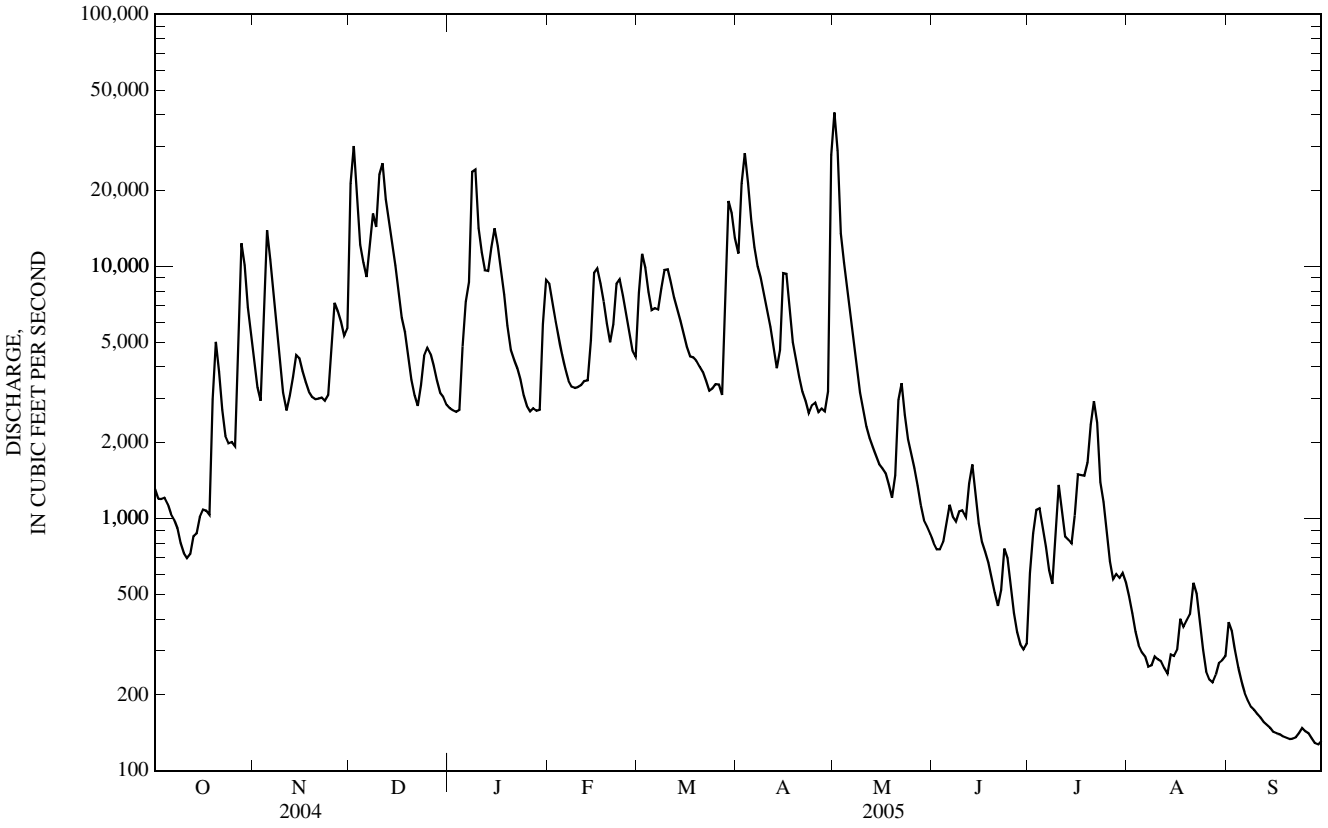
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2005, BY WATER YEAR (WY)

MEAN	1,211	3,090	5,516	5,727	8,641	6,358	7,144	5,484	4,320	1,933	1,384	2,199
MAX	2,621	6,608	10,230	9,677	16,440	9,091	11,430	8,365	9,066	3,023	2,525	7,487
(WY)	(2005)	(2004)	(2005)	(2004)	(2003)	(2002)	(2003)	(2002)	(2003)	(2004)	(2003)	(2004)
MIN	365	284	1,443	2,694	2,974	4,524	2,661	1,040	787	1,077	283	175
(WY)	(2001)	(2002)	(2002)	(2003)	(2002)	(2003)	(2001)	(2001)	(2005)	(2002)	(2002)	(2005)

03282120 KENTUCKY RIVER AT LOCK 12 NEAR IRVINE, KY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 2000 - 2005	
ANNUAL TOTAL	2,309,594		1,644,732			
ANNUAL MEAN	6,310		4,506		4,387	
HIGHEST ANNUAL MEAN					6,018	2004
LOWEST ANNUAL MEAN					2,575	2001
HIGHEST DAILY MEAN	48,300	Feb 7	40,800	May 1	57,900	Feb 18, 2003
LOWEST DAILY MEAN	596	Aug 23	127	Sep 29	56	Sep 16, 2002
ANNUAL SEVEN-DAY MINIMUM	709	Aug 18	136	Sep 24	82	Sep 12, 2002
MAXIMUM PEAK FLOW			41,700	May 1	58,600	Feb 18, 2003
MAXIMUM PEAK STAGE			26.35	May 1	35.02	Feb 18, 2003
INSTANTANEOUS LOW FLOW			100	Sep 29	100	Sep 29, 2005
ANNUAL RUNOFF (AC-FT)	4,581,000		3,262,000		3,179,000	
ANNUAL RUNOFF (CFSM)	2.16		1.55		1.50	
ANNUAL RUNOFF (INCHES)	29.46		20.98		20.44	
10 PERCENT EXCEEDS	14,900		10,500		10,400	
50 PERCENT EXCEEDS	3,680		2,920		2,160	
90 PERCENT EXCEEDS	1,100		270		370	

e Estimated



03282290 KENTUCKY RIVER AT LOCK 11 NEAR COLLEGE HILL, KY

LOCATION.--Lat 37°47'02", long 84°06'12", Estill County, Hydrologic Unit 05100205, on upstream right bank of Lock 11, 0.6 mi downstream from Flint Creek, 1.0 mi east of College Hill, 1.0 mi upstream from Lick Run, and at mile 201.

DRAINAGE AREA.--3,219 mi^2 of which 26.1 mi^2 is non-contributing.

PERIOD OF RECORD.--June 2002 to current year.

GAGE.--Water-stage recorder with telemetry. Datum of gage is 575.60 feet above NGVD of 1929.

REMARKS.--Records good. Flow regulated by Buckhorn Lake beginning December 1960 (station 03280800), and by Carr Fork Lake beginning January 1976 (station 03277446). Small diversions by City of Lexington waterworks.

COOPERATION.--Kentucky River Authority.

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

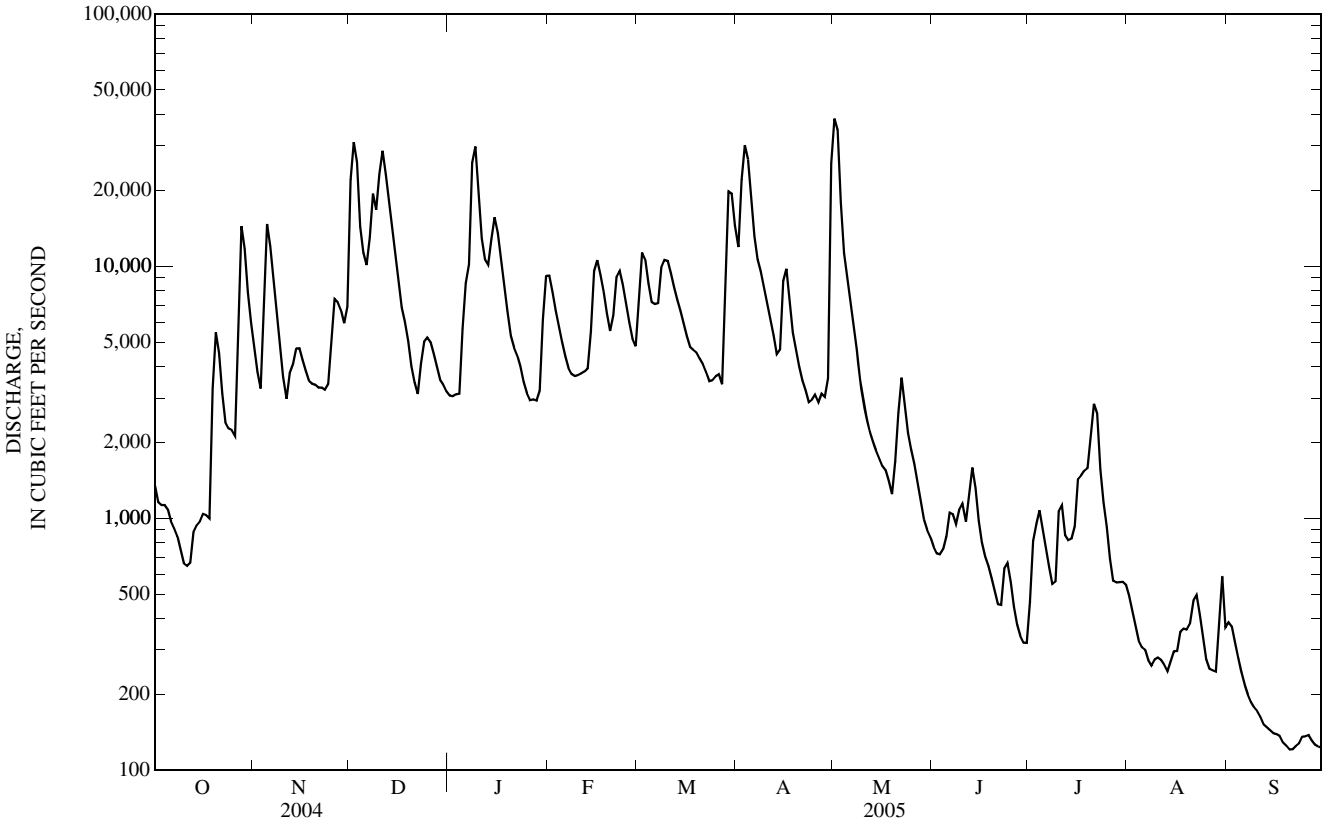
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,340	4,810	22,000	3,060	9,180	7,630	11,900	38,500	772	466	492	387
2	1,160	3,810	31,000	3,050	7,910	11,300	22,100	34,700	727	814	430	372
3	1,130	3,270	25,900	3,100	6,680	10,600	30,100	17,900	721	948	373	323
4	1,130	6,610	14,300	3,120	5,800	8,520	26,500	11,300	754	1,070	327	279
5	1,080	14,700	11,300	5,650	5,000	7,210	18,300	9,000	847	917	309	245
6	972	12,000	10,100	8,570	4,400	7,090	13,100	7,180	1,050	772	301	219
7	913	8,620	13,000	10,200	3,940	7,150	10,600	5,840	1,040	640	273	200
8	849	6,390	19,400	25,700	3,730	9,880	9,500	4,670	947	548	261	187
9	748	4,790	16,800	29,800	3,670	10,600	8,290	3,550	1,080	561	275	177
10	662	3,640	23,300	18,700	3,700	10,500	7,190	3,010	1,140	1,070	280	171
11	647	2,980	28,700	12,900	3,750	9,370	6,210	2,530	971	1,130	274	163
12	668	3,770	23,200	10,700	3,820	8,240	5,310	2,210	1,230	858	263	152
13	881	4,090	17,600	10,100	3,930	7,360	4,470	2,020	1,590	819	248	148
14	935	4,710	13,700	12,800	5,510	6,630	4,660	1,860	1,320	832	271	144
15	970	4,730	11,000	15,600	9,560	5,920	8,740	1,730	979	927	297	140
16	1,040	4,240	8,780	13,600	10,600	5,260	9,750	1,610	799	1,430	298	139
17	1,030	3,850	6,840	10,700	9,240	4,790	7,390	1,550	705	1,480	355	137
18	999	3,510	5,990	8,520	7,910	4,670	5,460	1,400	648	1,550	365	129
19	3,270	3,420	5,060	6,650	6,510	4,560	4,680	1,250	580	1,580	362	125
20	5,450	3,390	4,020	5,280	5,540	4,310	3,990	1,680	513	2,120	382	121
21	4,530	3,300	3,460	4,760	6,390	4,100	3,520	2,640	457	2,840	471	121
22	3,130	3,300	3,110	4,420	9,060	3,810	3,220	3,620	453	2,600	495	125
23	2,400	3,230	4,110	3,990	9,570	3,500	2,880	2,840	632	1,570	414	128
24	2,270	3,400	5,020	3,460	8,410	3,530	2,960	2,180	663	1,160	333	136
25	2,240	5,130	5,210	3,140	7,110	3,650	3,090	1,870	560	928	275	137
26	2,120	7,410	5,000	2,950	6,000	3,720	2,890	1,630	446	694	253	138
27	6,230	7,210	4,490	2,960	5,160	3,400	3,120	1,390	378	565	249	131
28	14,400	6,700	3,970	2,930	4,810	7,010	3,030	1,160	342	556	246	126
29	11,800	5,940	3,540	3,210	---	19,800	3,590	986	321	559	402	124
30	7,880	6,920	3,390	6,160	---	19,400	25,500	900	320	561	588	123
31	5,970	---	3,180	9,140	---	14,500	---	844	---	545	369	---
TOTAL	88,844	159,870	356,470	264,920	176,890	238,010	272,040	173,550	22,985	33,110	10,531	5,247
MEAN	2,866	5,329	11,500	8,546	6,318	7,678	9,068	5,598	766	1,068	340	175
MAX	14,400	14,700	31,000	29,800	10,600	19,800	30,100	38,500	1,590	2,840	588	387
MIN	647	2,980	3,110	2,930	3,670	3,400	2,880	844	320	466	246	121

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2005, BY WATER YEAR (WY)

MEAN	1,890	5,478	8,753	7,448	11,250	6,357	9,378	6,517	7,069	1,840	1,238	2,849
MAX	2,866	7,340	11,500	10,880	17,400	7,678	11,810	7,664	10,310	3,210	2,738	8,121
(WY)	(2005)	(2004)	(2005)	(2004)	(2003)	(2005)	(2003)	(2003)	(2003)	(2004)	(2003)	(2004)
MIN	893	3,764	7,379	2,924	6,318	4,736	7,256	5,598	766	1,068	298	175
(WY)	(2004)	(2003)	(2003)	(2003)	(2005)	(2003)	(2004)	(2005)	(2005)	(2005)	(2002)	(2005)

03282290 KENTUCKY RIVER AT LOCK 11 NEAR COLLEGE HILL, KY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 2002 - 2005	
ANNUAL TOTAL	2,549,435		1,802,467			
ANNUAL MEAN	6,966		4,938		5,908	
HIGHEST ANNUAL MEAN					6,615	2004
LOWEST ANNUAL MEAN					4,938	2005
HIGHEST DAILY MEAN	44,600	Feb 8	38,500	May 1	55,900	Feb 18, 2003
LOWEST DAILY MEAN	561	Aug 23	121	Sep 20	118	Sep 12, 2002
ANNUAL SEVEN-DAY MINIMUM	657	Aug 19	126	Sep 18	126	Sep 18, 2005
MAXIMUM PEAK FLOW			39,200	May 1	56,500	Feb 18, 2003
MAXIMUM PEAK STAGE			26.38	May 1	35.06	Feb 18, 2003
10 PERCENT EXCEEDS	17,000		11,500		13,200	
50 PERCENT EXCEEDS	4,180		3,180		3,540	
90 PERCENT EXCEEDS	1,090		275		635	



03282500 RED RIVER NEAR HAZEL GREEN, KY

LOCATION.--Lat 37°48'44", long 83°27'50", Wolfe County, Hydrologic Unit 05100204, on right bank 600 ft upstream from Buck Creek, 0.3 mi downstream from Chapel Branch, 2.7 mi northwest of Hazel Green, and at mile 72.7.

DRAINAGE AREA.--65.8 mi^2.

PERIOD OF RECORD.--April 1954 to current year.

REVISED RECORDS.--WRD KY 72-1: 1971.

GAGE.--Water-stage recorder with telemetry, crest-stage gage, and concrete control. Datum of gage is 870.11 ft NGVD of 1929.

REMARKS.--Records good except for daily discharges below 2.0 ft^3/s and for those estimated, which are poor.

COOPERATION.--Kentucky Natural Resources and Environmental Protection Cabinet.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,100 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov 4	1345	1,310	5.65	Apr 2	1345	1,340	5.74
Dec 1	0845	1,450	6.06	Apr 30	1845	*3,390	*11.24
Jan 8	1445	1,720	6.82				

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

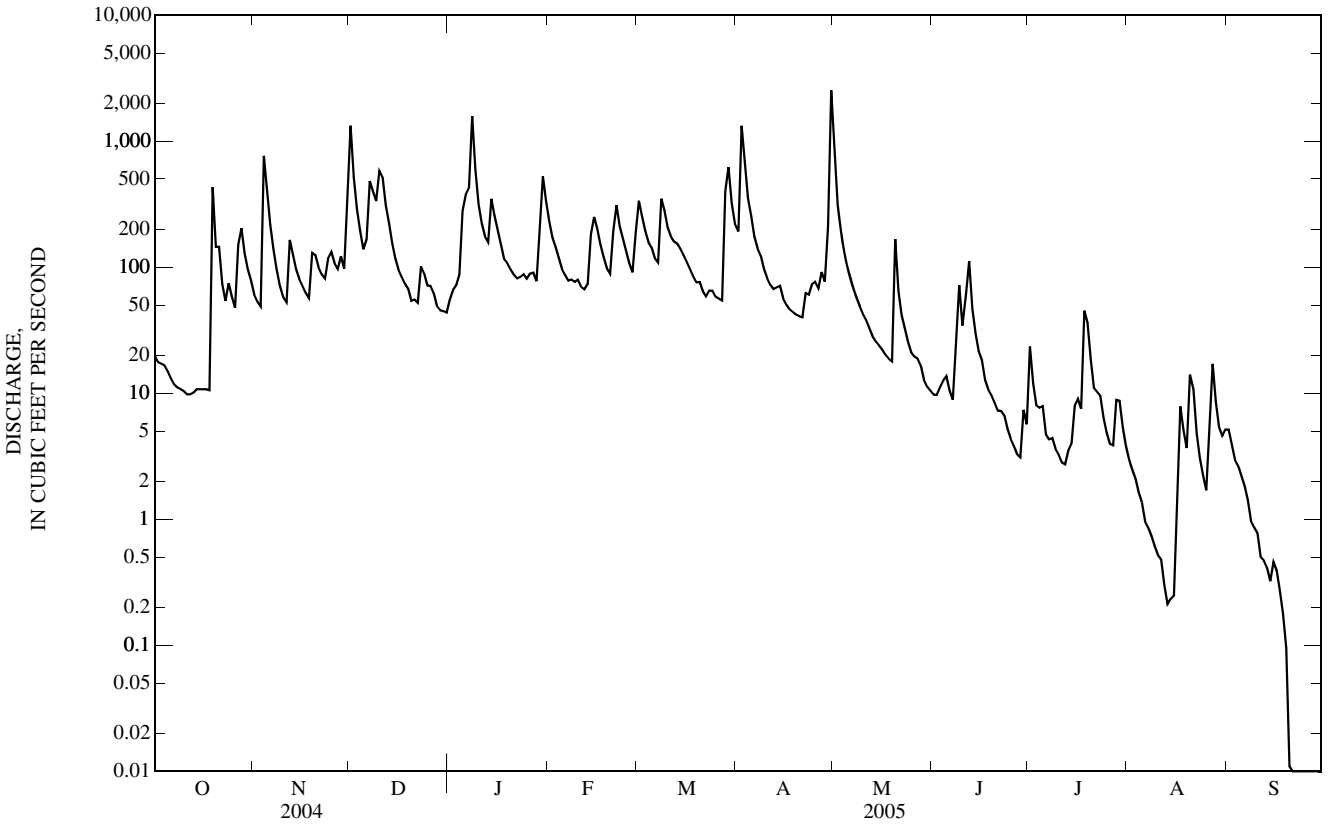
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	61	1,330	55	230	336	192	1,050	9.8	23	3.0	5.1
2	18	53	516	66	171	251	1,320	316	9.7	12	2.5	3.9
3	17	49	287	72	144	193	689	197	11	8.0	2.1	3.0
4	17	765	193	87	118	158	350	135	13	7.7	1.6	2.6
5	15	417	138	280	96	143	254	101	14	7.9	1.4	2.2
6	13	217	166	377	86	118	174	82	10	4.7	0.97	1.8
7	12	139	480	425	78	109	141	67	8.9	4.3	0.86	1.4
8	11	96	399	1,570	80	350	123	57	26	4.4	0.74	0.97
9	11	71	334	594	76	281	97	49	72	3.6	0.61	0.86
10	10	58	583	317	79	206	82	42	34	3.3	0.52	0.78
11	9.8	53	519	222	70	175	72	38	60	2.8	0.48	0.50
12	9.8	164	311	176	67	160	67	33	111	2.7	0.30	0.47
13	10	126	225	159	73	154	69	28	47	3.5	0.21	0.41
14	11	96	156	348	182	140	71	26	30	4.0	0.23	0.32
15	11	80	117	255	251	125	57	24	22	7.9	0.25	0.46
16	11	71	95	197	201	110	50	22	18	9.0	1.1	0.39
17	11	63	84	150	150	97	47	20	13	7.5	7.8	0.27
18	11	57	74	115	120	85	44	19	11	45	5.1	0.18
19	429	130	67	107	98	76	42	18	9.6	36	3.7	0.09
20	145	125	54	95	89	76	41	167	8.4	19	14	0.01
21	145	100	55	87	194	64	40	65	7.3	11	11	0.00
22	73	88	52	81	310	59	62	42	7.2	10	4.8	0.00
23	54	81	101	84	211	65	60	32	6.7	9.5	3.1	0.00
24	74	117	90	88	167	65	73	26	5.2	6.4	2.2	0.00
25	58	131	71	81	133	58	77	21	4.3	4.8	1.7	0.00
26	48	108	71	89	107	56	68	20	3.8	4.0	6.3	0.00
27	151	97	62	91	91	54	91	19	3.3	3.8	17	0.00
28	204	122	49	77	187	405	77	17	3.1	8.9	8.5	0.00
29	128	97	46	230	---	621	209	13	7.4	8.7	5.4	0.00
30	96	308	45	526	---	323	2,530	11	5.6	5.4	4.6	0.00
31	78	---	44	333	---	223	---	10	---	3.8	5.2	---
TOTAL	1,911.6	4,140	6,814	7,434	3,859	5,336	7,269	2,767	592.3	292.6	117.27	25.71
MEAN	61.7	138	220	240	138	172	242	89.3	19.7	9.44	3.78	0.86
MAX	429	765	1,330	1,570	310	621	2,530	1,050	111	45	17	5.1
MIN	9.8	49	44	55	67	54	40	10	3.1	2.7	0.21	0.00
CFSM	0.94	2.10	3.34	3.64	2.09	2.62	3.68	1.36	0.30	0.14	0.06	0.01
IN.	1.08	2.34	3.85	4.20	2.18	3.02	4.11	1.56	0.33	0.17	0.07	0.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 2005, BY WATER YEAR (WY)

MEAN	16.9	53.1	113	132	178	188	157	104	49.0	32.8	24.4	18.2
MAX	138	227	555	357	555	523	472	318	351	159	141	273
(WY)	(1990)	(1986)	(1979)	(1974)	(1989)	(1955)	(1972)	(1983)	(1997)	(2001)	(1974)	(2004)
MIN	0.22	0.54	2.76	17.5	27.6	49.1	16.6	13.9	1.19	0.99	0.27	0.05
(WY)	(1964)	(1956)	(1964)	(1981)	(1968)	(1969)	(1986)	(1986)	(1988)	(1999)	(1957)	(1999)

03282500 RED RIVER NEAR HAZEL GREEN, KY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1954 - 2005	
ANNUAL TOTAL	57,644.6		40,558.48			
ANNUAL MEAN	157		111		88.8	
HIGHEST ANNUAL MEAN					153	1994
LOWEST ANNUAL MEAN					39.6	1969
HIGHEST DAILY MEAN	3,510	May 31	2,530	Apr 30	6,170	Dec 9, 1978
LOWEST DAILY MEAN	3.6	Sep 2	0.00	Sep 21	0.00	Sep 14, 1954
ANNUAL SEVEN-DAY MINIMUM	5.6	Aug 17	0.00	Sep 21	0.00	Sep 12, 1955
MAXIMUM PEAK FLOW			3,390	Apr 30	9,080	Feb 27, 1962
MAXIMUM PEAK STAGE			11.24	Apr 30	22.12	Feb 27, 1962
INSTANTANEOUS LOW FLOW					0.00	Sep 14, 1954
ANNUAL RUNOFF (CFSM)	2.39		1.69		1.35	
ANNUAL RUNOFF (INCHES)	32.59		22.93		18.33	
10 PERCENT EXCEEDS	350		254		205	
50 PERCENT EXCEEDS	61		58		31	
90 PERCENT EXCEEDS	11		1.5		1.5	



03283500 RED RIVER AT CLAY CITY, KY

LOCATION.--Lat 37°51'53", long 83°56'01", Powell County, Hydrologic Unit 05100204, on right bank 25 ft upstream from bridge on State Highway 15, 0.1 mi downstream from Skinner Branch, 0.4 mi upstream from Brush Creek, 0.5 mi west of Clay City, and at mile 21.6.

DRAINAGE AREA.--362 mi^2.

PERIOD OF RECORD.--October 1930 to March 1932, April 1938 to current year. Monthly discharge only for October 1930, published in WSP 1305.

REVISED RECORDS.--WSP 1275: 1931-32. WSP 1385: Drainage area.

GAGE.--Water-stage recorder with telemetry and crest-stage gage. Datum of gage is 600.47 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers). Prior to Aug. 14, 1939, nonrecording gages, Aug. 14, 1939, to Aug. 13, 1975, water-stage recorder at site 50 ft downstream at same datum.

REMARKS.--Records good except for periods of estimated record, which are poor. Flow diversions by Clay City Water Plant, which can be significant during low-flow periods.

COOPERATION.--U.S. Army Corps of Engineers, Louisville District and Kentucky River Authority.

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

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec 2	1500	5,140	14.74	May 1	1230	*9,630	*18.34
Jan 9	unknown	unknown	unknown				

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	141	500	3,730	486	1,060	1,010	931	8,020	83	73	35	201
2	135	465	4,490	516	815	960	e2,440	5,220	82	134	30	120
3	157	473	2,070	674	713	769	e3,890	1,180	95	89	e26	77
4	141	2,730	1,050	675	628	664	e2,500	790	120	67	22	54
5	121	3,800	779	1,360	543	614	1,230	595	116	63	20	41
6	105	1,440	723	e1,790	494	568	871	481	96	88	19	33
7	94	866	1,650	e1,920	462	607	705	410	87	100	17	28
8	87	651	2,520	e3,050	469	1,930	670	360	99	79	16	25
9	83	515	1,490	e7,250	473	1,560	610	321	147	48	16	22
10	79	447	1,710	e3,530	494	1,130	515	288	186	38	15	21
11	75	411	1,970	1,230	476	867	466	259	206	33	14	19
12	73	711	1,540	929	447	791	437	232	215	29	14	18
13	112	828	1,090	826	464	771	439	208	235	82	16	17
14	157	609	813	1,800	856	684	489	191	171	146	16	16
15	129	514	648	1,500	1,270	610	444	210	133	125	13	15
16	125	465	551	1,030	1,030	551	400	187	109	150	16	15
17	106	435	499	802	796	507	372	161	88	124	27	15
18	97	409	461	624	640	469	355	144	74	235	55	14
19	3,410	452	434	541	545	435	342	150	65	303	58	13
20	3,590	709	398	534	495	435	327	683	59	215	45	13
21	941	593	364	509	711	411	312	563	53	175	52	13
22	690	509	380	487	1,080	380	340	318	48	111	38	12
23	508	471	654	508	926	380	414	270	44	93	40	12
24	588	536	727	410	751	511	541	231	40	74	29	12
25	568	983	529	451	649	458	510	183	37	57	22	12
26	472	697	478	461	556	424	469	156	35	47	28	14
27	1,030	588	417	473	490	405	725	139	32	39	103	14
28	1,750	738	e410	422	574	1,380	578	124	30	35	153	17
29	1,030	691	401	713	---	2,990	685	112	30	37	251	24
30	732	1,120	399	1,350	---	1,990	3,480	100	40	54	542	22
31	597	---	389	1,280	---	1,130	---	90	---	46	241	---
TOTAL	17,923	24,356	33,764	38,131	18,907	26,391	26,487	22,376	2,855	2,989	1,989	929
MEAN	578	812	1,089	1,230	675	851	883	722	95.2	96.4	64.2	31.0
MAX	3,590	3,800	4,490	7,250	1,270	2,990	3,890	8,020	235	303	542	201
MIN	73	409	364	410	447	380	312	90	30	29	13	12

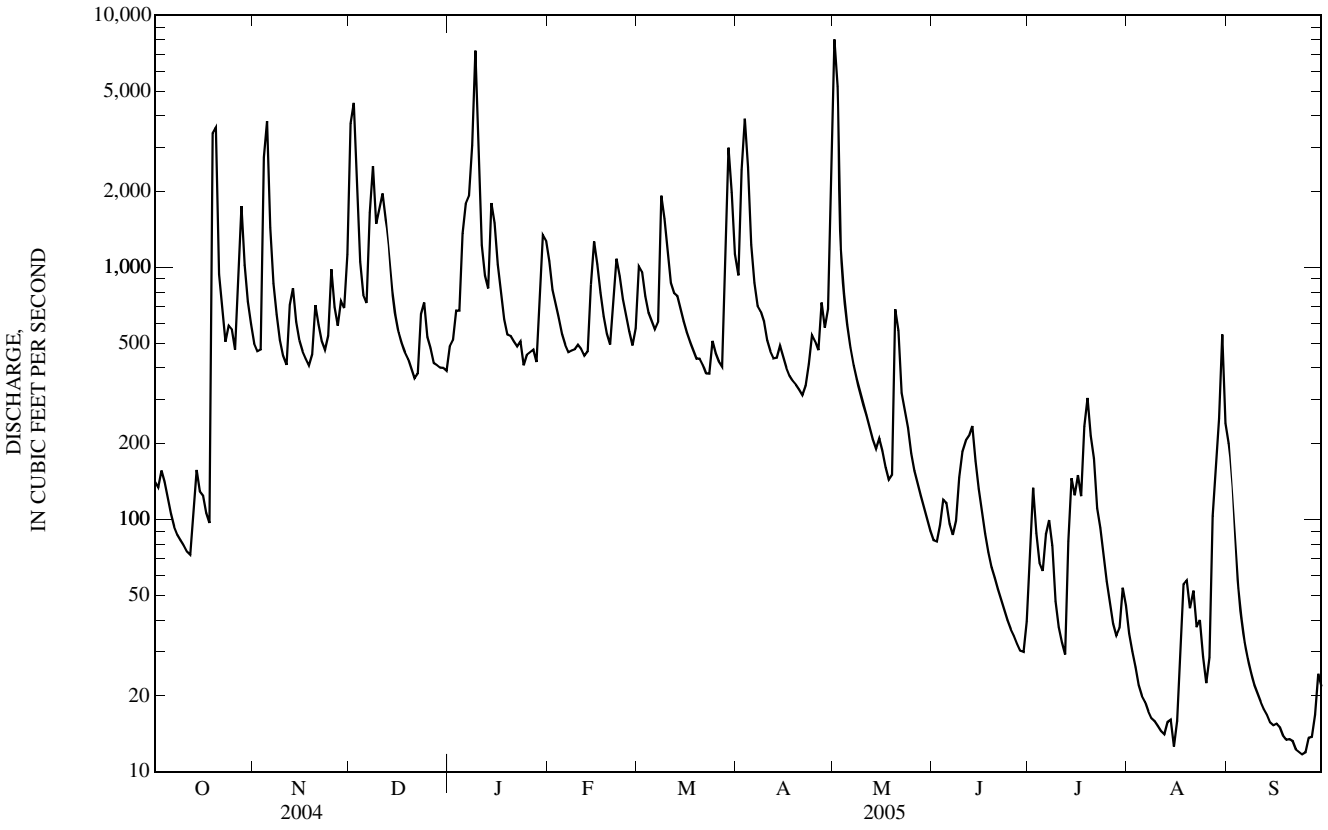
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 2005, BY WATER YEAR (WY)

MEAN	96.3	285	604	776	1,009	1,062	823	562	321	267	179	125
MAX	928	1,220	3,036	2,634	3,564	3,048	2,406	1,943	2,246	1,845	1,179	1,602
(WY)	(1990)	(1987)	(1979)	(1950)	(1989)	(1955)	(1972)	(1995)	(1997)	(1938)	(1938)	(2004)
MIN	4.41	9.75	19.7	43.2	127	258	110	54.6	23.9	5.01	18.2	6.15
(WY)	(1964)	(1954)	(1954)	(1931)	(1954)	(1969)	(1986)	(1941)	(1988)	(1944)	(1957)	(1984)

03283500 RED RIVER AT CLAY CITY, KY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1931 - 2005	
ANNUAL TOTAL	346,074		217,097			
ANNUAL MEAN	946		595		502	
HIGHEST ANNUAL MEAN					890	2004
LOWEST ANNUAL MEAN					158	1941
HIGHEST DAILY MEAN	16,200	Jun 1	8,020	May 1	26,100	Dec 9, 1978
LOWEST DAILY MEAN	65	Aug 28	12	Sep 22	1.2	Aug 10, 1944
ANNUAL SEVEN-DAY MINIMUM	85	Oct 6	12	Sep 19	2.0	Oct 2, 1930
MAXIMUM PEAK FLOW			9,630	May 1	28,800	Dec 9, 1978
MAXIMUM PEAK STAGE			18.34	May 1	26.75	Dec 9, 1978
INSTANTANEOUS LOW FLOW					1.2	Aug 10, 1944
10 PERCENT EXCEEDS	1,840		1,270		1,170	
50 PERCENT EXCEEDS	456		411		186	
90 PERCENT EXCEEDS	133		25		22	

e Estimated



03284000 KENTUCKY RIVER AT LOCK 10 NEAR WINCHESTER, KY

LOCATION.--Lat 37°53'41", long 84°15'44", Madison County, Hydrologic Unit 05100205, on left bank at Lock 10, 0.9 mi downstream from Otter Creek, 8.0 mi southwest of Winchester, and at mile 176.4.

DRAINAGE AREA.--3,955 mi^2.

PERIOD OF RECORD.--October 1907 to current year.

REVISED RECORDS.--WSP 1275: 1908-52. 1955: Drainage area.

GAGE.--Water-stage recorder with telemetry. Datum of gage is 557.37 ft above sea level (Ohio River datum) or 556.76 ft NGVD of 1929. Feb. 2, 1940 to Aug. 10, 1943, water-stage recorder 1.1 mi upstream at different datum. Aug. 11, 1943 to June 12, 1978, nonrecording gage at present site and datum.

REMARKS.--Records fair. Flow regulated since December 1960 by Buckhorn Lake (station 03280800), since January 1976 by Carr Fork Lake (station 03277446).

COOPERATION.--Kentucky River Authority and U.S. Army Corps of Engineers, Louisville District.

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

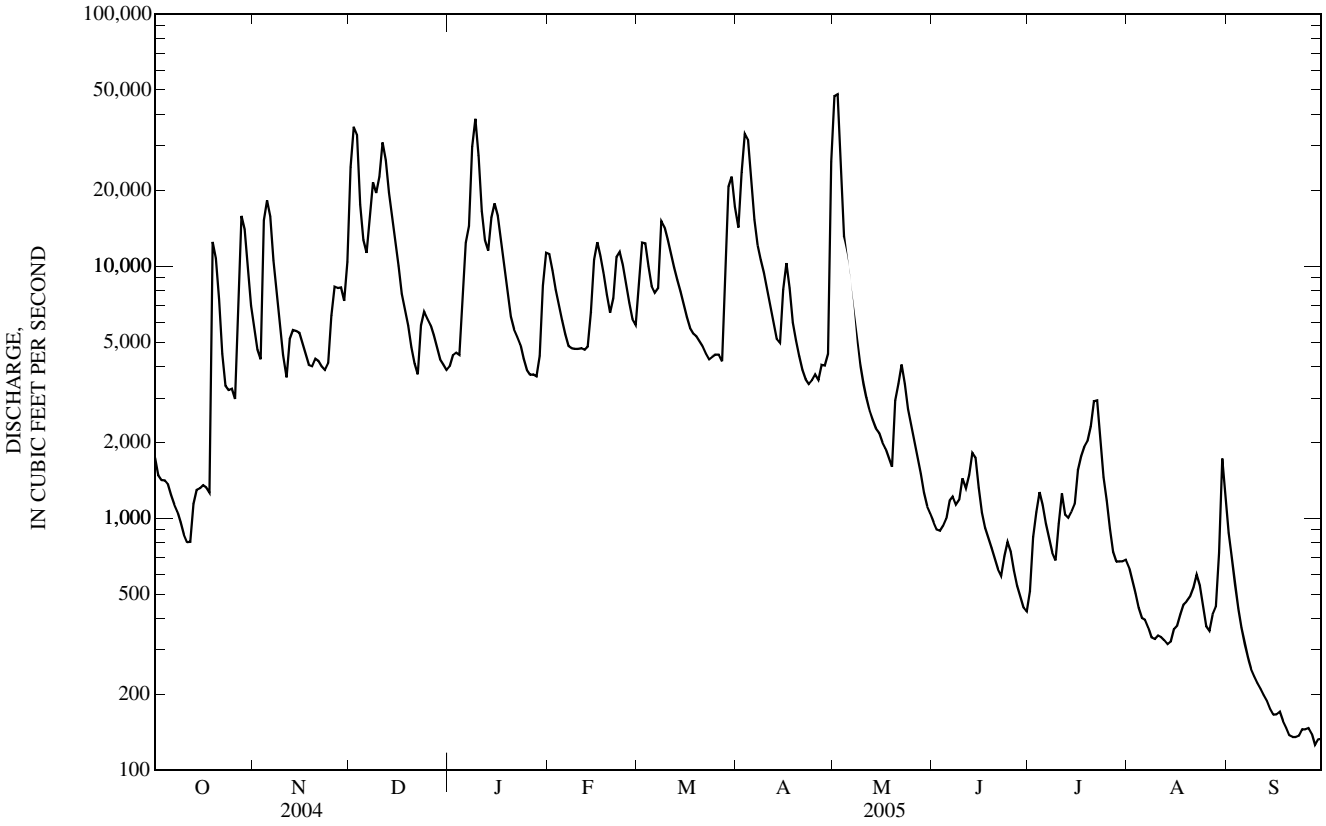
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,740	5,630	24,700	4,010	11,200	8,490	14,200	47,200	964	515	639	876
2	1,480	4,660	35,700	4,440	9,630	12,400	23,600	48,000	903	843	570	694
3	1,420	4,270	33,300	4,540	8,080	12,300	33,600	26,500	890	1,060	504	546
4	1,410	15,200	17,600	4,450	7,060	10,000	31,800	13,100	934	1,270	441	441
5	1,370	18,200	12,700	7,620	6,090	8,340	21,300	10,100	999	1,130	403	369
6	1,240	15,800	11,300	12,400	5,360	7,850	15,300	8,000	1,170	949	396	322
7	1,140	10,500	15,500	14,500	4,830	8,170	12,100	6,510	1,220	833	368	282
8	1,060	7,640	21,500	29,800	4,730	15,100	10,600	5,280	1,130	731	336	253
9	965	5,730	19,500	38,400	4,700	14,300	9,360	4,150	1,180	681	332	236
10	863	4,440	22,600	27,400	4,710	12,800	7,980	3,480	1,440	952	343	222
11	805	3,620	30,900	16,500	4,730	11,200	6,880	3,000	1,310	1,260	338	211
12	808	5,140	26,300	12,700	4,660	9,880	5,960	2,660	1,480	1,030	328	199
13	1,140	5,590	19,600	11,500	4,800	8,820	5,140	2,450	1,820	1,010	317	189
14	1,300	5,540	15,500	15,600	6,580	7,930	4,960	2,270	1,740	1,060	324	176
15	1,310	5,440	12,400	17,700	10,600	7,080	8,100	2,180	1,320	1,140	363	166
16	1,350	4,910	10,000	15,900	12,500	6,290	10,300	2,000	1,050	1,550	376	167
17	1,320	4,440	7,780	12,600	11,000	5,680	8,200	1,890	914	1,760	416	171
18	1,270	4,040	6,720	9,990	9,320	5,410	5,970	1,740	836	1,920	454	157
19	12,500	4,000	5,830	7,910	7,700	5,260	5,070	1,600	763	2,030	469	148
20	10,800	4,290	4,770	6,300	6,550	5,020	4,400	2,940	692	2,310	488	138
21	7,420	4,210	4,110	5,630	7,450	4,800	3,870	3,420	630	2,910	531	136
22	4,500	4,000	3,720	5,250	10,900	4,500	3,560	4,080	591	2,930	597	136
23	3,360	3,880	5,830	4,890	11,400	4,270	3,400	3,420	704	2,060	541	137
24	3,230	4,120	6,610	4,290	10,100	4,370	3,530	2,710	803	1,460	453	145
25	3,260	6,370	6,210	3,870	8,510	4,460	3,730	2,320	738	1,180	373	146
26	2,970	8,290	5,850	3,720	7,160	4,470	3,540	2,010	621	909	359	147
27	6,620	8,190	5,340	3,720	6,160	4,200	4,060	1,750	539	735	416	140
28	15,800	8,240	4,760	3,660	5,860	9,530	4,040	1,500	490	673	446	126
29	14,000	7,300	4,260	4,410	---	20,700	4,480	1,260	441	676	729	133
30	9,530	10,400	4,080	8,380	---	22,600	25,900	1,120	426	674	1,730	133
31	6,970	---	3,880	11,300	---	17,200	---	1,040	---	685	1,250	---
TOTAL	122,951	204,080	408,850	333,380	212,370	283,420	304,930	219,680	28,738	38,926	15,630	7,342
MEAN	3,966	6,803	13,190	10,750	7,585	9,143	10,160	7,086	958	1,256	504	245
MAX	15,800	18,200	35,700	38,400	12,500	22,600	33,600	48,000	1,820	2,930	1,730	876
MIN	805	3,620	3,720	3,660	4,660	4,200	3,400	1,040	426	515	317	126

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 2005, BY WATER YEAR (WY)

MEAN	1,712	3,736	7,106	8,211	10,460	10,490	8,547	6,982	4,334	1,906	1,562	1,423
MAX	12,850	10,270	23,400	19,950	25,060	25,290	18,210	19,600	15,220	4,640	4,916	10,340
(WY)	(1990)	(1987)	(1979)	(1979)	(1989)	(1994)	(1994)	(1984)	(1997)	(1992)	(1992)	(2004)
MIN	219	359	897	446	3,546	3,125	1,177	1,206	265	386	258	102
(WY)	(1981)	(2002)	(1981)	(1981)	(2002)	(1988)	(1986)	(1986)	(1988)	(1999)	(1986)	(1999)

03284000 KENTUCKY RIVER AT LOCK 10 NEAR WINCHESTER, KY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1977 - 2005	
ANNUAL TOTAL	3,108,780		2,180,297			
ANNUAL MEAN	8,494		5,973		5,513	
HIGHEST ANNUAL MEAN					9,815	1994
LOWEST ANNUAL MEAN					2,228	1988
HIGHEST DAILY MEAN	60,800	Jun 2	48,000	May 2	99,100	Dec 10, 1978
LOWEST DAILY MEAN	738	Sep 7	126	Sep 28	22	Oct 1, 1999
ANNUAL SEVEN-DAY MINIMUM	905	Sep 1	139	Sep 24	72	Sep 7, 1999
MAXIMUM PEAK FLOW			49,700	May 2	101,000	Dec 10, 1978
MAXIMUM PEAK STAGE			21.77	May 2	40.15	Dec 10, 1978
10 PERCENT EXCEEDS	20,700		14,700		13,800	
50 PERCENT EXCEEDS	4,960		4,040		2,480	
90 PERCENT EXCEEDS	1,420		371		335	



03284230 KENTUCKY RIVER AT LOCK 9 AT VALLEY VIEW, KY

LOCATION.--Lat 37°50'36", long 84°26'27", Madison County, Hydrologic Unit 05100205, at Lock and Dam No. 9 at Valley View, 1.0 mi below Tate Creek, and at mile 157.9.

DRAINAGE AREA.--4,101 mi^2.

PERIOD OF RECORD.--October 1999 to current year.

REVISIONS.--WDR KY-02-01, peak.

GAGE.--Water-stage recorder with telemetry. Datum of gage is 538.71 ft above NGVD of 1929.

REMARKS.--Records fair. Flow regulated by Buckhorn Lake beginning December 1960 (station 03280800), and by Carr Fork Lake beginning January 1976 (station 03277446). Small diversions by City of Lexington waterworks.

COOPERATION.--Kentucky River Authority.

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

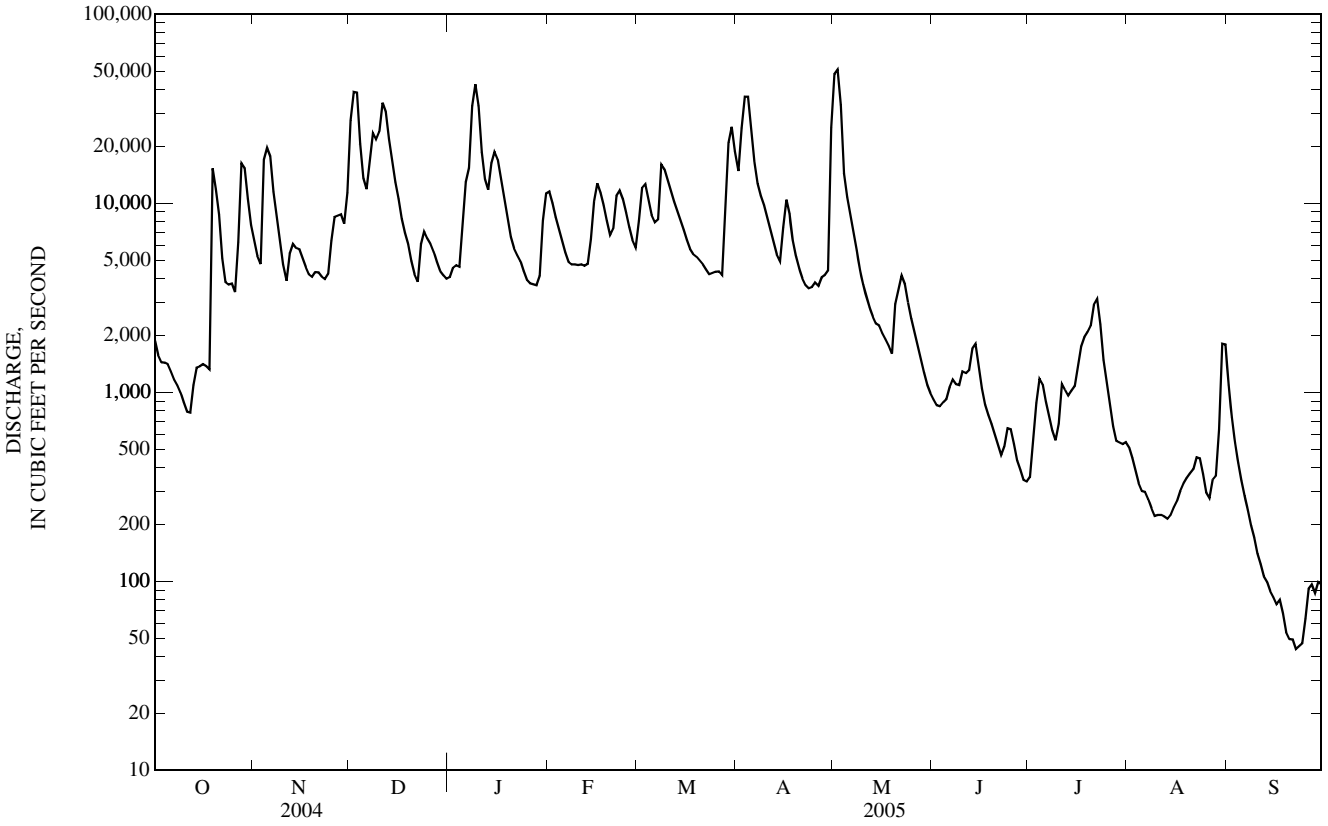
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,870	6,330	27,500	4,050	11,500	8,070	14,800	48,000	917	355	510	1,090
2	1,570	5,250	38,700	4,550	10,000	12,000	25,000	50,800	853	579	449	738
3	1,440	4,770	38,500	4,700	8,430	12,600	36,600	33,100	843	877	386	540
4	1,440	17,000	20,600	4,610	7,310	10,400	36,600	14,400	884	1,180	331	422
5	1,400	19,600	13,500	7,580	6,300	8,640	24,600	10,700	921	1,100	301	341
6	1,280	17,700	11,800	12,900	5,490	7,930	16,500	8,540	1,060	887	297	282
7	1,170	11,500	16,500	15,400	4,900	8,220	12,700	6,900	1,170	747	272	238
8	1,090	8,330	23,600	32,600	4,740	16,000	10,900	5,620	1,110	625	243	197
9	995	6,190	21,800	42,600	4,750	15,100	9,750	4,420	1,090	557	222	170
10	882	4,750	23,900	32,700	4,710	13,200	8,360	3,700	1,290	681	224	140
11	789	3,890	34,000	18,700	4,740	11,600	7,170	3,210	1,260	1,110	224	123
12	782	5,410	30,400	13,400	4,660	10,200	6,210	2,810	1,310	1,030	220	106
13	1,090	6,090	21,900	11,800	4,770	9,090	5,350	2,510	1,690	960	214	100
14	1,350	5,780	16,600	16,300	6,450	8,140	4,940	2,310	1,800	1,020	224	89
15	1,370	5,690	12,900	18,700	10,300	7,230	7,470	2,260	1,380	1,080	246	82
16	1,410	5,130	10,600	17,000	12,700	6,390	10,400	2,060	1,050	1,390	267	76
17	1,380	4,600	8,240	13,300	11,400	5,720	8,750	1,910	858	1,740	300	80
18	1,320	4,200	6,960	10,500	9,730	5,370	6,330	1,760	757	1,960	329	67
19	15,300	4,070	6,070	8,390	8,040	5,220	5,230	1,600	678	2,080	351	54
20	11,900	4,320	4,940	6,610	6,770	4,980	4,520	2,920	599	2,240	371	49
21	8,720	4,300	4,210	5,770	7,330	4,740	3,990	3,500	527	2,900	392	49
22	5,110	4,100	3,850	5,320	10,900	4,450	3,680	4,140	464	3,110	452	44
23	3,830	3,970	6,070	4,930	11,700	4,210	3,540	3,740	517	2,290	447	45
24	3,710	4,220	7,100	4,370	10,500	4,270	3,600	2,990	646	1,480	370	47
25	3,760	6,330	6,520	3,940	8,930	4,340	3,790	2,460	637	1,150	294	63
26	3,380	8,440	6,090	3,770	7,450	4,360	3,660	2,100	533	869	276	91
27	6,200	8,590	5,520	3,730	6,380	4,160	4,040	1,800	435	660	345	96
28	16,200	8,700	4,880	3,690	5,830	9,050	4,160	1,520	389	552	362	87
29	15,300	7,780	4,370	4,120	---	20,900	4,400	1,270	344	541	636	99
30	10,500	11,400	4,160	8,110	---	25,300	25,100	1,100	336	531	1,810	96
31	7,670	---	3,980	11,200	---	18,800	---	992	---	544	1,800	---
TOTAL	134,208	218,430	445,760	355,340	216,710	290,680	322,140	235,142	26,348	36,825	13,165	5,701
MEAN	4,329	7,281	14,380	11,460	7,740	9,377	10,740	7,585	878	1,188	425	190
MAX	16,200	19,600	38,700	42,600	12,700	25,300	36,600	50,800	1,800	3,110	1,810	1,090
MIN	782	3,890	3,850	3,690	4,660	4,160	3,540	992	336	355	214	44

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2005, BY WATER YEAR (WY)

MEAN	1,582	4,117	6,709	6,852	10,970	8,463	9,334	7,195	5,579	2,667	2,022	2,693
MAX	4,329	10,160	14,380	13,880	23,030	13,990	13,090	12,320	13,660	4,145	3,933	11,320
(WY)	(2005)	(2004)	(2005)	(2004)	(2003)	(2002)	(2003)	(2002)	(2004)	(2001)	(2001)	(2004)
MIN	256	366	1,317	1,452	3,892	4,572	3,631	1,652	878	1,188	287	190
(WY)	(2000)	(2002)	(2000)	(2000)	(2002)	(2000)	(2001)	(2001)	(2005)	(2005)	(2002)	(2005)

03284230 KENTUCKY RIVER AT LOCK 9 AT VALLEY VIEW, KY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1999 - 2005	
ANNUAL TOTAL	3,412,432		2,300,449			
ANNUAL MEAN	9,324		6,303		5,646	
HIGHEST ANNUAL MEAN					8,883	2004
LOWEST ANNUAL MEAN					2,909	2000
HIGHEST DAILY MEAN	61,300	Jun 2	50,800	May 2	71,800	Feb 18, 2003
LOWEST DAILY MEAN	731	Sep 7	44	Sep 22	40	Oct 1, 1999
ANNUAL SEVEN-DAY MINIMUM	928	Sep 1	50	Sep 19	50	Sep 19, 2005
MAXIMUM PEAK FLOW			52,000	May 2	72,600	Feb 18, 2003
MAXIMUM PEAK STAGE			24.18	May 2	36.12	Feb 18, 2003
10 PERCENT EXCEEDS	23,700		15,600		13,400	
50 PERCENT EXCEEDS	5,520		4,100		2,660	
90 PERCENT EXCEEDS	1,490		289		362	



03284500 KENTUCKY RIVER AT LOCK 8 NEAR CAMP NELSON, KY

LOCATION.--Lat 37°44'43", long 84°35'12", Jessamine County, Hydrologic Unit 05100205, on right bank at Lock and Dam No. 8, 1.5 mi downstream from Davis Creek, 1.8 mi upstream from Canoe Creek, 2.4 mi Southeast of Camp Nelson, and at mile 139.9.

DRAINAGE AREA.--4414 mi^2 of which 45.1 mi^2 does not contribute directly to surface runoff..

PERIOD OF RECORD.--July 1939 to September 1971, July 2002 to current year.

GAGE.--Water-stage recorder with telemetry. Datum of gage is 520.51 ft above NGVD of 1929.

REMARKS.--Records good except for those estimated and flows below 500 ft^3/s, which are poor. Flow requlated by Buckhorn Lake beginning December 1960 (station 03280800), and by Carr Fork Lake beginning January 1976 (station 03277446). Small diversion by City of Lexington Waterworks.

COOPERATION.--Kentucky River Authority.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,910	6,710	32,600	4,010	11,900	7,940	15,400	e46,000	937	296	475	1,470
2	1,630	5,670	38,300	4,620	10,400	11,800	26,500	e48,900	873	430	422	909
3	1,490	5,210	39,000	5,040	8,730	13,100	36,400	e39,700	844	751	361	611
4	1,440	23,200	23,700	4,960	7,560	10,900	37,500	e18,800	895	1,080	307	456
5	1,400	21,100	14,300	8,180	6,530	8,920	26,900	e12,200	913	1,100	273	349
6	1,300	19,500	12,500	14,400	5,700	8,000	17,400	8,760	1,010	906	262	275
7	1,170	12,600	18,700	17,400	5,080	8,230	13,300	7,060	1,130	735	233	221
8	1,090	8,900	24,500	36,400	4,860	17,700	11,400	5,770	1,100	603	206	175
9	1,010	6,620	23,400	40,500	4,900	16,400	9,930	4,550	1,050	518	181	148
10	897	5,080	24,200	35,200	4,820	14,000	8,490	3,690	1,200	548	175	126
11	780	4,080	34,400	20,700	4,880	12,300	7,270	3,160	1,250	962	178	107
12	754	6,550	32,700	14,300	4,810	10,600	6,320	2,730	1,250	1,020	173	90
13	1,280	6,930	23,200	12,400	5,050	9,380	5,570	2,440	1,530	935	171	82
14	1,580	6,170	17,300	17,800	7,020	8,380	5,020	2,320	1,710	975	174	75
15	1,510	6,000	13,500	19,300	10,200	7,440	6,720	2,300	1,430	1,030	197	70
16	1,540	5,460	10,900	18,000	13,200	6,590	10,100	2,060	1,080	1,230	239	64
17	1,470	4,850	8,510	14,100	11,900	5,890	8,940	1,900	875	1,580	277	66
18	1,400	4,390	7,030	11,000	10,100	5,480	6,530	1,770	746	1,790	299	59
19	14,200	4,190	6,170	8,760	8,360	5,300	5,280	1,650	659	1,920	321	51
20	12,600	4,480	5,210	6,920	7,050	5,070	4,530	3,340	567	2,020	337	43
21	9,490	4,480	4,240	5,960	7,820	4,830	3,950	3,500	488	2,490	353	41
22	5,520	4,230	3,830	5,450	11,300	4,530	3,570	3,990	419	2,840	389	37
23	3,990	4,090	7,820	5,040	12,100	4,250	3,400	3,760	424	2,310	411	35
24	3,750	4,730	7,950	4,460	11,000	4,270	3,400	2,960	544	1,560	347	36
25	3,910	6,940	6,850	3,970	9,290	4,350	3,610	2,430	571	1,180	270	41
26	3,450	8,790	6,320	3,760	7,750	4,360	e3,950	2,090	486	914	245	60
27	8,450	9,060	5,720	3,670	6,610	4,200	e3,950	1,810	384	679	290	79
28	16,500	9,210	5,050	3,610	5,970	8,850	e4,530	1,570	333	529	322	75
29	16,500	8,400	4,480	4,170	---	19,900	e4,990	1,340	295	493	597	76
30	11,500	14,400	4,190	8,550	---	26,400	e22,400	1,150	286	482	2,420	75
31	8,120	---	4,010	11,400	---	19,800	---	1,030	---	492	2,160	---
TOTAL	141,631	242,020	470,580	374,030	224,890	299,160	327,250	244,730	25,279	34,398	13,065	6,002
MEAN	4,569	8,067	15,180	12,070	8,032	9,650	10,910	7,895	843	1,110	421	200
MAX	16,500	23,200	39,000	40,500	13,200	26,400	37,500	48,900	1,710	2,840	2,420	1,470
MIN	754	4,080	3,830	3,610	4,810	4,200	3,400	1,030	286	296	171	35

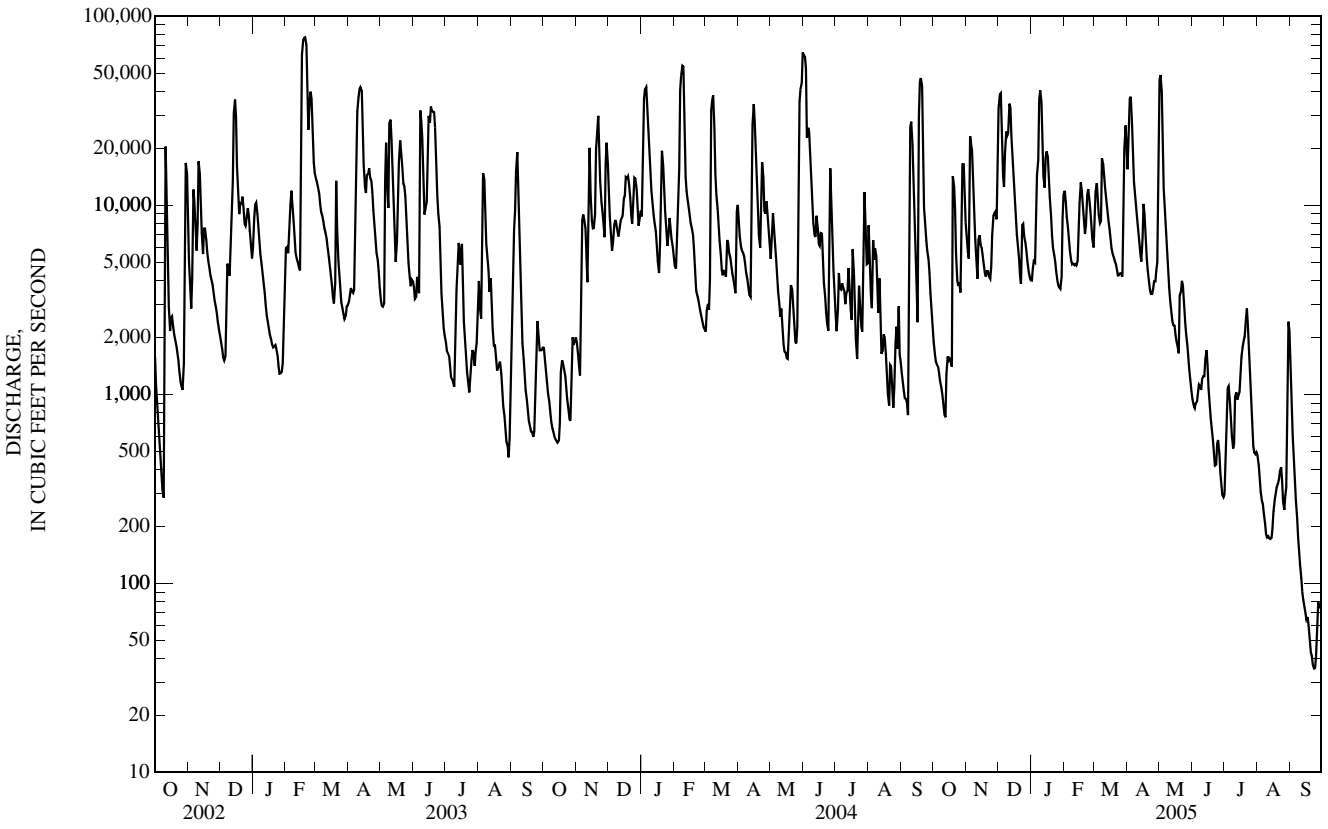
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2003 - 2005, BY WATER YEAR (WY)

MEAN	3,039	8,344	11,430	10,060	15,640	8,405	11,820	9,355	9,706	2,430	2,108	5,002
MAX	4,569	10,690	15,180	14,330	25,780	9,650	14,490	11,090	14,380	3,835	3,195	11,400
(WY)	(2005)	(2004)	(2005)	(2004)	(2003)	(2005)	(2003)	(2003)	(2003)	(2004)	(2003)	(2004)
MIN	1,099	6,270	9,379	3,792	8,032	6,325	10,080	7,895	843	1,110	421	200
(WY)	(2004)	(2003)	(2003)	(2003)	(2005)	(2003)	(2004)	(2005)	(2005)	(2005)	(2005)	(2005)

03284500 KENTUCKY RIVER AT LOCK 8 NEAR CAMP NELSON, KY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 2003 - 2005	
ANNUAL TOTAL	3,513,084		2,403,035			
ANNUAL MEAN	9,599		6,584		8,051	
HIGHEST ANNUAL MEAN					9,059	2004
LOWEST ANNUAL MEAN					6,584	2005
HIGHEST DAILY MEAN	64,000	May 31	48,900	May 2	77,100	Feb 19, 2003
LOWEST DAILY MEAN	754	Oct 12	35	Sep 23	35	Sep 23, 2005
ANNUAL SEVEN-DAY MINIMUM	997	Oct 7	41	Sep 19	41	Sep 19, 2005
MAXIMUM PEAK FLOW			50,100	May 2	92,800	Mar 2, 1962
MAXIMUM PEAK STAGE			27.43	May 2	40.30	Mar 2, 1962
10 PERCENT EXCEEDS	24,800		17,300		19,200	
50 PERCENT EXCEEDS	5,560		4,170		4,630	
90 PERCENT EXCEEDS	1,620		267		750	

e Estimated



03284520 EAST HICKMAN CREEK AT ANDOVER VILLAGE NEAR CADENTOWN, KY

LOCATION.--Lat 37°59'50", long 84°24'20", Fayette County, Hydrologic Unit 05100205, on right wingwall, downstream side of culvert in Andover Village, 1.6 mi west of intersection of Todds Road and Walnut Hill-Chilesburg Road, and at mile 12.4.

DRAINAGE AREA.--1.58 mi^2.

PERIOD OF RECORD.--October 1997 to current year.

GAGE.--Water-stage recorder with telemetry. Datum of gage is 972.71 ft above NGVD of 1929.

REMARKS.--Records fair except for December and January, which are poor.

COOPERATION.--Lexington-Fayette Urban County Government.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 65 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct 18	2215	140	3.84	Dec 7	0715	79	3.17
Oct 19	0310	*209	*4.36	May 19	2200	78	3.16
Nov 30	1555	84	3.23	Jul 19	1700	72	3.07

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.41	9.5	15	4.9	2.0	2.4	7.0	4.7	0.34	0.22	0.04	1.5
2	0.40	10	6.1	3.7	1.9	1.8	7.9	3.1	0.35	0.16	0.03	0.35
3	0.34	7.4	3.7	4.1	2.4	1.6	4.8	2.2	0.50	0.12	0.04	0.16
4	0.28	21	2.6	6.0	1.8	1.5	3.6	1.6	0.46	0.14	0.03	0.09
5	0.24	6.7	2.0	7.7	1.5	1.6	2.9	1.2	0.39	0.16	0.03	0.06
6	0.19	4.0	4.3	11	1.3	1.3	2.3	0.94	0.39	0.11	0.03	0.04
7	0.17	2.8	18	13	1.2	4.8	2.1	0.78	0.39	0.09	0.02	0.04
8	0.14	2.1	6.5	18	1.7	7.0	1.9	0.65	0.33	0.10	0.02	0.03
9	0.14	1.7	7.3	6.6	1.6	4.0	1.5	0.57	0.30	0.10	0.02	0.03
10	0.19	1.4	5.7	4.6	1.5	3.1	1.4	0.51	0.33	0.10	0.01	0.02
11	0.26	5.9	4.4	3.7	1.2	2.8	1.3	0.47	0.30	0.11	0.01	0.03
12	0.94	12	3.4	3.2	1.1	3.3	1.8	0.43	0.21	0.13	0.01	0.03
13	0.70	4.6	2.8	7.2	3.1	2.6	2.5	0.41	0.20	2.2	0.02	0.03
14	0.27	3.0	2.2	7.3	4.1	2.2	1.8	4.7	0.54	2.1	0.02	0.02
15	0.81	2.3	1.9	4.4	3.3	1.9	1.3	1.8	0.29	0.65	0.02	0.02
16	0.25	1.9	1.7	3.4	2.7	1.7	1.1	0.77	0.16	0.40	0.37	0.03
17	1.3	1.6	1.6	2.6	2.1	1.5	1.0	0.52	0.15	5.6	0.04	0.06
18	15	1.4	1.4	2.1	1.6	1.3	0.95	0.42	0.16	3.4	0.01	0.02
19	52	2.4	1.2	1.8	1.4	1.9	0.89	6.0	0.15	7.5	0.04	0.01
20	9.0	1.7	1.1	e1.6	1.9	2.2	0.85	4.9	0.14	2.3	0.04	0.01
21	4.9	1.2	1.1	e1.4	7.1	1.4	0.80	1.4	0.14	0.62	0.02	0.02
22	3.5	1.0	3.6	1.5	4.8	1.3	1.0	0.94	0.15	0.35	0.35	0.01
23	5.9	1.8	11	1.2	3.4	1.6	2.2	1.8	0.17	0.22	0.12	0.01
24	14	6.7	4.3	0.98	2.8	1.3	1.3	0.78	0.19	0.15	0.01	0.02
25	6.4	5.8	3.1	e0.85	2.2	1.2	0.97	0.79	0.18	0.11	0.00	0.02
26	4.3	3.0	2.4	e0.76	1.8	1.1	2.7	0.63	0.20	0.08	0.71	0.04
27	12	3.5	1.8	e0.68	1.5	3.0	2.1	0.54	0.19	0.06	1.7	0.05
28	6.2	3.8	1.5	0.61	2.7	11	1.6	0.40	0.19	0.05	0.81	0.03
29	4.2	2.4	e1.4	3.2	---	4.8	7.6	0.36	0.24	0.05	12	0.26
30	4.1	20	e1.3	3.4	---	3.6	15	0.33	0.21	0.04	16	0.04
31	2.7	---	e1.2	2.4	---	2.8	---	0.33	---	0.03	11	---
TOTAL	151.23	152.6	125.6	133.88	65.7	83.6	84.16	44.97	7.94	27.45	43.57	3.08
MEAN	4.88	5.09	4.05	4.32	2.35	2.70	2.81	1.45	0.26	0.89	1.41	0.10
MAX	52	21	18	18	7.1	11	15	6.0	0.54	7.5	16	1.5
MIN	0.14	1.0	1.1	0.61	1.1	1.1	0.80	0.33	0.14	0.03	0.00	0.01

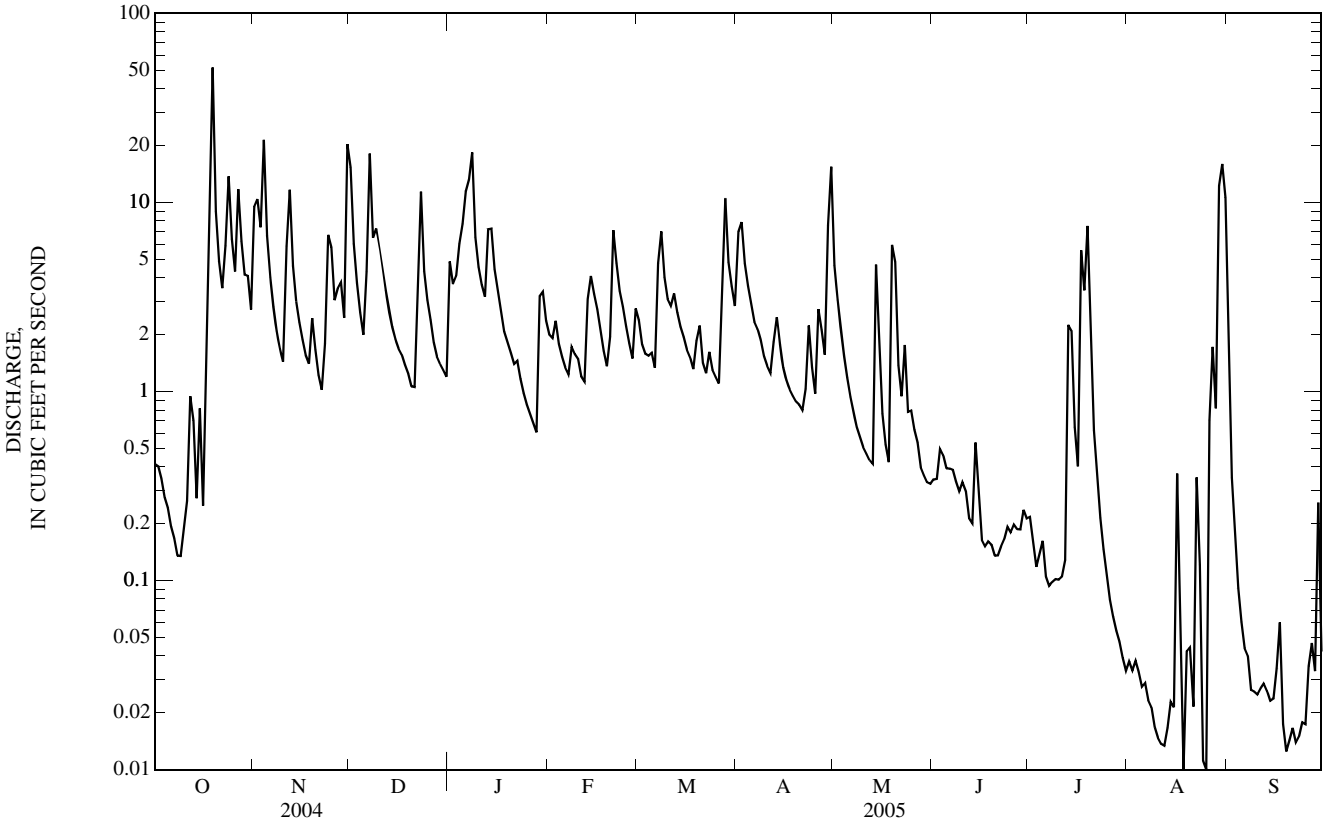
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2005, BY WATER YEAR (WY)

MEAN	1.94	2.43	2.51	3.23	3.65	3.49	2.72	3.43	2.30	1.59	1.18	1.59
MAX	5.19	6.39	4.05	5.69	7.84	6.57	5.34	7.39	6.73	4.78	3.89	4.38
(WY)	(2003)	(2004)	(2005)	(1998)	(2003)	(2002)	(1998)	(2003)	(1998)	(1998)	(2004)	(2003)
MIN	0.19	0.37	1.02	1.18	1.00	2.00	0.82	0.31	0.26	0.20	0.05	0.01
(WY)	(2001)	(1999)	(2000)	(2001)	(2002)	(2003)	(2001)	(1999)	(2005)	(2002)	(1999)	(1999)

03284520 EAST HICKMAN CREEK AT ANDOVER VILLAGE NEAR CADENTOWN, KY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1998 - 2005	
ANNUAL TOTAL	1,449.02		923.78			
ANNUAL MEAN	3.96		2.53		2.50	
HIGHEST ANNUAL MEAN					3.94	2003
LOWEST ANNUAL MEAN					1.48	1999
HIGHEST DAILY MEAN	58	Sep 17	52	Oct 19	63	Mar 20, 2002
LOWEST DAILY MEAN	0.12	Aug 19	0.00	Aug 25	0.00	Sep 20, 1998
ANNUAL SEVEN-DAY MINIMUM	0.19	Oct 5	0.01	Sep 18	0.00	Aug 31, 1999
MAXIMUM PEAK FLOW			209	Oct 19	269	Aug 31, 2003
MAXIMUM PEAK STAGE			4.36	Oct 19	4.78	Aug 31, 2003
INSTANTANEOUS LOW FLOW					0.00	Oct 1, 1999
10 PERCENT EXCEEDS	9.1		6.4		6.2	
50 PERCENT EXCEEDS	1.7		1.3		0.85	
90 PERCENT EXCEEDS	0.44		0.04		0.06	

e Estimated



03284525 EAST HICKMAN CREEK TRIBUTARY AT CHILESBURG ROAD NEAR LEXINGTON, KY

LOCATION.--Lat 37°59'18", long 84°24'40", Fayette County, Hydrologic Unit 05100205, on left bank, downstream side of bridge on Walnut Hill-Chilesburg Road, 0.9 mi northeast of Athens Road (#418), and 0.9 mi southwest of Todds Road (1927) and 3.1 mi east of Lexington.

DRAINAGE AREA.--0.96 mi^2.

PERIOD OF RECORD.--October 1997 to 2000, October 2003 to current year.

GAGE.--Water-stage recorder with telemetry. Datum of gage is 976.847 ft above NGVD of 1929.

REMARKS.--Records poor.

COOPERATION.--Lexington-Fayette Urban County Government.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 40 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct 18	2145	59	2.77	Oct 19	0220	*300	*4.40

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.11	6.0	13	2.8	1.4	1.3	2.7	5.4	0.14	0.34	0.02	5.6
2	0.02	5.6	7.2	2.8	1.3	0.82	6.5	3.5	0.19	0.18	0.03	2.2
3	0.02	4.0	4.5	2.8	1.8	0.67	4.2	2.2	0.29	0.11	0.03	0.52
4	0.01	11	3.7	3.8	1.3	0.63	3.2	1.3	0.23	0.11	0.02	0.28
5	0.00	6.2	2.6	6.0	1.1	0.62	2.4	1.0	0.17	0.18	0.02	0.17
6	0.00	3.2	3.6	7.5	0.89	0.55	1.6	0.78	0.13	0.17	0.02	0.12
7	0.00	2.3	9.3	7.0	0.77	1.4	1.2	0.62	0.14	0.15	0.02	0.10
8	0.00	1.8	5.8	15	1.0	5.7	1.0	0.51	0.16	0.13	0.01	0.09
9	0.00	1.5	5.5	7.4	1.0	3.5	0.72	0.42	0.16	0.13	0.02	0.09
10	0.00	1.2	5.4	4.7	1.0	2.4	0.59	0.39	0.32	0.08	0.02	0.08
11	0.00	2.7	4.2	3.9	0.70	1.9	0.49	0.32	0.43	0.08	0.03	0.07
12	0.01	8.7	3.3	3.3	0.57	2.0	0.62	0.27	0.27	0.10	0.15	0.06
13	0.03	3.0	2.0	3.9	1.5	1.7	1.1	0.25	0.34	1.4	0.11	0.05
14	0.03	2.1	1.3	6.5	2.9	1.3	0.83	1.5	0.52	2.0	0.07	0.05
15	0.03	1.6	1.0	4.1	2.2	1.1	0.47	2.7	0.42	1.9	0.06	0.06
16	0.20	1.3	0.89	3.2	1.6	0.98	0.36	0.62	0.23	0.83	0.86	0.08
17	0.47	1.1	0.78	2.4	1.2	1.1	0.31	0.36	0.21	2.1	0.28	0.13
18	3.8	1.0	0.68	1.8	0.89	0.88	0.27	0.27	0.18	5.6	0.57	0.11
19	61	1.7	0.58	1.6	0.73	0.90	0.22	0.99	0.13	1.9	0.34	0.09
20	8.7	1.1	0.44	e1.3	1.3	1.3	0.21	5.4	0.10	0.77	0.10	0.07
21	4.9	0.83	0.46	1.4	3.4	0.77	0.22	1.8	0.15	0.16	0.05	0.07
22	3.7	0.73	1.3	1.2	4.3	0.62	0.35	0.70	0.16	0.08	0.67	0.08
23	3.1	0.41	6.6	0.92	3.1	0.74	1.2	0.79	0.14	0.05	1.0	0.09
24	7.9	0.58	4.1	0.77	2.3	0.64	0.65	0.38	0.12	0.03	0.10	0.09
25	4.5	3.0	2.8	e0.65	1.7	0.57	0.42	0.27	0.10	0.02	0.05	0.03
26	3.7	2.3	1.6	e0.58	1.2	0.53	1.2	0.21	0.10	0.02	0.29	0.20
27	7.0	1.9	1.1	e0.51	0.92	0.98	1.7	0.18	0.08	0.01	2.4	0.20
28	7.3	3.5	e0.90	0.48	1.4	5.8	0.80	0.15	0.11	0.02	0.67	0.10
29	4.8	2.2	e0.84	1.5	---	4.1	2.4	0.13	0.14	0.02	7.9	0.66
30	2.7	9.4	e0.80	2.4	---	3.0	11	0.13	0.29	0.01	15	0.11
31	1.6	---	e0.76	1.7	---	1.9	---	0.13	---	0.02	18	---
TOTAL	125.63	91.95	97.03	103.91	43.47	50.40	48.93	33.67	6.15	18.70	48.91	11.65
MEAN	4.05	3.06	3.13	3.35	1.55	1.63	1.63	1.09	0.20	0.60	1.58	0.39
MAX	61	11	13	15	4.3	5.8	11	5.4	0.52	5.6	18	5.6
MIN	0.00	0.41	0.44	0.48	0.57	0.53	0.21	0.13	0.08	0.01	0.01	0.03

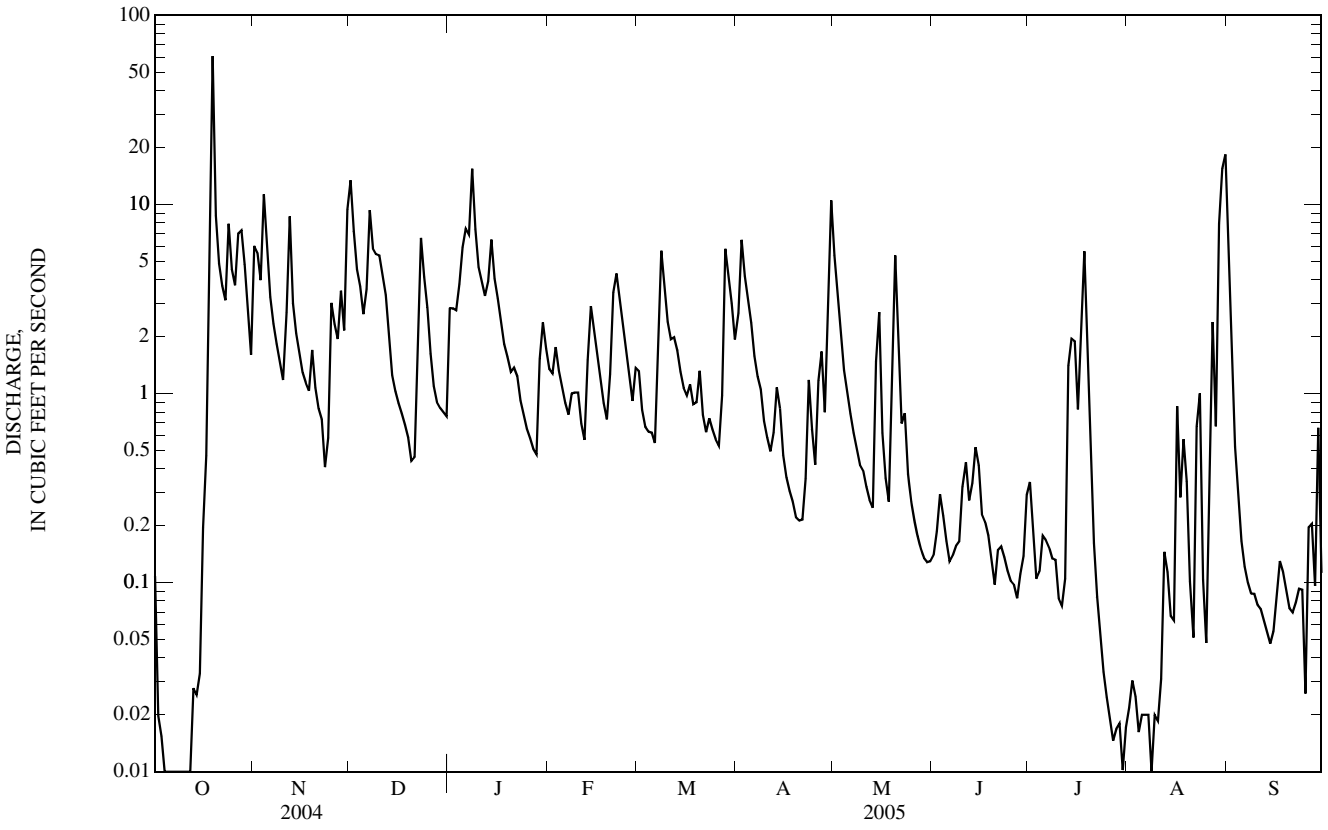
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2005, BY WATER YEAR (WY)

MEAN	2.14	3.37	1.41	2.50	3.39	3.27	1.63	2.81	1.46	4.84	5.79	5.05
MAX	11.7	12.7	3.13	4.38	8.80	13.0	3.28	7.38	3.65	26.9	25.4	27.9
(WY)	(2002)	(2002)	(2005)	(2001)	(2001)	(2002)	(1998)	(2001)	(2004)	(2002)	(2002)	(2002)
MIN	0.00	0.00	0.04	0.11	1.54	1.00	0.18	0.07	0.03	0.04	0.00	0.00
(WY)	(2000)	(2000)	(2000)	(2000)	(1999)	(2003)	(1999)	(1999)	(1999)	(1999)	(1999)	(1999)

03284525 EAST HICKMAN CREEK TRIBUTARY AT CHILESBURG ROAD NEAR LEXINGTON, KY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1998 - 2005	
ANNUAL TOTAL	1,043.24		680.40			
ANNUAL MEAN	2.85		1.86		1.53	
HIGHEST ANNUAL MEAN					2.60	2004
LOWEST ANNUAL MEAN					0.54	1999
HIGHEST DAILY MEAN	63	May 31	61	Oct 19	75	Mar 20, 2002
LOWEST DAILY MEAN	0.00	Oct 5	0.00	Oct 5	0.00	Sep 17, 1998
ANNUAL SEVEN-DAY MINIMUM	0.00	Oct 5	0.00	Oct 5	0.00	Sep 27, 1998
MAXIMUM PEAK FLOW			300	Oct 19	300	Oct 19, 2004
MAXIMUM PEAK STAGE			4.40	Oct 19	4.40	Oct 19, 2004
INSTANTANEOUS LOW FLOW					0.00	Oct 1, 1998
10 PERCENT EXCEEDS	6.2		4.8		3.8	
50 PERCENT EXCEEDS	1.1		0.77		0.33	
90 PERCENT EXCEEDS	0.22		0.05		0.00	

e Estimated



03284530 EAST HICKMAN CREEK AT DELONG ROAD NEAR EAST HICKMAN, KY

LOCATION.--Lat 37°56'59", long 84°27'19", Fayette County, Hydrologic Unit 05100205, on right bank, downstream side of bridge on Delong Road, 1.0 mi north of intersection with Walnut Hill Road, 1.6 mi south of intersection with Armstrong Mill Road, 2.0 mi north of East Hickman, and at mile 7.6.

DRAINAGE AREA.--15.1 mi^2.

PERIOD OF RECORD.--October 1997 to current year.

GAGE.--Water-stage recorder with telemetry. Datum of gage is 913.491 ft above NGVD of 1929.

REMARKS.--Records fair except those below 1.0 ft^3/s, which are poor.

COOPERATION.--Lexington-Fayette Urban County Government.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 400 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct 19	0325	*1,400	*6.48	No other peak greater than base discharge.			

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

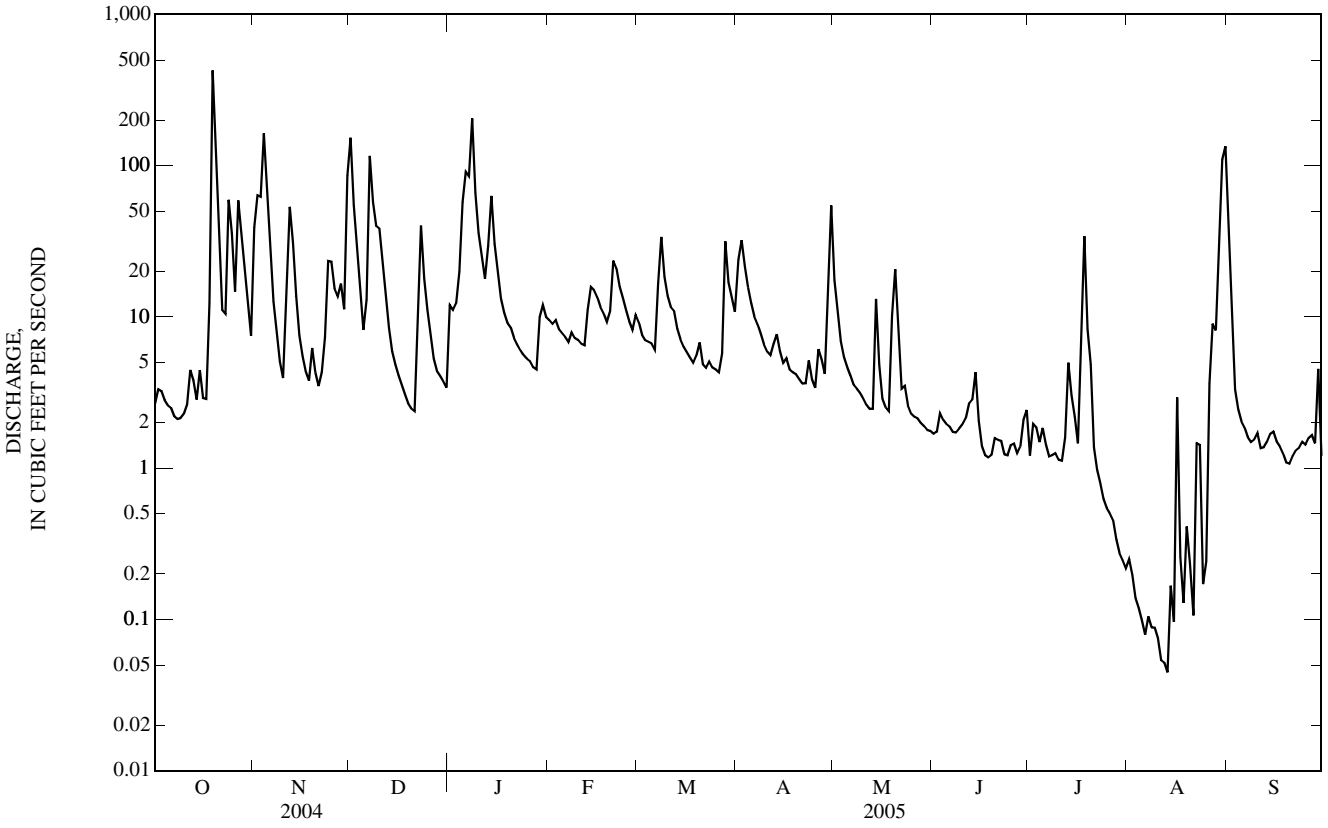
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.7	39	153	12	9.5	9.2	24	18	1.7	1.2	0.25	35
2	3.3	64	55	11	9.0	7.6	32	11	1.7	2.0	0.20	8.8
3	3.2	62	27	12	9.5	7.0	22	6.9	2.3	1.9	0.14	3.3
4	2.8	163	14	20	8.3	6.8	16	5.4	2.1	1.5	0.12	2.4
5	2.6	62	8.2	57	7.8	6.7	12	4.6	2.0	1.8	0.10	2.0
6	2.5	26	13	91	7.3	6.1	10	4.1	1.9	1.4	0.08	1.9
7	2.2	13	116	85	6.8	17	9.0	3.6	1.7	1.2	0.10	1.6
8	2.1	8.0	58	205	7.9	34	7.7	3.4	1.7	1.2	0.09	1.5
9	2.1	5.1	40	66	7.3	18	6.6	3.2	1.8	1.3	0.09	1.5
10	2.3	3.9	38	36	7.0	14	5.9	2.9	1.9	1.1	0.08	1.7
11	2.6	12	23	25	6.6	12	5.6	2.6	2.2	1.1	0.05	1.4
12	4.5	53	13	18	6.5	11	6.6	2.5	2.7	1.6	0.05	1.4
13	3.8	31	8.5	30	11	8.4	7.7	2.5	2.8	5.0	0.04	1.5
14	2.8	14	5.9	63	16	7.1	5.9	13	4.3	3.0	0.17	1.7
15	4.5	7.5	4.8	30	15	6.4	5.0	4.9	2.1	2.2	0.10	1.7
16	2.9	5.5	4.1	20	14	5.8	5.3	2.9	1.4	1.5	2.9	1.5
17	2.9	4.3	3.6	13	12	5.4	4.5	2.5	1.2	9.8	0.26	1.4
18	12	3.8	3.1	11	11	5.0	4.3	2.4	1.2	34	0.13	1.3
19	426	6.2	2.7	9.2	9.3	5.6	4.2	10	1.2	8.3	0.41	1.1
20	81	4.3	2.5	8.5	11	6.8	3.9	21	1.6	4.9	0.23	1.1
21	27	3.5	2.4	7.2	24	4.9	3.6	8.2	1.5	1.4	0.11	1.2
22	11	4.3	7.1	6.6	21	4.6	3.7	3.4	1.5	0.97	1.5	1.3
23	10	7.4	40	6.0	16	5.1	5.2	3.5	1.2	0.79	1.4	1.4
24	60	23	18	5.6	13	4.6	3.9	2.6	1.2	0.63	0.17	1.5
25	36	23	11	5.3	11	4.5	3.4	2.3	1.4	0.55	0.24	1.4
26	15	15	7.5	5.1	9.4	4.3	6.1	2.2	1.5	0.50	3.6	1.6
27	59	14	5.3	4.7	8.2	5.7	5.2	2.1	1.3	0.45	9.0	1.7
28	34	17	4.4	4.5	10	32	4.2	2.0	1.4	0.34	8.2	1.5
29	19	11	4.1	10	---	17	13	1.9	2.1	0.27	37	4.5
30	12	86	3.8	12	---	13	55	1.8	2.4	0.25	110	1.2
31	7.5	---	3.4	10	---	11	---	1.8	---	0.22	134	---
TOTAL	859.3	791.8	700.4	899.7	305.4	306.6	301.5	159.2	55.0	92.37	310.81	91.1
MEAN	27.7	26.4	22.6	29.0	10.9	9.89	10.1	5.14	1.83	2.98	10.0	3.04
MAX	426	163	153	205	24	34	55	21	4.3	34	134	35
MIN	2.1	3.5	2.4	4.5	6.5	4.3	3.4	1.8	1.2	0.22	0.04	1.1

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

MEAN	9.47	18.3	20.9	21.4	35.2	27.9	19.2	31.3	19.0	9.95	9.50	12.8
MAX	34.3	60.3	38.8	40.8	83.2	54.7	34.3	69.1	48.3	28.7	29.9	43.3
(WY)	(2003)	(2004)	(2004)	(2004)	(2003)	(2002)	(2002)	(2004)	(2003)	(1998)	(2004)	(2003)
MIN	1.00	1.25	1.70	3.94	10.9	9.89	7.25	1.86	1.24	2.98	0.09	0.18
(WY)	(1998)	(1999)	(2000)	(2000)	(2005)	(2005)	(1999)	(2000)	(1999)	(2005)	(1999)	(1999)

03284530 EAST HICKMAN CREEK AT DELONG ROAD NEAR EAST HICKMAN, KY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1998 - 2005	
ANNUAL TOTAL	11,531.4		4,873.18			
ANNUAL MEAN	31.5		13.4		19.5	
HIGHEST ANNUAL MEAN					35.9	2003
LOWEST ANNUAL MEAN					9.86	1999
HIGHEST DAILY MEAN	821	May 31	426	Oct 19	821	May 31, 2004
LOWEST DAILY MEAN	1.1	Jul 16	0.04	Aug 13	0.00	Aug 1, 1999
ANNUAL SEVEN-DAY MINIMUM	1.8	Aug 13	0.07	Aug 7	0.00	Aug 17, 1999
MAXIMUM PEAK FLOW			1,400	Oct 19	1,940	Jun 25, 2004
MAXIMUM PEAK STAGE			6.48	Oct 19	7.24	Jun 25, 2004
INSTANTANEOUS LOW FLOW					0.00	Sep 13, 2002
10 PERCENT EXCEEDS	69		31		47	
50 PERCENT EXCEEDS	11		4.9		5.1	
90 PERCENT EXCEEDS	2.6		1.2		0.51	



03284555 WEST HICKMAN CREEK AT ASH GROVE PIKE NEAR EAST HICKMAN, KY

LOCATION.--Lat 37°56'04", long 84°30'08", Jessamine County, Hydrologic Unit 05100205, on center pier, downstream side of bridge on Ash Grove Pike (#1980), 0.7 mi northwest of intersection with Macker Road, 1.9 mi northwest of East Hickman, 2.4 mi southeast of Nicholasville Road (US 27); and at mile 28.3.

DRAINAGE AREA.--20.5 mi^2.

PERIOD OF RECORD.--October 1997 to current year.

GAGE.--Water-stage recorder with telemetry. Datum of gage is 868.402 ft above NGVD of 1929.

REMARKS.--Records fair.

COOPERATION.--Lexington-Fayette Urban County Government.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct 19	0405	*3,200	*7.68	No other peak greater than base discharge.			

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

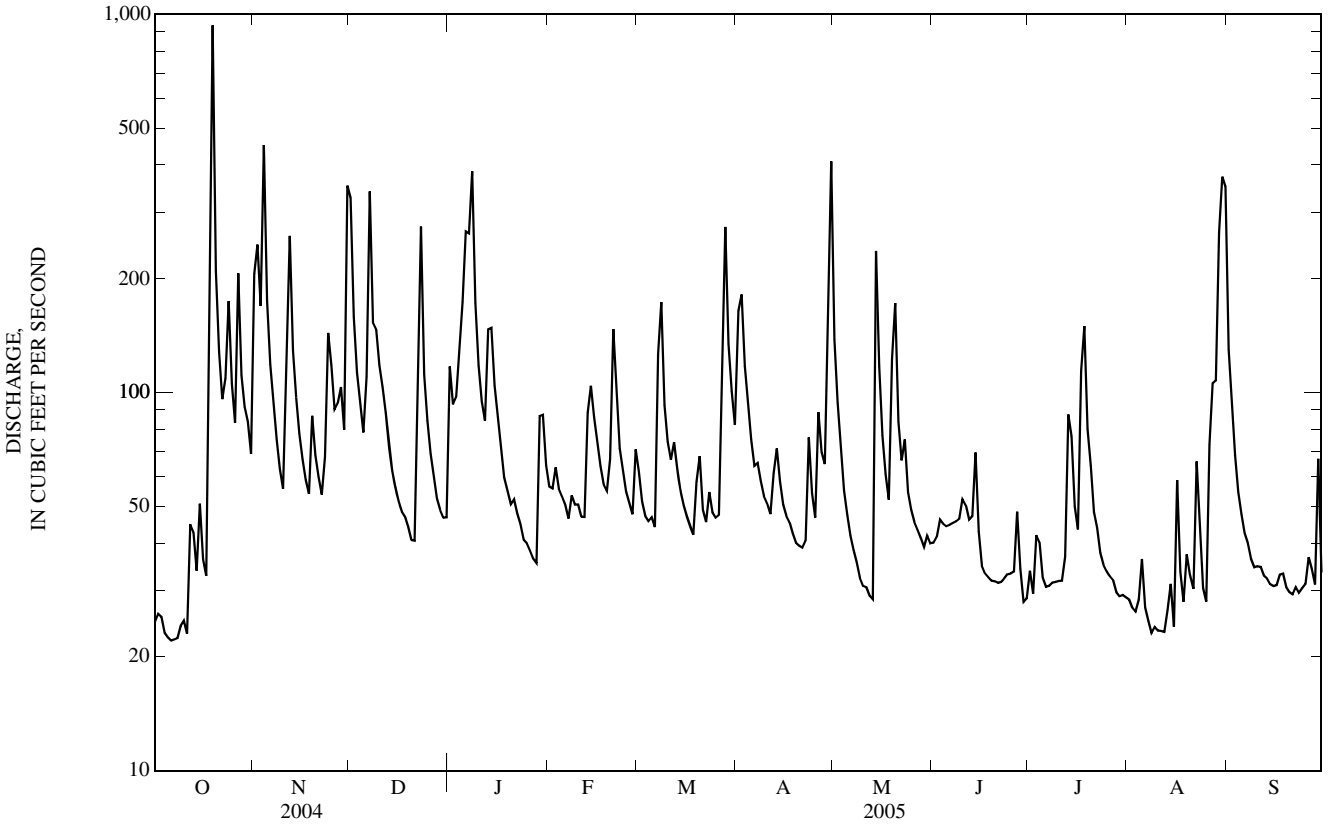
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	206	327	117	56	62	165	138	40	34	28	130
2	26	246	158	93	56	51	182	94	42	29	27	94
3	26	169	113	97	63	47	118	71	46	42	26	68
4	23	452	94	134	56	46	92	55	45	40	28	55
5	23	175	78	174	53	47	75	48	44	32	36	48
6	22	119	110	266	50	44	64	42	45	31	27	42
7	22	94	340	264	46	126	65	38	45	31	25	40
8	22	75	153	385	53	173	58	35	46	31	23	36
9	24	63	147	172	51	93	53	32	46	32	24	35
10	25	56	118	118	51	74	51	31	52	32	23	35
11	23	139	103	95	47	66	48	31	50	32	23	35
12	45	259	88	84	47	74	61	29	46	37	23	33
13	43	129	73	147	88	63	71	28	47	87	27	32
14	34	97	62	148	104	55	58	236	69	77	31	31
15	51	78	56	104	86	50	50	117	43	50	24	31
16	36	67	52	85	74	47	47	77	35	43	59	31
17	33	59	48	71	64	44	45	61	33	114	34	33
18	143	54	47	60	57	42	42	52	32	150	28	33
19	935	87	44	55	55	58	40	123	32	80	37	31
20	210	68	41	51	67	68	39	172	32	64	33	30
21	128	60	41	52	147	49	39	84	31	48	30	29
22	96	54	91	48	97	45	41	66	32	44	66	31
23	109	68	274	45	71	55	76	75	32	38	47	30
24	175	144	111	41	63	48	54	55	33	35	30	30
25	106	118	85	40	55	47	47	49	33	34	28	31
26	83	90	69	38	51	47	89	45	34	33	73	37
27	207	94	60	36	48	90	69	43	48	32	106	34
28	111	103	52	35	71	274	65	41	34	30	108	31
29	92	80	49	87	---	134	172	39	28	29	264	67
30	84	352	47	87	---	101	409	42	29	29	372	33
31	69	---	47	64	---	82	---	40	---	29	350	---
TOTAL	3,051	3,855	3,178	3,293	1,827	2,302	2,485	2,089	1,204	1,449	2,060	1,256
MEAN	98.4	128	103	106	65.2	74.3	82.8	67.4	40.1	46.7	66.5	41.9
MAX	935	452	340	385	147	274	409	236	69	150	372	130
MIN	22	54	41	35	46	42	39	28	28	29	23	29

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

MEAN	48.5	66.9	70.5	77.1	87.3	85.9	74.8	95.1	67.0	55.5	51.5	50.7
MAX	99.6	136	110	106	163	152	110	172	135	105	93.9	94.3
(WY)	(2003)	(2004)	(2004)	(2004)	(2003)	(2002)	(1998)	(2004)	(1998)	(1998)	(2004)	(2003)
MIN	26.3	23.6	33.4	42.6	37.5	49.1	39.6	31.0	26.7	25.6	20.6	18.9
(WY)	(2000)	(2000)	(2000)	(2001)	(2002)	(2003)	(2001)	(1999)	(1999)	(1999)	(1999)	(1999)

03284555 WEST HICKMAN CREEK AT ASH GROVE PIKE NEAR EAST HICKMAN, KY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1998 - 2005	
ANNUAL TOTAL	36,989		28,049			
ANNUAL MEAN	101		76.8		69.1	
HIGHEST ANNUAL MEAN					97.3	2004
LOWEST ANNUAL MEAN					45.0	1999
HIGHEST DAILY MEAN	1,270	May 31	935	Oct 19	1,270	May 31, 2004
LOWEST DAILY MEAN	22	Oct 6	22	Oct 6	12	Nov 5, 1998
ANNUAL SEVEN-DAY MINIMUM	23	Oct 4	23	Oct 4	17	Aug 16, 1999
MAXIMUM PEAK FLOW			3,200	Oct 19	3,200	Oct 19, 2004
MAXIMUM PEAK STAGE			7.68	Oct 19	7.68	Oct 19, 2004
INSTANTANEOUS LOW FLOW					1.4	Nov 5, 1998
10 PERCENT EXCEEDS	206		147		133	
50 PERCENT EXCEEDS	60		51		42	
90 PERCENT EXCEEDS	36		30		23	



03285000 DIX RIVER NEAR DANVILLE, KY

LOCATION.--Lat 37°38'31", long 84°39'39", Garrard County, Hydrologic Unit 05100205, on right bank 50 ft downstream from bridge on State Highway 52, 1.4 mi downstream from Hanging Fork, 6 mi east of Danville, and at mile 34.6.

DRAINAGE AREA.--318 mi^2.

PERIOD OF RECORD.--May to August 1905 (gage heights only), October 1942 to current year. Published as "Dicks River," 1905.

REVISED RECORDS.--WSP 1555: Drainage area.

GAGE.--Water-stage recorder with telemetry. Datum of gage is 750.18 ft above NGVD of 1929. Prior to Dec. 21, 1942, nonrecording gage at same site and datum. May to August 1905, nonrecording gage at site 6 mi downstream at different datum. Auxillary: Water-stage recorder at site 2 miles downstream at datum 2.0 ft. lower.

REMARKS.--Records good except for those estimated, which are poor.

COOPERATION.--Kentucky Natural Resources and Environmental Protection Cabinet.

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

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov 4	1200	*10,200	*10.34	Jan 8	0600	8,730	9.70
Dec 1	0000	8,750	9.71	Apr 30	1200	9,060	9.85

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	428	6,820	295	596	784	436	e3,030	31	3.8	18	293
2	54	416	2,460	323	479	537	2,980	1,160	28	3.6	13	162
3	53	601	1,270	654	e404	430	1,640	700	28	3.3	9.2	96
4	52	5,680	886	585	e354	378	955	482	36	13	7.0	63
5	50	2,350	655	1,530	e331	587	661	357	40	11	5.5	45
6	43	1,090	1,020	1,860	e309	620	494	279	35	9.9	4.0	34
7	38	732	3,610	2,020	e296	474	413	225	30	7.6	2.6	26
8	35	517	e2,200	e6,330	e290	2,620	511	185	25	6.8	2.1	21
9	31	381	1,510	e2,430	e284	1,420	382	153	26	7.1	2.3	16
10	29	301	2,010	1,350	e284	880	300	129	41	5.9	4.6	13
11	27	261	1,460	1,010	e287	675	255	111	37	5.2	4.6	10
12	26	1,650	1,180	933	e293	609	232	93	28	5.1	8.4	7.7
13	371	1,260	896	839	e408	525	488	85	25	7.5	7.3	6.3
14	499	725	661	2,360	1,550	422	564	82	28	12	4.3	5.2
15	243	520	510	1,320	1,530	353	449	77	38	11	2.2	4.0
16	265	416	426	932	973	302	326	74	63	12	1.5	3.4
17	178	345	367	695	711	273	261	59	39	34	1.3	2.9
18	127	294	316	510	536	242	221	50	29	35	1.2	2.7
19	1,160	276	285	e397	436	213	191	45	23	31	1.5	2.5
20	971	318	237	e312	380	201	163	512	18	63	2.2	2.1
21	448	278	203	e253	1,700	188	143	431	13	77	2.9	1.6
22	295	236	212	e223	1,640	164	126	229	11	80	2.9	1.3
23	222	218	2,770	e196	960	160	121	164	9.1	103	2.8	1.2
24	323	687	1,490	e176	697	173	125	128	8.0	48	2.6	1.1
25	423	1,540	834	e157	531	178	117	96	6.9	32	2.0	1.0
26	268	990	616	e155	416	162	102	73	6.0	23	2.0	e0.72
27	e2,720	691	482	e153	349	150	248	62	5.1	17	4.7	e0.60
28	e1,960	791	389	e151	350	871	326	53	4.4	12	5.7	e0.50
29	1,090	695	346	331	---	918	234	45	4.1	9.1	21	e0.44
30	759	2,550	339	1,280	---	508	e5,430	40	4.1	7.4	880	37
31	553	---	313	830	---	393	---	35	---	11	452	---
TOTAL	13,371	27,237	36,773	30,590	17,374	16,410	18,894	9,244	719.7	707.3	1,481.4	861.26
MEAN	431	908	1,186	987	620	529	630	298	24.0	22.8	47.8	28.7
MAX	2,720	5,680	6,820	6,330	1,700	2,620	5,430	3,030	63	103	880	293
MIN	26	218	203	151	284	150	102	35	4.1	3.3	1.2	0.44
CFSM	1.36	2.86	3.73	3.10	1.95	1.66	1.98	0.94	0.08	0.07	0.15	0.09
IN.	1.56	3.19	4.30	3.58	2.03	1.92	2.21	1.08	0.08	0.08	0.17	0.10

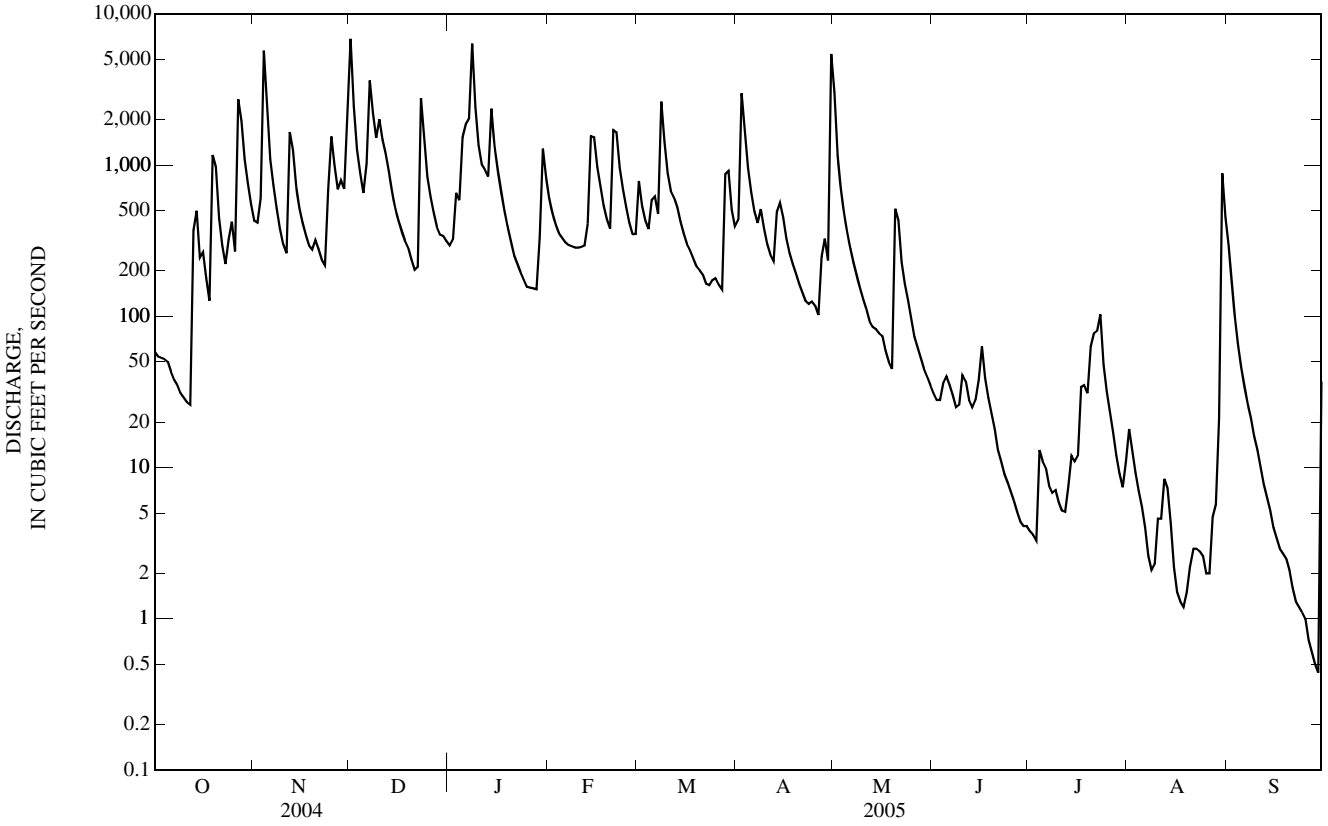
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 2005, BY WATER YEAR (WY)

MEAN	107	316	661	795	979	991	672	477	286	172	94.3	154
MAX	1,323	1,471	3,656	3,140	4,129	3,059	2,736	2,618	1,732	1,692	527	3,430
(WY)	(1980)	(1987)	(1979)	(1950)	(1989)	(1997)	(1972)	(1983)	(1997)	(1996)	(1958)	(1979)
MIN	0.00	0.03	0.69	17.0	72.1	174	57.1	51.8	8.83	0.31	0.93	0.01
(WY)	(1953)	(1954)	(1954)	(1981)	(1954)	(1983)	(1986)	(1976)	(1988)	(1944)	(1952)	(1953)

03285000 DIX RIVER NEAR DANVILLE, KY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1943 - 2005	
ANNUAL TOTAL	250,596		173,662.66			
ANNUAL MEAN	685		476		473	
HIGHEST ANNUAL MEAN					1,184	1979
LOWEST ANNUAL MEAN					119	1954
HIGHEST DAILY MEAN	10,300	Feb 6	6,820	Dec 1	35,100	Jul 20, 1996
LOWEST DAILY MEAN	26	Aug 20	0.44	Sep 29	0.00	Jul 21, 1944
ANNUAL SEVEN-DAY MINIMUM	33	Oct 6	0.79	Sep 23	0.00	Jul 29, 1944
MAXIMUM PEAK FLOW			10,200	Nov 4	52,400	Jul 20, 1996
MAXIMUM PEAK STAGE			10.34	Nov 4	21.81	Dec 9, 1978
ANNUAL RUNOFF (CFSM)	2.15		1.50		1.49	
ANNUAL RUNOFF (INCHES)	29.32		20.32		20.20	
10 PERCENT EXCEEDS	1,630		1,260		1,070	
50 PERCENT EXCEEDS	312		223		126	
90 PERCENT EXCEEDS	65		4.2		3.2	

e Estimated



03286500 KENTUCKY RIVER AT LOCK 7 AT HIGH BRIDGE, KY

LOCATION.--Lat 37°49'45", long 84°43'26", Jessamine County, Hydrologic Unit 05100205, on right bank at Lock 7, 0.45 mi northwest of High Bridge, 1.2 mi downstream from Dix River, 3.8 mi upstream of U.S. Highway 68 bridge, and at mile 117.

DRAINAGE AREA.--5,036 mi^2.

PERIOD OF RECORD.--October 1901 to September 1924 (gage-heights only), monthly discharge October 1924 to September 1927, December 1992 to current year.

GAGE.--Water-stage recorder with telemetry. Datum of gage is 503.92 ft above sea level, Kentucky River datum.

REMARKS.--Records fair above 1,000 ft^3/s and poor below. Flow regulated since November 1925 by Herrington Lake, since December 1960 by Buckhorn Lake, since January 1976 by Carr Fork Lake, and by hydroelectric plant at Lock 7.

COOPERATION.--Kentucky Utilities.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,250	8,560	37,700	5,490	13,400	8,800	16,200	48,400	1,070	415	582	2,480
2	2,970	7,870	42,500	6,130	12,000	12,300	26,600	52,900	990	494	532	1,450
3	2,090	7,430	45,000	6,610	10,400	14,500	38,500	43,900	951	821	464	975
4	2,070	24,100	29,600	6,620	9,120	11,700	42,100	19,300	979	1,110	404	711
5	2,200	24,600	16,800	9,440	8,070	9,910	31,100	13,000	994	1,220	371	553
6	2,590	22,800	14,200	15,500	7,180	8,350	19,700	10,300	1,060	1,060	365	448
7	2,080	15,400	20,300	19,800	6,520	8,840	15,100	8,090	1,190	867	350	374
8	1,720	11,000	27,300	39,800	6,200	19,200	13,300	6,750	1,200	e800	319	316
9	1,320	8,480	26,600	46,600	6,240	19,100	11,600	5,560	1,140	e710	293	279
10	1,070	6,780	26,100	41,900	6,150	16,000	9,810	4,190	1,230	e700	279	256
11	1,320	5,690	36,800	25,200	6,200	14,100	8,590	3,570	1,330	e1,040	278	236
12	1,420	8,110	37,600	16,600	6,110	12,300	7,790	3,230	1,320	e1,190	275	218
13	1,960	9,100	27,000	14,000	6,230	11,000	6,930	2,890	1,540	1,120	271	209
14	2,400	7,940	20,000	19,400	8,160	9,880	6,110	2,670	1,820	1,190	274	200
15	2,280	7,630	15,700	21,200	11,000	8,840	6,380	2,890	1,650	1,230	305	195
16	1,970	7,100	12,800	20,500	14,400	7,600	9,980	2,530	1,270	1,340	330	193
17	1,630	6,420	10,400	16,400	13,700	6,760	9,560	2,290	1,020	1,720	387	188
18	2,090	5,910	8,720	12,900	11,700	6,320	7,210	2,550	861	2,100	416	187
19	14,900	5,640	7,790	10,600	9,970	6,570	5,740	2,480	769	2,220	432	180
20	15,200	5,900	6,750	8,650	8,550	5,480	5,210	3,830	684	2,310	448	173
21	11,500	5,940	5,830	7,500	8,900	5,650	4,700	3,950	607	2,700	463	168
22	6,970	5,710	5,390	6,910	12,400	5,810	3,970	4,180	530	3,070	491	163
23	4,620	5,530	9,600	6,490	13,600	5,250	3,770	4,180	502	2,770	562	161
24	4,120	6,350	10,400	5,910	12,700	4,950	3,740	3,450	605	1,930	543	161
25	4,840	8,540	8,790	5,400	10,900	4,540	4,070	2,850	714	1,420	439	161
26	4,570	10,400	8,080	5,140	9,350	4,540	3,920	2,470	682	1,140	404	171
27	8,560	10,900	7,430	5,030	8,130	4,450	4,130	2,140	568	871	495	185
28	17,000	10,900	6,710	4,950	7,340	7,930	4,790	1,800	486	694	e440	194
29	18,700	10,300	6,110	5,190	---	18,600	4,980	1,520	433	622	e745	196
30	13,700	14,100	5,740	9,260	---	28,100	24,100	1,300	410	599	2,910	219
31	9,950	---	5,550	12,300	---	21,900	---	1,170	---	587	3,520	---
TOTAL	171,060	295,130	549,290	437,420	264,620	329,270	359,680	270,330	28,605	40,060	18,387	11,600
MEAN	5,518	9,838	17,720	14,110	9,451	10,620	11,990	8,720	954	1,292	593	387
MAX	18,700	24,600	45,000	46,600	14,400	28,100	42,100	52,900	1,820	3,070	3,520	2,480
MIN	1,070	5,530	5,390	4,950	6,110	4,450	3,740	1,170	410	415	271	161

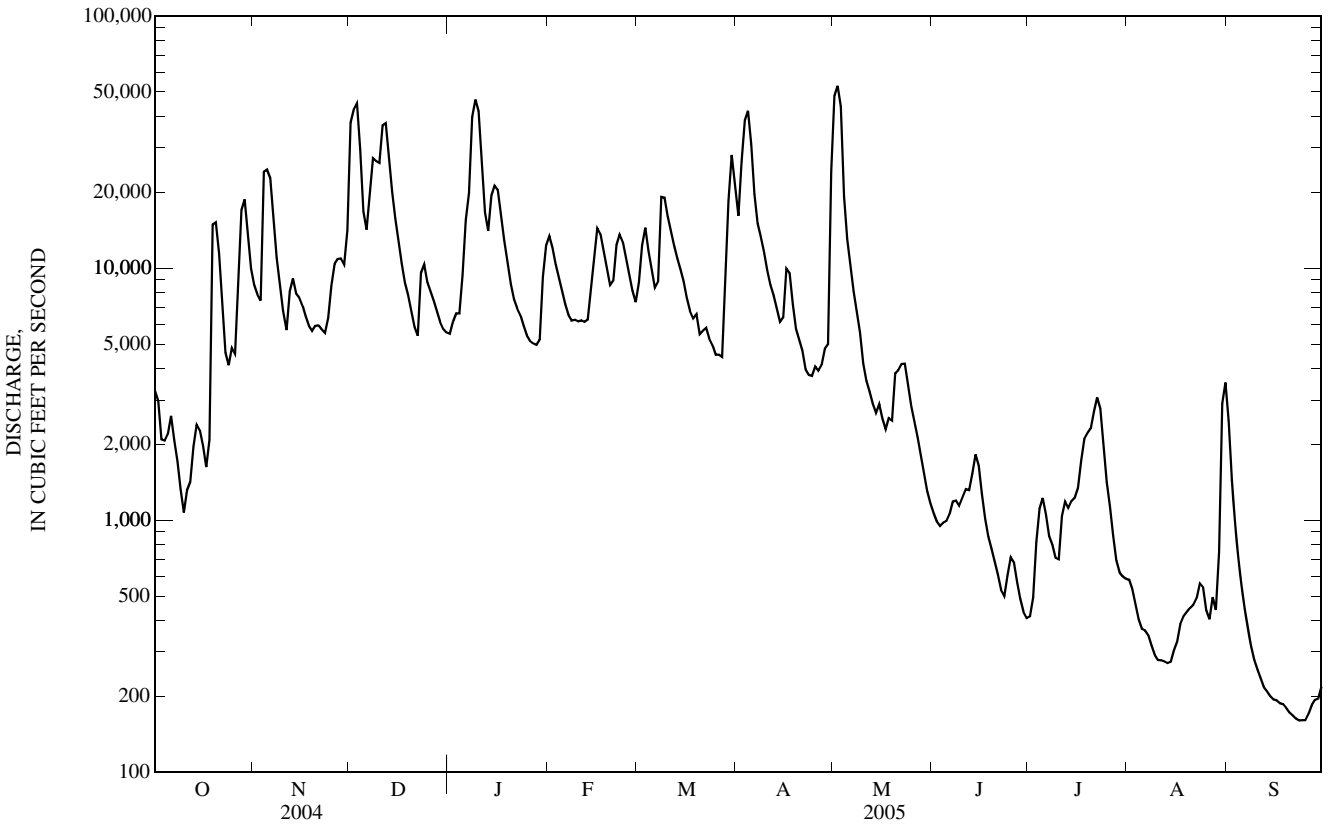
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2005, BY WATER YEAR (WY)

MEAN	1,713	4,286	7,219	10,990	12,600	14,610	11,150	9,381	6,597	2,531	1,864	1,931
MAX	5,518	11,810	17,720	22,370	27,360	29,500	21,390	22,020	18,360	4,867	4,660	12,960
(WY)	(2005)	(2004)	(2005)	(1994)	(2003)	(1997)	(1994)	(1995)	(1997)	(1998)	(2001)	(2004)
MIN	324	456	1,567	1,876	4,614	5,553	3,730	1,973	417	435	306	153
(WY)	(1998)	(2002)	(2000)	(2000)	(2002)	(2000)	(1999)	(2001)	(1999)	(1999)	(1999)	(1999)

03286500 KENTUCKY RIVER AT LOCK 7 AT HIGH BRIDGE, KY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1992 - 2005	
ANNUAL TOTAL	4,090,340		2,775,452			
ANNUAL MEAN	11,180		7,604		7,042	
HIGHEST ANNUAL MEAN					11,250	1994
LOWEST ANNUAL MEAN					3,371	2000
HIGHEST DAILY MEAN	71,500	May 31	52,900	May 2	87,900	Mar 2, 1997
LOWEST DAILY MEAN	1,060	Sep 7	161	Sep 23	79	Sep 13, 2002
ANNUAL SEVEN-DAY MINIMUM	1,320	Sep 1	165	Sep 20	109	Sep 9, 2002
MAXIMUM PEAK FLOW			53,500	May 2	92,800	Mar 10, 1994
MAXIMUM PEAK STAGE			22.99	May 2	37.90	Mar 10, 1994
10 PERCENT EXCEEDS	27,400		19,100		17,500	
50 PERCENT EXCEEDS	6,800		5,190		3,200	
90 PERCENT EXCEEDS	2,160		382		466	

e Estimated



03287000 KENTUCKY RIVER AT LOCK 6 NEAR SALVISA, KY

LOCATION.--Lat 37°55'32", long 84°49'17", Woodford County, Hydrologic Unit 05100205, on right bank at Lock 6, 1.5 mi upstream from Clear Creek, 2.1 mi east of Salvisa, and at mile 96.2.

DRAINAGE AREA.--5,102 mi^2, of which about 101 mi^2 does not contribute directly to surface runoff.

PERIOD OF RECORD.--October 1925 to current year. Prior to October 1953, published as "at Lock 6, at Warwick."

REVISED RECORDS.--WSP 1385: 1926-27, 1928(M), 1929, 1931(M), 1932, 1933-34(M), 1935, 1937, drainage area.

GAGE.--Water-stage recorder with telemetry. Datum of gage is 489.90 ft, Kentucky River datum or 487.89 ft. above NGVD of 1929. Prior to November 1934, nonrecording gage at same site and datum. Auxiliary water-stage recorder with telemetry at Lock 5, 14 mi downstream. Prior to Sept. 30, 1981, nonrecording gage at same site and datum.

REMARKS.--Records good above 2,000 ft^3/s, fair below. Flow regulated since November 1925 by Herrington Lake, since December 1960 by Buckhorn Lake, since January 1976 by Carr Fork Lake, and by hydroelectric plant at Lock 7.

COOPERATION.--Kentucky River Authority, U.S. Army Corps of Engineers, Louisville District.

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

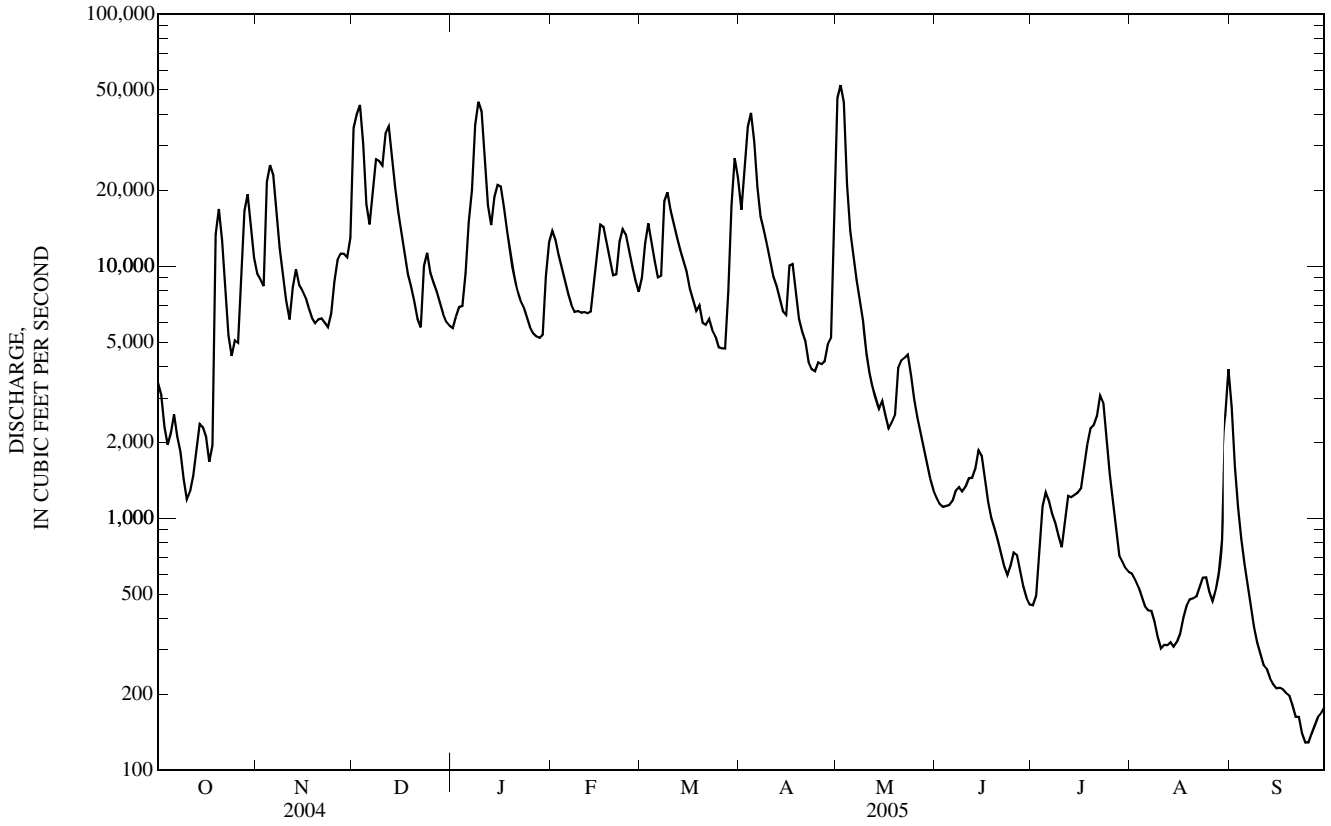
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,440	9,340	35,300	5,690	13,800	8,990	16,800	46,500	1,210	452	602	2,770
2	3,080	8,890	40,000	6,310	12,700	12,300	24,500	52,300	1,140	493	570	1,610
3	2,300	8,340	43,500	6,890	11,000	14,800	35,700	44,800	1,110	753	534	1,110
4	1,950	21,600	30,600	6,950	9,760	12,500	40,500	21,100	1,120	1,110	489	831
5	2,180	25,200	17,600	9,390	8,680	10,500	31,300	13,800	1,130	1,270	449	660
6	2,580	23,000	14,700	15,100	7,740	9,020	20,500	11,100	1,170	1,170	431	545
7	2,110	16,300	19,400	20,100	7,020	9,150	15,700	8,810	1,290	1,040	429	454
8	1,830	11,800	26,500	36,400	6,600	18,100	13,900	7,370	1,330	955	389	370
9	1,430	9,170	26,100	44,800	6,630	19,600	12,200	6,080	1,280	850	338	320
10	1,190	7,350	25,100	41,100	6,540	16,600	10,400	4,590	1,330	769	305	290
11	1,280	6,150	33,600	26,100	6,580	14,700	9,070	3,780	1,450	966	315	261
12	1,480	8,240	35,800	17,400	6,500	12,900	8,330	3,300	1,450	1,230	314	252
13	1,850	9,720	27,000	14,600	6,610	11,600	7,450	2,980	1,580	1,210	322	232
14	2,360	8,440	20,500	18,800	8,480	10,500	6,620	2,710	1,860	1,230	309	220
15	2,300	8,030	16,300	21,000	11,100	9,470	6,400	2,920	1,770	1,260	323	212
16	2,110	7,530	13,400	20,700	14,600	8,130	10,000	2,560	1,420	1,310	349	213
17	1,670	6,820	11,100	17,100	14,300	7,350	10,200	2,270	1,160	1,610	403	210
18	1,950	6,240	9,260	13,700	12,400	6,640	7,910	2,400	1,000	1,970	449	203
19	13,400	5,940	8,280	11,300	10,700	6,970	6,170	2,570	908	2,280	477	198
20	16,900	6,140	7,220	9,320	9,200	5,960	5,480	3,950	818	2,340	481	181
21	12,700	6,210	6,170	8,040	9,280	5,860	5,020	4,230	731	2,550	490	163
22	8,060	5,970	5,720	7,360	12,500	6,160	4,170	4,330	646	3,070	534	163
23	5,310	5,740	10,000	6,910	14,000	5,580	3,890	4,460	596	2,870	581	140
24	4,410	6,490	11,300	6,320	13,300	5,270	3,830	3,700	648	2,040	583	129
25	5,090	8,690	9,400	5,750	11,600	4,770	4,140	2,960	733	1,500	511	129
26	4,970	10,600	8,590	5,420	10,000	4,730	4,090	2,510	716	1,180	470	140
27	8,260	11,200	7,900	5,270	8,750	4,710	4,190	2,180	620	901	516	151
28	16,600	11,200	7,140	5,190	7,900	7,940	4,900	1,880	536	711	611	163
29	19,300	10,800	6,460	5,340	---	17,400	5,200	1,640	484	673	820	169
30	14,800	13,000	6,010	9,150	---	26,800	20,400	1,430	454	632	2,560	178
31	10,800	---	5,800	12,400	---	22,500	---	1,290	---	611	3,900	---
TOTAL	177,690	304,140	545,750	439,900	278,270	337,500	358,960	276,500	31,690	41,006	19,854	12,667
MEAN	5,732	10,140	17,600	14,190	9,938	10,890	11,970	8,919	1,056	1,323	640	422
MAX	19,300	25,200	43,500	44,800	14,600	26,800	40,500	52,300	1,860	3,070	3,900	2,770
MIN	1,190	5,740	5,720	5,190	6,500	4,710	3,830	1,290	454	452	305	129

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 2005, BY WATER YEAR (WY)

MEAN	2,171	4,692	9,065	10,350	12,940	12,990	10,220	8,696	5,583	2,361	1,953	1,971
MAX	13,680	12,450	31,030	25,970	34,850	30,240	21,550	26,910	18,890	5,441	6,238	13,020
(WY)	(1990)	(1987)	(1979)	(1979)	(1989)	(1997)	(1994)	(1983)	(1997)	(1998)	(1992)	(2004)
MIN	312	467	1,164	502	4,480	3,769	1,491	1,308	362	420	277	188
(WY)	(1981)	(2002)	(1981)	(1981)	(2002)	(1983)	(1986)	(1986)	(1988)	(1999)	(1986)	(1999)

03287000 KENTUCKY RIVER AT LOCK 6 NEAR SALVISA, KY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1977 - 2005	
ANNUAL TOTAL	4,176,700		2,823,927			
ANNUAL MEAN	11,410		7,737		6,885	
HIGHEST ANNUAL MEAN					11,050	1994
LOWEST ANNUAL MEAN					2,826	1988
HIGHEST DAILY MEAN	72,100	Jun 1	52,300	May 2	125,000	Dec 10, 1978
LOWEST DAILY MEAN	1,150	Sep 6	129	Sep 24	83	Sep 4, 1984
ANNUAL SEVEN-DAY MINIMUM	1,480	Sep 2	145	Sep 21	112	Nov 8, 1991
MAXIMUM PEAK FLOW			53,200	May 2	130,000	Dec 10, 1978
MAXIMUM PEAK STAGE			21.78	May 2	49.04	Dec 10, 1978
10 PERCENT EXCEEDS	26,900		19,000		17,200	
50 PERCENT EXCEEDS	7,200		5,420		3,150	
90 PERCENT EXCEEDS	2,230		449		446	



03287500 KENTUCKY RIVER AT LOCK 4 AT FRANKFORT, KY

LOCATION.--Lat 38°12'06", long 84°52'54", Franklin County, Hydrologic Unit 05100205, on left bank at downstream side of Broadway Street Bridge at Frankfort, 300 ft upstream from Benson Creek, 0.8 mi upstream from Lock 4, and at mile 65.8. Records include flow of Benson Creek.

DRAINAGE AREA.--5,411 mi^2, (includes that of Benson Creek), of which about 120 mi^2 does not contribute directly to surface runoff.

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--March 1905 to July 1906 (gage heights only), October 1925 to current year. Monthly discharge only October 1930 to February 1931, October, November 1931, and May to September 1932, published in WSP 1305. Gage-height records collected in this vicinity September 1887 to December 1889, January to May 1893, and since April 1901 are contained in reports of the National Weather Service.

REVISED RECORDS.--WSP 1113: 1941-42. WSP 1385: 1926-27, 1929(M), 1932-33, 1935-37, 1938(M), drainage area. WSP 1555: 1932(M).

GAGE.--Water-stage recorder with telemetry. Datum of gage is 462.10 ft above NGVD of 1929. See WDR KY-90-1 for history of changes prior to Jan. 28, 1982.

REMARKS.--Records fair except those for estimated daily discharges and flow below 1000 ft^3/s, which are poor. Flow regulated since November 1925 by Herrington Lake, since December 1960 by Buckhorn Lake, since January 1976 by Carr Fork Lake, and by hydroelectric plant at Lock 7.

COOPERATION.--U.S. Army Corps of Engineers, Louisville District, Kentucky River Authority, and City of Frankfort.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,540	10,400	34,700	6,970	14,300	8,550	18,900	41,000	1,350	576	645	3,490
2	3,160	11,100	38,600	7,010	13,500	11,300	22,700	49,800	1,270	580	630	2,000
3	2,650	10,600	42,600	9,190	11,700	15,000	32,900	47,100	1,240	715	585	1,240
4	1,880	19,100	35,000	8,700	10,200	13,700	38,900	26,400	1,200	1,100	540	869
5	2,190	29,300	20,700	10,600	8,920	10,800	33,700	15,300	1,210	1,390	477	691
6	2,500	25,100	16,000	17,100	7,890	9,420	23,400	11,800	1,250	1,370	445	594
7	2,270	19,300	22,700	22,500	7,120	8,640	17,300	9,060	1,370	1,170	448	513
8	2,000	13,200	28,300	33,800	6,840	16,200	14,900	7,460	1,460	1,010	419	451
9	1,580	9,830	28,400	43,900	6,720	21,500	12,700	6,220	1,420	908	378	399
10	1,260	7,710	26,700	43,200	6,660	18,100	10,900	4,890	1,430	831	351	365
11	1,120	7,570	31,500	30,900	6,570	15,800	9,120	3,960	1,610	894	338	341
12	1,490	13,200	36,100	20,000	6,510	13,700	8,340	3,390	1,630	1,250	332	310
13	1,740	11,000	30,000	16,500	6,820	12,100	7,500	3,120	1,710	1,340	330	284
14	2,310	9,130	22,800	19,600	8,940	10,800	6,830	2,790	1,970	1,320	336	260
15	2,440	8,290	18,200	22,200	11,000	9,690	5,920	3,270	2,030	1,330	336	240
16	2,310	7,760	14,600	22,400	14,800	8,230	8,830	2,810	1,720	1,350	387	234
17	1,830	7,010	11,800	19,200	15,400	7,500	10,400	2,420	1,350	1,670	412	227
18	2,240	6,360	9,560	15,100	13,300	6,550	8,260	2,310	1,110	2,050	450	212
19	17,600	6,610	8,380	12,100	11,200	6,850	6,290	2,860	996	2,370	492	205
20	20,800	6,470	7,380	9,840	9,480	6,330	5,420	6,360	910	2,540	496	202
21	14,400	6,400	6,290	8,230	9,080	5,690	5,090	4,640	824	2,580	500	190
22	9,290	6,150	6,370	7,420	12,000	6,110	4,340	4,340	752	2,980	518	178
23	6,090	5,870	13,100	6,930	14,500	5,800	4,250	4,600	687	3,000	548	164
24	5,680	7,110	13,200	6,380	14,100	5,480	3,970	4,030	700	2,300	576	e157
25	5,380	9,030	10,300	5,810	12,300	4,980	4,050	3,210	783	1,670	534	166
26	5,340	10,700	9,000	5,430	10,400	4,830	4,250	2,680	806	1,270	496	e193
27	7,820	11,600	8,150	5,240	8,960	6,580	4,340	2,340	749	974	505	e195
28	16,300	11,600	7,360	5,130	8,030	17,500	4,730	2,040	667	796	688	198
29	20,800	11,500	6,900	5,240	---	17,200	5,400	1,780	620	684	877	e205
30	17,000	12,300	7,160	8,320	---	26,800	15,900	1,530	586	650	2,610	e214
31	11,900	---	6,410	12,100	---	25,600	---	1,410	---	637	4,860	---
TOTAL	196,910	331,300	578,260	467,040	287,240	357,330	359,530	284,920	35,410	43,305	21,539	14,987
MEAN	6,352	11,040	18,650	15,070	10,260	11,530	11,980	9,191	1,180	1,397	695	500
MAX	20,800	29,300	42,600	43,900	15,400	26,800	38,900	49,800	2,030	3,000	4,860	3,490
MIN	1,120	5,870	6,290	5,130	6,510	4,830	3,970	1,410	586	576	330	157

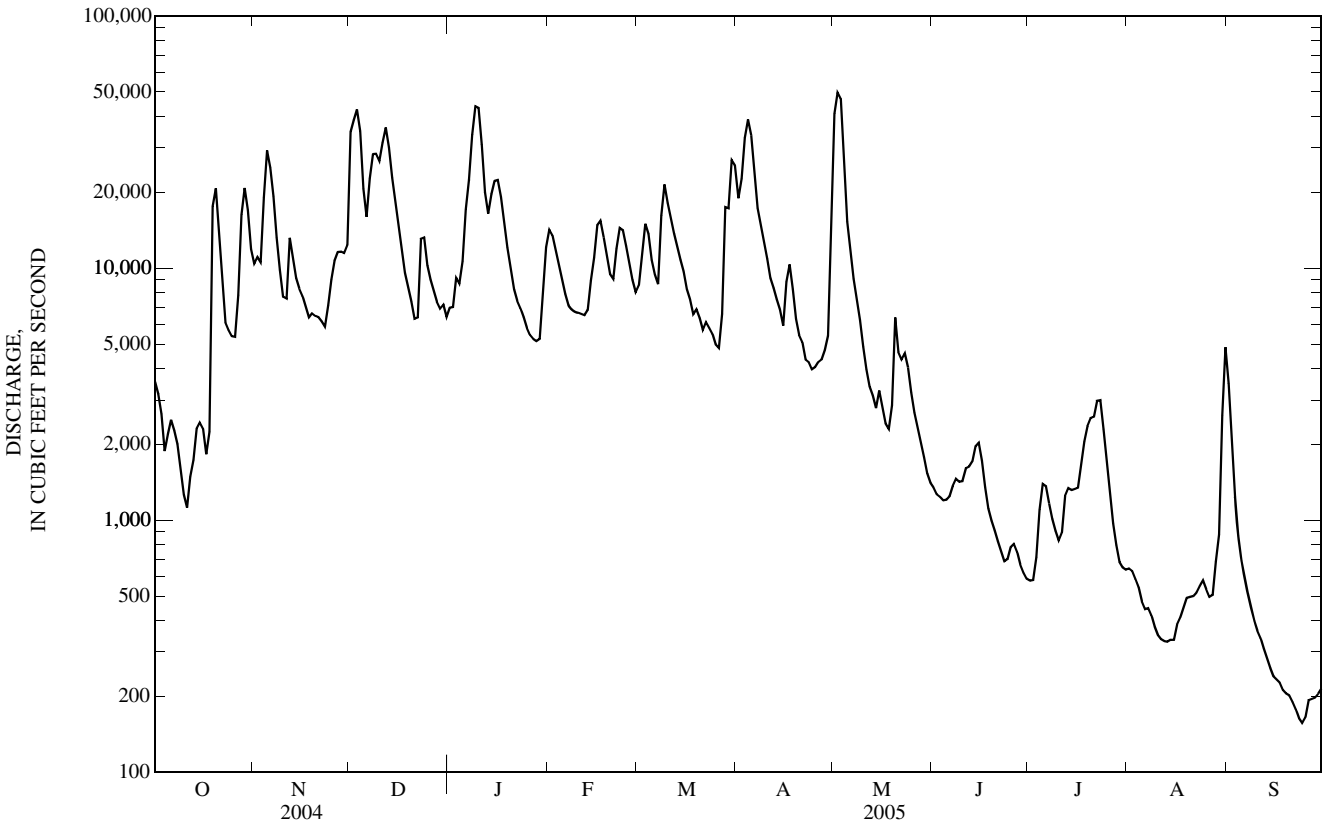
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 2005, BY WATER YEAR (WY)

MEAN	2,294	5,101	9,700	11,010	13,690	13,910	10,620	9,102	5,858	2,530	2,106	2,117
MAX	13,240	13,700	33,220	27,590	35,680	34,190	22,400	28,200	20,840	6,446	6,433	12,750
(WY)	(1990)	(1987)	(1979)	(1979)	(1989)	(1997)	(1994)	(1983)	(1997)	(1998)	(1992)	(2004)
MIN	289	550	1,301	540	4,866	4,175	1,518	1,354	417	638	260	207
(WY)	(1981)	(2000)	(1981)	(1981)	(2002)	(1983)	(1986)	(1986)	(1988)	(1999)	(2002)	(1999)

03287500 KENTUCKY RIVER AT LOCK 4 AT FRANKFORT, KY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1977 - 2005	
ANNUAL TOTAL	4,336,770		2,977,771			
ANNUAL MEAN	11,850		8,158		7,304	
HIGHEST ANNUAL MEAN					11,860	1979
LOWEST ANNUAL MEAN					3,182	1988
HIGHEST DAILY MEAN	73,800	Jun 1	49,800	May 2	116,000	Dec 10, 1978
LOWEST DAILY MEAN	1,120	Oct 11	157	Sep 24	78	Sep 13, 2002
ANNUAL SEVEN-DAY MINIMUM	1,500	Sep 2	178	Sep 21	88	Sep 8, 2002
MAXIMUM PEAK FLOW			51,100	May 2	118,000	Dec 9, 1978
MAXIMUM PEAK STAGE			21.20	May 3	48.47	Dec 10, 1978
10 PERCENT EXCEEDS	28,800		20,300		17,900	
50 PERCENT EXCEEDS	7,500		5,800		3,440	
90 PERCENT EXCEEDS	2,340		467		501	

e Estimated



03287500 KENTUCKY RIVER AT LOCK 4 AT FRANKFORT, KY--Continued.

WATER-QUALITY RECORDS

PERIOD OF RECORD.-June 2001 to current year.

COOPERATION.--Kentucky River Authority

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: June 2001 to current year.
pH: June 2001 to current year.
WATER TEMPERATURES: June 2001 to current year.
DISSOLVED OXYGEN: June 2001 to current year.

INSTRUMENTATION.-- Water-quality monitor with telemetry.

REMARKS.--
SPECIFIC CONDUCTANCE: Records rated excellent.
pH: Records rated excellent.
WATER TEMPERATURES: Records rated excellent.
DISSOLVED OXYGEN: Records rated poor.

EXTREMES FOR PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded, 663 microsiemens, Aug. 30, 2001; minimum recorded, 96 microsiemens, Feb. 20, 2003.
pH: Maximum recorded, 9.9 units, Aug. 19, 2003; minimum recorded, 6.7 units, Aug. 31, and Sept. 1, 3-5, 2001.
WATER TEMPERATURES: Maximum recorded, 31.3°C, Aug. 5, 2002; minimum recorded, 2.5°C, Feb. 1, 2004.
DISSOLVED OXYGEN: Maximum recorded, 15.4 mg/L, Jan. 23, 2002; minimum recorded, 0.2 mg/L, Sept. 13, 2001.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 663 microsiemens, Aug. 30, 2005; minimum recorded, 149 microsiemens, May 3, 2005.
pH: Maximum recorded, 8.9 units, June 22, 2005; minimum recorded, 7.3 units, July 14-16 2005.
WATER TEMPERATURES: Maximum recorded, 30.4°C, Aug. 13, 2005; minimum recorded, 3.6°C, Feb. 1-5, 2005.
DISSOLVED OXYGEN: Maximum recorded, 14.5 mg/L, Feb. 2, 2005; minimum recorded, 3.7 mg/L, July 14-15, Aug. 29, 2005.

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	271	265	267	380	335	347	373	304	346	354	340	345
2	274	270	272	354	338	348	307	283	295	361	353	356
3	280	274	277	346	337	339	293	215	270	378	361	370
4	284	280	282	337	315	327	215	177	185	393	377	385
5	286	284	285	331	267	302	211	185	199	394	385	391
6	291	286	289	307	267	292	231	211	221	390	377	381
7	295	291	293	292	276	284	241	230	233	399	378	392
8	298	295	296	299	276	291	253	239	246	378	349	362
9	301	298	299	323	292	306	266	253	259	349	300	312
10	302	301	301	331	323	329	265	251	260	300	208	259
11	303	302	302	326	281	306	251	234	243	208	188	193
12	303	301	302	281	262	266	241	223	235	201	189	194
13	306	301	303	292	265	281	223	196	203	218	201	208
14	308	306	306	293	283	288	214	205	208	240	218	230
15	310	306	308	311	283	296	224	214	220	272	239	249
16	311	309	310	315	310	313	232	224	227	293	272	283
17	311	309	310	318	308	311	243	232	237	293	271	283
18	311	296	309	324	318	321	251	242	247	273	265	268
19	302	259	286	320	317	319	254	251	253	276	265	272
20	320	258	307	318	315	315	257	254	255	265	245	253
21	332	293	310	316	315	316	262	257	260	254	245	248
22	331	292	307	323	316	320	280	261	267	262	254	258
23	316	293	308	331	323	326	285	279	282	277	262	270
24	335	313	326	346	331	338	295	284	290	---	---	---
25	334	323	327	358	346	353	304	294	299	---	---	---
26	327	324	326	359	352	356	305	302	303	283	282	283
27	362	324	344	369	352	363	321	305	314	283	282	283
28	428	360	385	368	356	364	339	321	331	284	283	283
29	463	382	421	356	350	352	343	335	337	295	283	289
30	472	375	431	350	344	347	344	338	342	298	295	296
31	407	376	396	---	---	---	341	338	339	298	295	297
MONTH	472	258	316	380	262	321	373	177	265			

03287500 KENTUCKY RIVER AT LOCK 4 AT FRANKFORT, KY—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	326	296	311	305	297	303	357	263	326	318	288	307
2	339	322	329	305	296	300	263	224	236	328	158	267
3	341	333	338	309	296	303	263	224	247	189	149	160
4	349	341	346	296	289	291	264	238	256	---	---	---
5	359	346	349	293	290	291	238	188	203	210	196	203
6	373	359	368	302	292	296	210	192	200	219	210	216
7	373	340	360	315	302	310	222	210	216	225	219	222
8	340	323	329	315	298	306	230	222	227	228	225	227
9	323	322	322	305	287	300	236	230	233	236	226	230
10	327	323	326	297	287	290	242	236	239	246	236	241
11	330	327	329	298	286	294	248	242	244	258	246	252
12	330	323	326	287	283	285	255	248	251	268	258	263
13	324	320	322	287	280	282	265	255	259	277	268	272
14	326	323	324	303	287	298	271	265	268	283	277	280
15	335	325	331	302	294	298	277	271	274	287	283	285
16	344	335	338	294	286	289	283	275	279	293	287	290
17	356	344	350	294	286	289	289	283	286	297	293	295
18	356	354	355	305	294	299	292	286	289	297	288	292
19	355	347	353	309	304	307	298	292	295	303	295	301
20	352	344	346	305	298	302	306	298	301	309	295	303
21	355	337	351	303	298	301	320	306	313	310	300	306
22	337	289	309	303	301	302	333	320	326	328	307	319
23	296	285	288	302	298	300	359	333	347	324	313	316
24	303	296	299	312	302	306	374	359	367	322	317	319
25	309	298	305	317	312	315	378	370	376	327	322	325
26	314	309	312	319	317	318	370	335	348	327	323	325
27	313	303	306	327	319	323	335	324	330	326	318	320
28	305	302	303	324	301	311	340	324	330	331	322	326
29	---	---	---	343	314	329	357	340	349	342	331	336
30	---	---	---	360	336	351	358	310	343	345	341	343
31	---	---	---	353	335	342	---	---	---	348	345	346
MONTH	373	285	329	360	280	304	378	188	285	348	149	283
		JUNE			JULY			AUGUST			SEPTEMBER	
1	351	348	349	---	---	---	---	---	---	602	574	587
2	354	350	352	---	---	---	---	---	---	578	572	574
3	359	353	356	---	---	---	---	---	---	582	572	576
4	367	359	362	503	499	502	---	---	---	590	581	586
5	376	366	371	501	492	496	---	---	---	592	590	591
6	383	376	379	493	487	490	---	---	---	593	584	590
7	387	383	385	489	485	488	---	---	---	591	577	585
8	388	383	386	488	485	486	---	---	---	589	581	585
9	389	383	386	488	486	487	---	---	---	584	570	578
10	386	379	382	489	487	488	---	---	---	572	550	563
11	381	377	379	489	486	487	---	---	---	550	522	538
12	381	377	378	488	485	486	---	---	---	522	499	512
13	397	381	389	485	482	484	569	565	567	505	460	490
14	412	397	405	486	484	485	573	569	572	472	459	466
15	428	412	420	486	485	485	578	572	575	465	454	460
16	437	428	433	485	481	483	581	578	579	468	454	463
17	441	437	438	481	465	474	586	579	581	475	454	464
18	445	438	442	465	454	458	595	586	589	489	472	481
19	449	443	446	477	462	471	603	593	597	494	487	491
20	450	445	448	485	477	481	606	600	603	497	486	492
21	453	448	451	487	485	486	611	606	609	498	494	497
22	454	447	450	519	487	499	618	610	614	500	494	498
23	467	454	458	546	519	537	624	615	620	503	498	501
24	470	459	464	553	545	550	631	617	625	503	495	499
25	473	465	468	556	552	554	635	628	631	505	501	503
26	479	473	475	560	556	558	645	634	637	509	504	507
27	487	478	481	561	557	559	643	634	639	515	509	512
28	---	---	---	562	555	559	646	628	639	522	514	518
29	---	---	---	562	552	558	645	640	642	528	521	523
30	---	---	---	561	547	555	663	645	654	532	525	528
31	---	---	---	558	546	552	658	602	633	---	---	---
MONTH										602	454	525
YEAR	663	149	362									

03287500 KENTUCKY RIVER AT LOCK 4 AT FRANKFORT, KY—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	7.6	7.5	7.6	7.6	7.9	7.7	7.9	7.9	8.1	8.0	8.1	8.0
2	7.6	7.6	7.7	7.6	7.8	7.7	7.9	7.9	8.0	8.0	8.1	8.1
3	7.6	7.6	7.7	7.7	7.8	7.6	7.9	7.9	8.1	8.0	8.1	8.1
4	7.6	7.6	7.7	7.6	7.7	7.5	7.9	7.9	8.0	8.0	8.1	8.0
5	7.6	7.6	7.6	7.5	7.6	7.5	7.9	7.9	8.0	8.0	8.1	8.0
6	7.6	7.6	7.6	7.5	7.7	7.6	8.0	7.9	8.0	8.0	8.0	8.0
7	7.6	7.6	7.6	7.6	7.8	7.7	8.0	7.9	8.0	8.0	8.0	8.0
8	7.6	7.6	7.6	7.6	7.8	7.7	8.0	7.9	8.0	8.0	8.1	8.0
9	7.6	7.6	7.7	7.6	7.8	7.7	7.9	7.8	8.0	8.0	8.1	8.0
10	7.7	7.6	7.7	7.7	7.8	7.7	7.8	7.7	8.0	8.0	8.1	8.0
11	7.8	7.6	7.7	7.7	7.7	7.7	7.7	7.6	8.0	8.0	8.1	8.0
12	7.6	7.6	7.7	7.7	7.7	7.6	7.7	7.6	8.0	8.0	8.1	8.0
13	7.6	7.6	7.7	7.7	7.6	7.6	7.7	7.7	8.0	8.0	8.1	8.0
14	7.6	7.6	7.7	7.7	7.7	7.6	7.8	7.7	8.1	8.0	8.1	8.1
15	7.6	7.6	7.8	7.7	7.7	7.7	7.8	7.8	8.1	8.1	8.1	8.0
16	7.6	7.6	7.8	7.7	7.7	7.7	7.9	7.8	8.1	8.1	8.1	8.0
17	7.6	7.6	7.7	7.7	7.7	7.7	7.9	7.8	8.1	8.1	8.1	8.0
18	7.7	7.6	7.7	7.7	7.7	7.7	7.8	7.8	8.1	8.1	8.1	8.0
19	7.6	7.5	7.8	7.7	7.8	7.7	7.8	7.8	8.1	8.1	8.1	8.0
20	7.6	7.5	7.8	7.7	7.8	7.7	7.8	7.8	8.1	8.1	8.1	8.0
21	7.6	7.5	7.7	7.7	7.8	7.8	7.8	7.8	8.1	8.1	8.1	8.0
22	7.6	7.6	7.7	7.7	7.8	7.8	7.8	7.8	8.1	8.0	8.1	8.0
23	7.6	7.6	7.8	7.7	7.8	7.8	7.9	7.8	8.1	8.0	8.1	8.0
24	7.6	7.6	7.8	7.8	7.9	7.8	---	---	8.1	8.0	8.0	8.0
25	7.6	7.6	7.9	7.8	7.9	7.8	---	---	8.1	8.0	8.1	8.0
26	7.6	7.6	7.9	7.8	7.9	7.8	8.0	8.0	8.1	8.1	8.0	8.0
27	7.7	7.6	7.9	7.8	7.9	7.9	8.0	8.0	8.1	8.0	8.0	8.0
28	7.7	7.6	7.9	7.9	7.9	7.9	8.0	8.0	8.1	8.0	8.0	8.0
29	7.6	7.6	7.9	7.9	7.9	7.9	8.0	8.0	---	---	8.0	8.0
30	7.6	7.6	7.9	7.9	7.9	7.9	8.0	8.0	---	---	8.0	7.9
31	7.6	7.6	---	---	7.9	7.9	8.0	8.0	---	---	7.9	7.9
MONTH	7.8	7.5	7.9	7.5	7.9	7.5	8.0	7.6	8.1	8.0	8.1	7.9
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.9	7.9	8.0	7.8	7.9	7.6	---	---	---	---	7.7	7.6
2	7.9	7.8	7.8	7.6	7.7	7.6	---	---	---	---	7.7	7.6
3	7.9	7.9	7.6	7.6	7.8	7.6	---	---	---	---	8.0	7.6
4	7.9	7.8	7.7	7.6	7.8	7.6	8.2	7.9	---	---	8.1	7.7
5	7.8	7.7	7.8	7.7	7.8	7.5	7.9	7.6	---	---	8.1	7.7
6	7.8	7.7	7.8	7.8	7.9	7.5	8.2	7.5	---	---	8.5	7.7
7	7.8	7.8	7.8	7.8	8.2	7.6	8.2	7.6	---	---	8.8	7.9
8	7.9	7.8	7.8	7.8	8.6	7.8	8.2	7.7	---	---	8.4	7.9
9	7.9	7.9	7.8	7.8	8.4	7.7	8.0	7.5	---	---	8.5	7.9
10	7.9	7.9	7.9	7.8	8.1	7.7	7.9	7.5	---	---	8.8	8.2
11	7.9	7.9	7.9	7.8	7.9	7.6	7.8	7.4	---	---	8.7	8.4
12	7.9	7.8	7.9	7.8	7.8	7.5	7.6	7.4	---	---	8.8	8.4
13	7.9	7.9	7.9	7.8	7.9	7.6	7.5	7.4	8.2	8.0	8.7	8.4
14	7.9	7.9	7.8	7.8	7.8	7.6	7.5	7.3	8.1	7.8	8.6	8.2
15	7.9	7.8	7.9	7.8	7.9	7.6	7.5	7.3	8.1	7.8	8.7	8.3
16	7.9	7.9	7.9	7.8	8.0	7.6	7.5	7.3	7.9	7.7	8.6	8.2
17	7.9	7.9	7.9	7.7	8.1	7.7	7.6	7.4	7.9	7.6	8.7	8.2
18	7.9	7.9	7.8	7.7	8.2	7.7	7.7	7.4	8.0	7.6	8.6	8.1
19	7.9	7.9	7.8	7.7	8.1	7.6	7.6	7.5	8.0	7.6	8.2	8.0
20	7.9	7.8	7.8	7.7	8.6	7.6	7.6	7.5	8.0	7.7	8.4	7.9
21	7.9	7.8	7.8	7.7	8.6	7.8	7.6	7.5	8.0	7.7	8.3	7.8
22	7.9	7.9	7.9	7.7	8.9	8.3	7.8	7.6	8.0	7.7	8.4	8.1
23	8.0	7.9	7.9	7.8	8.6	8.2	7.7	7.6	8.2	7.6	8.5	8.2
24	8.1	7.9	8.0	7.9	8.5	8.2	7.7	7.5	8.2	7.6	8.7	8.3
25	8.1	8.0	8.1	7.9	8.5	8.1	7.9	7.5	8.2	7.6	8.6	8.3
26	8.0	8.0	7.9	7.7	8.4	8.1	8.2	7.6	8.0	7.7	8.4	8.1
27	8.0	7.9	7.9	7.7	8.5	8.0	8.2	7.7	8.0	7.6	8.3	7.9
28	8.0	7.9	7.9	7.7	---	---	8.4	7.6	7.8	7.5	8.1	7.8
29	8.0	8.0	8.0	7.7	---	---	8.4	7.6	7.5	7.4	8.0	7.6
30	8.0	8.0	7.8	7.6	---	---	8.5	7.5	7.6	7.5	7.9	7.6
31	---	---	7.9	7.6	---	---	---	---	7.6	7.6	---	---
MONTH	8.1	7.7	8.1	7.6							8.8	7.6
YEAR	8.9	7.3										

03287500 KENTUCKY RIVER AT LOCK 4 AT FRANKFORT, KY—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	19.2	18.7	19.0	16.9	16.6	16.7	11.1	10.7	11.0	5.8	5.4	5.6
2	19.2	19.0	19.1	17.0	16.9	16.9	10.7	9.9	10.4	6.1	5.8	6.0
3	19.0	18.4	18.8	16.9	16.4	16.7	9.9	9.2	9.4	6.6	6.1	6.3
4	19.1	18.1	18.5	16.4	16.0	16.3	9.8	9.3	9.6	6.7	6.6	6.6
5	18.6	18.0	18.2	16.3	15.3	15.8	9.7	9.4	9.5	7.1	6.6	6.9
6	18.4	17.6	18.0	15.5	14.9	15.3	9.4	9.3	9.4	7.1	7.0	7.1
7	18.6	17.8	18.1	15.1	14.8	14.9	10.1	9.4	9.7	7.7	7.0	7.4
8	18.5	17.9	18.2	15.0	14.5	14.8	10.1	9.5	9.8	8.3	7.6	8.0
9	18.5	18.0	18.2	14.5	14.2	14.3	10.1	9.5	9.8	8.7	8.3	8.6
10	19.1	18.0	18.3	14.2	14.0	14.1	9.9	9.6	9.7	9.2	8.7	8.9
11	18.6	17.8	18.2	14.1	13.6	13.8	10.4	9.9	10.1	8.9	8.7	8.8
12	18.2	17.9	18.1	13.6	13.1	13.3	10.5	10.1	10.3	9.3	8.9	9.1
13	17.9	17.5	17.8	13.2	12.8	12.9	10.1	9.8	10	9.5	9.3	9.4
14	17.9	17.4	17.7	12.9	12.2	12.5	9.8	9.2	9.5	9.5	9.2	9.3
15	17.7	17.0	17.4	12.2	11.8	12.0	9.2	8.7	8.9	9.3	9.1	9.2
16	17.1	16.7	16.9	12.0	11.8	11.9	8.7	8.3	8.4	9.1	8.4	8.7
17	16.8	16.2	16.5	12.0	11.9	12.0	8.3	7.9	8.1	8.4	7.8	8.1
18	16.5	16.2	16.4	12.2	12.0	12.1	7.9	7.5	7.7	7.8	7.3	7.5
19	16.5	16.1	16.3	12.4	12.1	12.3	7.5	6.8	7.3	7.3	7.0	7.1
20	16.9	16.2	16.6	12.6	12.4	12.5	6.8	6.3	6.4	7.0	6.8	6.9
21	16.9	16.6	16.8	12.5	12.5	12.5	6.3	6.2	6.2	6.8	6.3	6.6
22	16.9	16.4	16.6	12.5	12.4	12.4	6.4	6.1	6.3	6.3	5.6	6.1
23	16.4	16.4	16.4	12.4	12.3	12.3	6.1	5.9	5.9	5.6	5.0	5.2
24	16.7	16.4	16.5	12.5	12.3	12.4	5.9	5.5	5.7	---	---	---
25	16.7	16.3	16.5	12.5	11.7	12.1	5.5	4.8	5.0	---	---	---
26	16.7	16.5	16.6	11.7	11.4	11.5	4.9	4.6	4.7	5.0	4.9	5.0
27	16.7	16.5	16.6	11.5	11.3	11.4	4.6	4.3	4.5	4.9	4.5	4.7
28	16.9	16.5	16.7	11.4	10.9	11.2	4.3	4.1	4.2	4.5	4.4	4.4
29	16.9	16.6	16.8	11.0	10.9	10.9	4.4	4.3	4.3	4.5	4.4	4.5
30	16.9	16.6	16.8	11.0	10.9	10.9	4.9	4.4	4.7	4.4	4.3	4.4
31	16.6	16.5	16.6	---	---	---	5.4	4.9	5.2	4.6	4.1	4.5
MONTH	19.2	16.1	17.4	17.0	10.9	13.3	11.1	4.1	7.8			
		FEBRUARY			MARCH			APRIL			MAY	
1	4.1	3.6	3.8	6.8	6.5	6.6	11.6	11.4	11.5	14.5	13.8	14.1
2	3.7	3.6	3.6	6.7	6.3	6.5	11.5	11.2	11.3	13.8	12.5	12.9
3	3.7	3.6	3.6	7.0	6.6	6.8	11.4	10.9	11.2	12.6	12.3	12.5
4	3.8	3.6	3.7	7.1	6.7	6.9	11.6	10.9	11.2	12.8	12.4	12.6
5	4.1	3.6	3.9	7.1	6.6	6.8	11.3	10.4	10.6	13.0	12.4	12.7
6	4.4	4.0	4.2	6.6	6.4	6.5	10.9	10.4	10.6	13.4	12.8	13.0
7	4.7	4.3	4.4	6.7	6.3	6.5	11.3	10.9	11.1	13.7	13.2	13.4
8	5.2	4.7	5.0	6.6	6.1	6.3	11.9	11.2	11.5	14.4	13.5	13.9
9	5.6	5.2	5.5	6.6	6.0	6.3	12.2	11.5	11.8	15.0	14.3	14.6
10	5.6	5.5	5.5	6.5	6.1	6.3	13.0	12.2	12.6	15.3	15.0	15.2
11	5.5	5.3	5.4	6.2	6.1	6.1	13.6	12.9	13.2	16.3	15.3	15.8
12	5.6	5.3	5.4	6.2	6.0	6.1	14.2	13.6	13.9	16.6	15.9	16.2
13	5.8	5.5	5.6	6.3	6.1	6.2	14.2	13.8	14.1	17.4	16.3	16.8
14	6.3	5.8	6.0	6.7	6.1	6.4	14.2	13.5	13.8	17.5	17.3	17.4
15	6.7	6.3	6.5	6.9	6.5	6.7	14.4	13.9	14.1	17.9	17.5	17.7
16	7.0	6.7	6.8	7.1	6.8	6.9	14.7	14.3	14.5	18.1	17.3	17.7
17	7.0	6.5	6.8	7.1	6.6	6.9	15.9	14.6	15.4	18.0	17.5	17.8
18	6.7	6.4	6.5	7.2	6.8	7.0	16.5	15.7	16.1	18.8	17.8	18.3
19	6.6	6.5	6.6	7.3	7.1	7.2	17.0	16.4	16.7	18.8	18.1	18.5
20	6.6	6.3	6.5	7.3	7.1	7.2	17.3	16.8	17.1	19.1	17.9	18.6
21	6.4	6.3	6.4	7.7	7.2	7.5	17.7	17.3	17.5	19.2	18.8	19.0
22	6.9	6.4	6.6	7.7	7.6	7.7	18.1	17.5	17.8	19.7	18.8	19.2
23	7.3	6.8	7.0	7.7	7.7	7.7	17.8	17.0	17.4	19.6	18.6	19.0
24	7.4	7.3	7.3	8.0	7.7	7.8	17.0	16.2	16.6	19.4	18.5	18.9
25	7.3	7.1	7.2	8.2	7.8	8.0	16.2	15.8	15.9	20.1	19.2	19.6
26	7.2	6.9	7.1	8.9	8.2	8.6	16.4	15.8	16.1	20.3	19.7	20.1
27	7.2	7.0	7.1	8.8	8.6	8.7	16.1	15.8	16.0	21.3	20.1	20.6
28	7.1	6.8	7.0	9.2	8.7	9.0	15.9	15.4	15.7	21.5	20.6	21.0
29	---	---	---	10.2	9.2	9.7	15.6	15.1	15.3	22.1	20.7	21.4
30	---	---	---	10.7	10.0	10.3	15.2	14.3	15.0	22.0	21.2	21.4
31	---	---	---	11.5	10.7	11.1	---	---	---	23.0	21.2	22.0
MONTH	7.4	3.6	5.8	11.5	6.0	7.4	18.1	10.4	14.2	23.0	12.3	17.2

03287500 KENTUCKY RIVER AT LOCK 4 AT FRANKFORT, KY—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	22.7	21.7	22.0	---	---	---	---	---	---	25.6	25.1	25.4
2	22.0	21.5	21.6	---	---	---	---	---	---	26.2	25.3	25.6
3	22.5	21.5	21.8	---	---	---	---	---	---	26.2	25.0	25.5
4	23.3	21.7	22.5	29.4	28.4	29.0	---	---	---	26.1	25.0	25.4
5	24.3	22.3	23.3	29.1	28.5	28.8	---	---	---	26.0	24.7	25.3
6	26.0	23.3	24.5	29.4	28.1	28.7	---	---	---	26.1	24.8	25.4
7	26.0	24.5	25.2	28.9	28.2	28.5	---	---	---	26.4	25.1	25.6
8	26.5	24.7	25.5	29.1	28.0	28.5	---	---	---	26.4	24.5	25.3
9	27.1	25.1	26.0	28.9	27.7	28.3	---	---	---	26.4	24.6	25.4
10	26.6	25.5	26.1	29.0	27.5	28.2	---	---	---	26.4	24.9	25.6
11	26.0	25.5	25.7	28.2	27.6	27.9	---	---	---	26.5	25.0	25.7
12	26.1	25.3	25.7	27.6	27.2	27.4	---	---	---	27.1	24.9	25.9
13	27.1	25.6	26.2	27.2	26.8	27.0	30.4	29.3	29.7	26.9	24.8	25.7
14	26.9	25.8	26.2	27.5	26.7	26.9	30.0	29.1	29.5	26.1	25.2	25.7
15	26.8	25.7	26.2	27.4	26.7	27.0	29.8	28.9	29.3	26.6	25.2	25.9
16	26.8	25.6	26.1	27.2	26.6	26.8	29.2	28.7	28.9	26.2	25.5	25.9
17	26.7	25.3	25.9	27.2	26.5	26.8	29.4	28.4	28.8	25.9	25.0	25.5
18	25.9	25.1	25.5	27.8	26.5	27.1	29.0	28.5	28.7	25.8	24.5	25.1
19	26.1	24.9	25.5	27.7	27.1	27.3	29.6	28.4	29.0	26.2	24.4	25.2
20	26.4	24.8	25.6	27.6	27.1	27.3	30.0	28.9	29.5	26.0	24.9	25.4
21	26.5	24.9	25.7	27.5	26.9	27.2	30.1	29.1	29.6	27.0	24.4	25.3
22	27.1	25.5	26.2	27.5	26.9	27.2	29.7	28.7	29.2	26.2	24.7	25.4
23	27.7	25.0	26.3	27.9	27.4	27.6	29.4	28.3	28.8	26.8	25.3	25.9
24	28.0	25.0	26.6	28.0	27.3	27.7	29.4	28.0	28.6	26.8	25.4	26.0
25	28.0	26.5	27.3	29.5	27.5	28.3	29.7	27.7	28.5	26.1	25.5	25.7
26	28.1	27.0	27.5	29.6	28.2	28.9	28.7	28.1	28.3	25.5	24.9	25.2
27	---	---	---	29.3	28.3	28.8	28.3	27.9	28.2	25.6	24.5	24.9
28	---	---	---	29.4	28.0	28.5	28.3	27.6	27.9	25.2	24.2	24.7
29	---	---	---	29.2	27.4	28.4	27.6	26.9	27.2	24.8	23.8	24.3
30	---	---	---	29.3	27.5	28.4	26.9	26.6	26.8	24.5	23.4	23.8
31	---	---	---	29.6	27.5	28.6	26.8	25.5	26.2	---	---	---
MONTH										27.1	23.4	25.4
YEAR	30.4	3.6	15.9									

03287500 KENTUCKY RIVER AT LOCK 4 AT FRANKFORT, KY—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	9.3	9.0	9.2	9.1	8.9	9.0	11.2	10.8	11.0	11.8	11.7	11.8
2	9.2	9.1	9.1	8.9	8.8	8.9	11.3	10.9	11.1	11.7	11.5	11.6
3	9.2	9.0	9.1	9.1	8.8	8.9	11.5	10.8	11.2	11.6	11.4	11.5
4	9.3	9.0	9.2	9.4	9.0	9.1	10.8	10.4	10.6	11.5	11.3	11.4
5	9.4	9.1	9.2	9.5	9.3	9.4	11.0	10.8	10.9	11.4	11.2	11.3
6	9.3	9.0	9.2	9.7	9.3	9.6	11.0	10.9	11.0	11.4	11.1	11.2
7	9.4	9.1	9.2	9.8	9.6	9.7	11.0	10.7	10.8	11.6	11.4	11.5
8	9.5	9.2	9.3	9.7	9.6	9.7	11.3	10.7	11.1	11.6	11.3	11.5
9	9.4	9.2	9.3	9.9	9.7	9.8	11.2	10.9	11.1	11.5	11.0	11.2
10	9.6	9.1	9.3	9.9	9.8	9.8	11.2	10.9	11.0	11.2	10.8	11.0
11	10.0	9.2	9.5	9.9	9.7	9.8	11.0	10.9	10.9	11.2	10.9	11.1
12	9.4	9.1	9.2	9.9	9.8	9.9	11.0	10.9	10.9	11.3	10.9	11.1
13	9.2	9.0	9.1	10.1	9.9	10	11.0	10.8	10.9	11.0	10.7	10.9
14	9.1	8.8	9.0	10.3	10.1	10.2	11.2	11.0	11.1	11.1	10.7	10.9
15	9.0	8.8	8.9	10.4	10.3	10.3	11.3	11.1	11.3	11.3	11.1	11.2
16	9.2	8.9	9.1	10.4	10.3	10.3	11.4	11.2	11.3	11.5	11.2	11.4
17	9.3	9.0	9.2	10.4	10.3	10.3	11.4	11.2	11.3	11.6	11.4	11.5
18	9.5	9.1	9.2	10.4	10.3	10.3	11.3	11.2	11.3	11.7	11.5	11.6
19	9.5	9.2	9.3	10.3	10.2	10.2	11.2	11.1	11.2	11.7	11.4	11.6
20	10.0	9.4	9.8	10.2	10.1	10.1	11.4	11.2	11.3	11.6	11.4	11.5
21	9.8	9.6	9.7	10.1	10.0	10.1	11.4	11.3	11.4	11.5	11.3	11.4
22	9.7	9.4	9.6	10.2	10.1	10.1	11.4	11.3	11.3	11.6	11.4	11.5
23	9.5	9.3	9.4	10.2	10.1	10.1	11.5	11.3	11.4	11.8	11.5	11.6
24	9.3	9.1	9.2	10.2	10.1	10.2	11.9	11.4	11.6	---	---	---
25	9.2	9.0	9.1	10.3	10.1	10.2	12.1	11.8	12.0	---	---	---
26	9.1	9.0	9.0	10.6	10.3	10.5	12.1	11.9	12.0	13.2	13.1	13.1
27	9.2	8.9	9.1	10.6	10.6	10.6	12.2	12.0	12.1	13.3	13.1	13.2
28	9.3	9.1	9.2	10.8	10.5	10.6	12.3	12.2	12.3	13.4	13.3	13.4
29	9.4	9.1	9.3	11.0	10.7	10.8	12.3	12.1	12.2	13.5	13.4	13.5
30	9.4	9.2	9.3	10.9	10.8	10.8	12.2	12.0	12.1	13.5	13.4	13.4
31	9.2	9.1	9.2	---	---	---	12.1	11.8	11.9	13.9	13.4	13.5
MONTH	10.0	8.8	9.2	11.0	8.8	10.0	12.3	10.4	11.3	13.9	10.7	11.8
		FEBRUARY			MARCH			APRIL			MAY	
1	14.4	13.9	14.3	13.1	12.8	12.9	11.7	11.3	11.5	---	---	---
2	14.5	14.4	14.4	13.2	12.9	13.1	11.5	11.3	11.4	---	---	---
3	14.4	14.3	14.4	13.4	13.2	13.2	11.8	11.5	11.7	---	---	---
4	14.3	14.2	14.2	13.4	13.2	13.3	11.9	11.5	11.7	---	---	---
5	14.2	14.0	14.1	13.3	13.2	13.2	11.8	11.6	11.7	---	---	---
6	14.1	13.9	14.0	13.5	13.2	13.4	11.9	11.6	11.8	---	---	---
7	13.9	13.7	13.8	13.5	13.1	13.3	11.6	11.3	11.5	---	---	---
8	13.7	13.4	13.5	13.6	13.1	13.3	11.3	11.2	11.3	---	---	---
9	13.4	13.1	13.2	13.7	13.5	13.6	11.5	11.1	11.3	---	---	---
10	13.1	13.0	13.0	13.7	13.5	13.6	11.4	11.2	11.3	---	---	---
11	13.3	13.1	13.2	13.7	13.5	13.6	11.3	10.9	11.1	---	---	---
12	13.2	13.2	13.2	13.6	13.5	13.5	11.0	10.6	10.8	---	---	---
13	13.2	13.1	13.1	13.5	13.3	13.4	10.7	10.5	10.6	---	---	---
14	13.1	12.8	12.9	13.3	13.2	13.3	10.9	10.6	10.7	---	---	---
15	13.1	12.8	12.9	13.2	13.1	13.2	11.1	10.8	11.0	---	---	---
16	13.1	13.0	13.0	13.2	13.0	13.1	11.5	11.0	11.3	---	---	---
17	13.4	13.1	13.3	13.1	13.0	13.0	11.5	11.2	11.4	---	---	---
18	13.4	13.3	13.4	13.0	12.9	13.0	11.4	11.1	11.1	9.8	9.4	9.5
19	13.3	13.2	13.2	13.0	12.8	12.8	11.1	10.9	11.0	10.1	9.4	9.7
20	13.3	13.2	13.3	13.0	12.8	12.9	11.0	10.7	10.9	9.6	9.1	9.3
21	13.3	13.1	13.2	13.0	12.7	12.8	10.9	10.7	10.7	9.4	8.8	9.1
22	13.1	13.0	13.1	12.7	12.6	12.7	10.8	10.3	10.7	9.4	8.8	9.0
23	13.2	13.0	13.1	12.6	12.5	12.6	10.5	10.2	10.3	9.5	8.7	9.1
24	13.1	13.0	13.0	12.5	12.4	12.4	10.8	10.3	10.5	9.4	8.9	9.2
25	13.1	13.1	13.1	12.5	12.4	12.5	11.3	10.6	10.9	9.6	8.7	9.0
26	13.1	13.0	13.1	12.4	12.1	12.3	11.1	10.7	10.9	9.0	8.2	8.6
27	13.1	12.9	13.0	12.3	12.1	12.2	---	---	---	8.9	8.0	8.3
28	13.0	12.8	12.9	12.1	11.7	11.8	---	---	---	8.9	7.9	8.3
29	---	---	---	12.1	11.6	11.8	---	---	---	8.9	7.8	8.2
30	---	---	---	12.2	12.0	12.1	---	---	---	8.6	7.5	7.8
31	---	---	---	12.0	11.7	11.9	---	---	---	8.8	7.4	7.8
MONTH	14.5	12.8	13.4	13.7	11.6	12.9						

03287500 KENTUCKY RIVER AT LOCK 4 AT FRANKFORT, KY—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER—CONTINUED
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	8.6	7.4	7.7	---	---	---	---	---	---	5.8	5.4	5.6
2	7.6	7.1	7.3	---	---	---	---	---	---	6.0	5.1	5.4
3	7.7	6.9	7.2	---	---	---	---	---	---	7.5	5.0	6.0
4	7.6	6.7	7.2	6.4	5.4	5.9	---	---	---	8.0	5.7	6.5
5	7.7	6.5	7.1	6.4	4.5	5.2	---	---	---	7.9	5.7	6.6
6	7.9	6.5	7.2	7.8	3.9	5.6	---	---	---	10.2	5.7	7.3
7	8.9	6.7	7.6	7.9	4.5	6.1	---	---	---	12.5	7.0	9.7
8	11.0	7.4	8.7	7.7	5.2	6.3	---	---	---	9.5	6.9	8.3
9	9.9	7.1	8.3	7.3	4.7	6.2	---	---	---	9.9	7.0	8.3
10	8.5	6.7	7.6	7.3	4.8	6.0	---	---	---	12.6	8.3	9.8
11	7.5	6.4	6.9	6.3	4.2	5.4	---	---	---	11.5	7.4	9.7
12	7.1	6.0	6.5	5.1	4.0	4.4	---	---	---	11.8	9.0	10.1
13	6.8	5.9	6.3	4.6	3.8	4.1	8.0	7.0	7.4	13.0	9.2	10.6
14	6.8	5.6	6.0	5.2	3.7	4.2	7.5	6.1	6.9	13.0	10.4	11.6
15	6.9	5.7	6.2	5.2	3.7	4.3	7.3	5.9	6.5	13.0	11.1	11.9
16	7.3	5.8	6.6	5.4	3.9	4.6	6.4	5.2	5.8	12.1	9.6	10.7
17	7.8	6.1	6.9	6.0	4.3	4.9	6.1	4.7	5.4	12.1	8.9	10.9
18	8.3	6.2	7.1	6.6	4.8	5.5	6.8	4.9	5.8	10.9	7.9	8.9
19	7.9	6.1	6.9	6.4	5.4	5.9	7.6	5.4	6.3	8.4	7.6	8.0
20	10.0	6.2	7.8	6.4	5.8	6.0	7.4	5.5	6.7	8.4	6.0	7.5
21	10.1	6.8	8.1	6.6	5.7	6.0	7.2	5.5	6.4	8.0	5.8	7.0
22	11.8	8.4	10	7.2	5.9	6.4	7.3	5.7	6.3	9.0	6.8	8.0
23	9.4	7.9	8.8	6.7	6.1	6.5	7.8	5.0	6.2	8.8	7.1	8.0
24	9.1	7.7	8.4	6.7	5.7	6.2	7.8	4.4	6.0	10.6	7.8	9.3
25	9.0	7.2	8.4	7.4	5.6	6.4	7.7	4.5	5.9	9.4	7.7	8.5
26	8.7	7.4	8.0	8.8	5.8	7.0	6.4	5.1	5.7	8.4	6.7	7.4
27	---	---	---	8.6	6.1	7.2	6.5	4.7	5.5	7.7	5.6	6.5
28	---	---	---	9.5	5.8	7.1	6.2	3.9	5.0	6.6	5.5	6.2
29	---	---	---	9.0	4.4	6.2	4.7	3.7	4.2	6.6	4.8	5.8
30	---	---	---	9.8	4.6	6.9	5.0	4.1	4.7	6.4	4.6	5.3
31	---	---	---	9.3	4.8	6.6	5.5	4.7	5.2	---	---	---
MONTH										13.0	4.6	8.2
YEAR	14.5	3.7	9.8									

THIS PAGE IS INTENTIONALLY BLANK.