

RESERVOIR SEDIMENT  
DATA SUMMARY

Cedar Lake  
NAME OF RESERVOIR

16-37  
DATA SHEET NO.

DAM	1. OWNER TVA			2. STREAM Haley Creek			3. STATE Tennessee					
	4. SEC. TWP. RANGE			5. NEAREST POST/OFF. Lexington			6. COUNTY Henderson					
	7. LAT. 35° 40' 20" LONG. 88° 19' 19"			8. TOP OF DAM ELEVATION 449.9			9. SPILLWAY CREST ELEV. 445.4 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		445.4 1/		234		1,215		2,090		11/12/63	
	b. MULTIPLE USE											
	c. POWER											
	d. WATER SUPPLY										16. DATE NORMAL OPER. BEGAN	
	e. IRRIGATION											
	f. CONSERVATION		438.85 2/		143		525		875			
g. INACTIVE		434.4 3/		93		350		350		2/17/64		
17. LENGTH OF RESERVOIR 1.42 MILES					AV. WIDTH OF RESERVOIR 0.15 MILES							
WATERSHED	18. TOTAL DRAINAGE AREA 4.37 SQ. MI.				22. MEAN ANNUAL PRECIPITATION 49.17 INCHES							
	19. NET SEDIMENT CONTRIBUTING AREA 4.15 SQ. MI.				23. MEAN ANNUAL RUNOFF 22.55 INCHES							
	20. LENGTH 3.8 MILES		AV. WIDTH 1.2 MILES		24. MEAN ANNUAL RUNOFF 52.55 AC.-FT.							
	21. MAX. ELEV. 660		MIN. ELEV. 420		25. ANNUAL TEMP.: MEAN 60° RANGE 4° to 98°							
	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. 8, 1964		0	0	Range	9	143	875					
Oct. 11, 1972		8.5	8.5	Range	6	4/	861					
				(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. 11, 1972		50.95		4660	5899	39,607	4660	39,607				
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. 11, 1972		14	1.65	0.398	14	1.65	0.398					
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. 11, 1972		65*	563	563	0.19	1.60						

\*Assumed

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION											
	17.4-10	10-5	5-0									
PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION												
Oct. 11, 1972	10	31	59									

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. 11, 1972	5	4	4	4	4	15	16	14	16	18					

45. RANGE IN RESERVOIR OPERATION							
WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW AC.-FT.	WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW AC.-FT.
1964	441.02		4,661				
1965	441.70	438.87	5,899				
1966	440.60	438.93	3,747				
1967	440.74	438.94	3,868				
1968	439.87	435.36	3,927				
1969	440.15	435.10	4,447				
1970	440.19	438.93	4,620				
1971	440.24	438.97	4,762				
1972	441.50	435.28	4,877				
1973	441.40	439.03	10,011				

46. ELEVATION-AREA-CAPACITY DATA								
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY
		1964			1972			
421	0	0		4/	0			
425	3	6			5			
430	31	69			67			
435	100	407			400			
438.85	143	875			861			
440	158	1050			1,034			
445 <sup>4</sup>	234	2090			2,078			

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.