

RESERVOIR SEDIMENT
DATA SUMMARY

Sycamore Lake
NAME OF RESERVOIR

16-44
DATA SHEET NO.

DAM	1. OWNER TVA		2. STREAM Dry Branch		3. STATE Tennessee			
	4. SEC. TWP. RANGE		5. NEAREST POST/OFF. Lexington		6. COUNTY Henderson			
	7. LAT. 35° 33' 50" LONG. 88° 22' 42"		8. TOP OF DAM ELEVATION 457.0		9. SPILLWAY CREST ELEV. 453.2 1/			
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	453.2 1/	270	800	2,815	1/27/65		
	b. MULTIPLE USE							
	c. POWER							
	d. WATER SUPPLY					16. DATE NORMAL OPER. BEGAN		
	e. IRRIGATION							
	f. CONSERVATION	449.96 2/	224	609	2,015			
g. INACTIVE	447.0 3/	186	1,406	1,406	2/11/66			
WATERSHED	17. LENGTH OF RESERVOIR 1.52 MILES		AV. WIDTH OF RESERVOIR 0.23 MILES					
	18. TOTAL DRAINAGE AREA 2.80 SQ. MI.		22. MEAN ANNUAL PRECIPITATION 49.33 INCHES					
	19. NET SEDIMENT CONTRIBUTING AREA 2.45 SQ. MI.		23. MEAN ANNUAL RUNOFF 16.39 INCHES					
	20. LENGTH 2.5 MILES		AV. WIDTH 1.1 MILES		24. MEAN ANNUAL RUNOFF 2447 AC.-FT.			
	21. MAX. ELEV. 640		MIN. ELEV. 425		25. ANNUAL TEMP.: MEAN 60° RANGE 4° to 98°			
SURVEY DATA	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.
	Apr. 20, 1965	0	0	Range	11	224	2,015	
	Oct. 13, 1972	7.5	7.5	Range	8	4/	1,969	
				(D)				
	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	
	Oct. 13, 1972	49.43	1969	2531	14,771	1969	14,771	
	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	
	Oct. 13, 1972	46	6.13	2.50	46	6.13	2.50	
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. TOTAL TO DATE	b. PERIOD	a. AV. AN.	b. TOT. TO DATE	a. PERIOD	b. TOT. TO DATE	
Oct. 13, 1972	65*	3539	3539	0.304	2.283			

*Assumed

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION											
	23.5-20	20-15	15-10	10-5	5-0							
PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION												
Oct. 13, 1972	5	14	35	39	7							

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															
Oct. 13, 1972	12	16	16	16	10	10	10	5	3	2					

45. RANGE IN RESERVOIR OPERATION							
WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW AC.-FT.	WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW AC.-FT.
1965	448.27		1555				
1966	450.78	447.48	1640				
1967	451.30	443.80	2531				
1968	450.80	-	2390				
1969	450.80	447.07	1886				
1970	451.30	446.99	2344				
1971	451.28	449.69	1377				
1972	451.04	447.01	1944				
1973	452.06	449.97	5548				

46. ELEVATION-AREA-CAPACITY DATA								
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY
		1965		4/	1972			
426.5	0	0			0			
430	2	5			3			
435	41	102			93			
440	92	430			405			
445	161	1060			1,017			
449.96	224	2015			1,969			
453.2	270	2815			2,763			

47. REMARKS AND REFERENCES

1/ Emergency spillway crest.
 2/ Main spillway crest; normal full pool.
 3/ Planned minimum pool.
 4/ Not measured or calculated after initial survey.