

RESERVOIR SEDIMENT
DATA SUMMARY

Dogwood Lake
NAME OF RESERVOIR

16-39
DATA SHEET NO.

DAM	1. OWNER TVA		2. STREAM Big Creek		3. STATE Tennessee			
	4. SEC. TWP. RANGE		5. NEAREST POST/OFF. Darden		6. COUNTY Henderson			
	7. LAT. 35° 43' 02" LONG. 88° 14' 32"		8. TOP OF DAM ELEVATION 452.0		9. SPILLWAY CREST ELEV. 447.0 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	447.0 1/	513	1,596	7,110	8/19/65		
	b. MULTIPLE USE							
	c. POWER							
	d. WATER SUPPLY					16. DATE NORMAL OPER. BEGAN		
	e. IRRIGATION							
	f. CONSERVATION	443.66 2/	446	1,704	5,514			
g. INACTIVE	439.5 3/	372	3,810	3,810	5/20/67			
WATERSHED	17. LENGTH OF RESERVOIR 4/		2.87 MILES	AV. WIDTH OF RESERVOIR		0.24 MILES		
	18. TOTAL DRAINAGE AREA		5.04 SQ. MI.	22. MEAN ANNUAL PRECIPITATION		49.93 INCHES		
	19. NET SEDIMENT CONTRIBUTING AREA		4.34 SQ. MI.	23. MEAN ANNUAL RUNOFF		16.56 INCHES		
	20. LENGTH 3.9 MILES	AV. WIDTH 1.3 MILES	24. MEAN ANNUAL RUNOFF		4451 AC.-FT.			
	21. MAX. ELEV. 640	MIN. ELEV. 414	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.
	Oct. 25, 1967	0	0	Range	16	446	5,514	
	Oct. 20, 1972	5.0	5.0	Range	8	5/	5,463	
				(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. 20, 1972	53.62	4196	4639	20,979	4196	20,979	
	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. 20, 1972	51	10.2	2.35	51	10.2	2.35	
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. 20, 1972	65*	3,327	3,327	0.185	0.925			

*Assumed

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION											
	29-3/4-25	25-20	20-15	15-10	10-5	5-0						

Oct. 20, 1972	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION											
	2		16	36	25	13	8					

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

Oct. 20, 1972	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN REACH DESIGNATION													
	20	20	17	9	9	11	8	3	1	2				

45. RANGE IN RESERVOIR OPERATION

WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW AC.-FT.	WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW AC.-FT.
1966			2,067				
1967	443.84		3,426				
1968	444.81	439.96	4,639				
1969	444.70	439.48	3,439				
1970	445.22	442.54	3,657				
1971	445.35	443.38	4,093				
1972	445.80	443.36	4,169				
1973	446.00	443.43	10,119				

46. ELEVATION-AREA-CAPACITY DATA

ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY
		1967		5/	1972			
414	0	0			0			
420	20	25			24			
425	110	348			337			
430	196	1112			1,079			
435	289	2318			2,276			
440	382	3998			3,950			
443.66	446	5514			5,463			
447	513	7110			7,059			

47. REMARKS AND REFERENCES

- 1/ Emergency spillway crest.
- 2/ Main spillway crest; normal full pool.
- 3/ Planned minimum pool.
- 4/ Big Creek 2.25 miles; unnamed tributary 0.62 mile.
- 1/ Not measured or calculated after initial survey.