

RESERVOIR SEDIMENT
DATA SUMMARY

Lost Creek Detention Dam

NAME OF RESERVOIR

16-40

DATA SHEET NO.

DAM	1. OWNER TVA			2. STREAM Lost Creek			3. STATE Tennessee					
	4. SEC. TWP. RANGE			5. NEAREST POST OFF. Lexington			6. COUNTY Henderson					
	7. LAT. 35° 34' 44" LONG. 88° 20' 36"			8. TOP OF DAM ELEVATION 425.5			9. SPILLWAY CREST ELEV. 419.6 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		419.6 1/		154		859		859		3/	
	b. MULTIPLE USE										10/9/63	
	c. POWER										16. DATE NORMAL OPER. BEGAN	
	d. WATER SUPPLY										10/9/63	
	e. IRRIGATION											
	f. CONSERVATION											
g. INACTIVE		404.4 2/		0		0		0				
17. LENGTH OF RESERVOIR 1.70 MILES				AV. WIDTH OF RESERVOIR 0.14 MILES								
18. TOTAL DRAINAGE AREA 4.29 SQ. MI.				22. MEAN ANNUAL PRECIPITATION 49.22 INCHES								
19. NET SEDIMENT CONTRIBUTING AREA 4.29 SQ. MI.				23. MEAN ANNUAL RUNOFF INCHES								
20. LENGTH 3.8 MILES		AV. WIDTH 1.1 MILES		24. MEAN ANNUAL RUNOFF AC.-FT.								
21. MAX. ELEV. 620		MIN. ELEV. 404		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. 20, 1964		0	0	Range	9	154	859					
Oct. 15, 1972		8.5	8.5	Range	5	4/	832					
				(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. 15, 1972		46.7										
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. 15, 1972		27	3.18	0.741	27	3.18	0.741					
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. 15, 1972		*654	1,049	1,049	0.370	3.14						

*Assumed

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION												
	5.2-10	10-5	5-0										
Oct. 15, 1972	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION												
	27	67	6										

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. 15, 1972	25	25	17	21	12	0	0	0	0	0					

45. RANGE IN RESERVOIR OPERATION							
WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW AC.-FT.	WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW AC.-FT.
1964	417.3	5/					
1965	415.7						
1966	413.5						
1967	415.6						
1968	413.5						
1969	414.4						
1970	414.5						
1971	416.5						
1972	413.4						

46. ELEVATION-AREA-CAPACITY DATA								
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY
		1964		4/	1972			
404.4	0	0			0			
410	22	29			21			
415	88	303			276			
419.6	154	859			832			

47. REMARKS AND REFERENCES

1/ Emergency spillway crest.
 2/ Bottom slab and invert elevation of 30" dia. open sluiceway.
 3/ Date embankment completed.
 4/ Not measured or calculated after initial survey
 5/ No record - during low flows would be just above invert elevation of 404.4.