

RESERVOIR SEDIMENT
DATA SUMMARY

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS

CAVE RUN LAKE
NAME OF RESERVOIR

19-67

DATA SHEET NO.

DAM	1. OWNER US Army Corps of Engrs		2. STREAM Licking River		3. STATE Kentucky			
	4. SEC TWP. RANGE		5. NEAREST P O. Farmers, KY		6. COUNTY Bath, Rowan			
	7. LAT 38° 06' 55" LONG 83° 32' 00"		8. TOP OF DAM ELEVATION 788		9. SPILLWAY CREST ELEV. 765			
RESERVOIR	10. STORAGE ALLOCATION	11. ELEVATION TOP OF POOL	12. ORIGINAL SURFACE AREA, ACRES	13. ORIGINAL CAPACITY, ACRE-Feet	14. GROSS STORAGE, ACRE-Feet	15. DATE STORAGE BEGAN		
	a. FLOOD CONTROL	765	14870	391491	614072	JAN 74		
	b. MULTIPLE USE	730	8270	46961	222581			
	c. POWER							
	d. WATER SUPPLY					16. DATE NOR-MAL OPER. BEGAN		
	e. IRRIGATION					FEB 74		
	f. CONSERVATION	724	7390	175620	175620			
	g. INACTIVE							
17. LENGTH OF RESERVOIR 48 MILES			AV. WIDTH OF RESERVOIR 0.27 MILES					
18. TOTAL DRAINAGE AREA 827 SQ. MI.			22. MEAN ANNUAL PRECIPITATION 45 INCHES					
19. NET SEDIMENT CONTRIBUTING AREA 826 SQ. MI.			23. MEAN ANNUAL RUNOFF 1/ 16.70 INCHES					
20. LENGTH 57 MILES		AV. WIDTH 14.5 MILES		24. MEAN ANNUAL RUNOFF 1/ 736710 AC.-FT.				
21. MAX. ELEV. 1500		MIN. ELEV. 650		25. ANNUAL TEMP: MEAN 55 RANGE -34 to 110°F				
WATERSHED	26. DATE OF SURVEY	27. PERIOD YEARS	28. ACCL. YEARS	29. TYPE OF SURVEY	30. NO. OF RANGES OR CONTOUR INT.	31. SURFACE AREA, ACRES	32. CAPACITY, ACRE-Feet	33. C/I. RATIO, AC.-FT. PER AC.-FT.
	JAN 1975	11.75	12.75	RANGE	12	14,870	614072	0.83
	SEPT 1986			RANGE	12	14,870	607275	0.82
SURVEY DATA	26. DATE OF SURVEY	34. PERIOD ANNUAL PRECIPITATION	35. PERIOD WATER INFLOW, ACRE-Feet		36. WATER INFL. TO DATE, AC.-FT.			
		a. MEAN ANNUAL	b. MAX. ANNUAL	c. PERIOD TOTAL	a. MEAN ANNUAL	b. TOTAL TO DATE		
	SEPT 1986	45.8	374152	567804	4115672	351960	4223516	
	1/	1/	1/	1/	1/	1/		
26. DATE OF SURVEY	37. PERIOD CAPACITY LOSS, ACRE-Feet			38. TOTAL SED. DEPOSITS TO DATE, ACRE-Feet				
	a. PERIOD TOTAL	b. AV. ANNUAL	c. PER SQ. MI.-YEAR	a. TOTAL TO DATE	b. AV. ANNUAL	c. PER SQ. MI.-YEAR		
SEPT 1986	6797	533	.64	6797	533	.64		
26. DATE OF SURVEY	39. AV. DRY WGT., LBS. PER CU. FT.	40. SED. DEP. TONS PER SQ. MI.-YR.		41. STORAGE LOSS, PCT.		42. SED. INFLOW, PPM		
	a. PERIOD	b. TOTAL TO DATE	a. AV. ANN	b. TOT. TO DATE	a. PERIOD	b. TOT. TO DATE		
SEPT 1986	43.7	609	609	.09	1.11	1057	1127	

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION														
	115	105	95-85	85-75	75-65	65-55	55-45	45-0							
	-105 -95 PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION														
SEPT 1986	0	0	.10	.09	.08	.25	.24	.24							
26. DATE OF SURVEY	44. REACH DESIGNATION PERCENT OF TOTAL ORIGINAL LENGTH OF RESERVOIR														
	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	-105	-110	-115	-120	-125
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN REACH DESIGNATION														
SEPT 1986	.32	.47	.05	.07	.03	.04	.01	.01							
45. RANGE IN RESERVOIR OPERATION															
WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.	WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.								
1975	734.1	713.2	1126239												
1976	741.2	718.5	617603												
1977	731.9	725.7	493312												
1978	733.4	724.5	830539												
1979	737.3	727.8	1102479												
1980	755.0	726.3	762370												
1981	736.5	725.0	558802												
1982	738.8	724.7	610027												
1983	735.2	724.7	672407												
1984	744.8	724.9	682699												
1985	747.8	724.5	706957												
46. ELEVATION-AREA-CAPACITY DATA															
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY							
656	0	0	695	2610	27106										
660	10	17	700	3361	41900										
665	33	115	705	4144	60643										
670	79	382	710	5111	83609										
675	221	1052	715	5881	111129										
680	627	2963	720	6579	142082										
685	1279	7880	725	7355	176960										
690	1894	15780	730	8194	215784										
47. REMARKS AND REFERENCES															
1/ USGS Water Resources Data - Licking River at Farmers, KY															
48 AGENCY MAKING SURVEY US Army Corps of Engineers				50. DATE 9 August 1990											
49 AGENCY SUPPLYING DATA Louisville District															