

RESERVOIR SEDIMENTATION  
DATA SUMMARY

Lake Tandy

NAME OF RESERVOIR

18-2a

DATA SHEET NO.

DAM	1. OWNER City of Hopkinsville			2. RIVER Little River			3. STATE Kentucky									
	4. SEC. TWP. RANGE			5. NEAREST TOWN Hopkinsville			6. COUNTY Christian									
	7. STREAM BED ELEV. 544			8. TOP OF DAM ELEV. 574			9. SPILLWAY GREST ELEV. 569									
RESERVOIR	10. STORAGE ALLOCATION		11. ELEVATION TOP OF POOL		12. SURFACE AREA ACRES		13. STORAGE ACRE- FEET		14. ACCUMULATED ACRE- FEET		15. DATE STORAGE BEGAN					
	a. FLOOD CONTROL										1907					
	b. POWER															
	c. WATER SUPPLY		569		62.9		769		769		16. DATE NORMAL OPER. BEGAN					
	d. IRRIGATION															
	e. CONSERVATION															
f. INACTIVE																
17. LENGTH OF RESERVOIR 0.64			MILES			AV. WIDTH OF RESERVOIR 0.16			MILES							
WATERSHED	18. TOTAL DRAINAGE AREA 6.10				SQ. MI.				22. MEAN ANNUAL PRECIPITATION 47.4 (63 yrs)				INCHES			
	19. NET SEDIMENT CONTRIBUTING AREA 6.00				SQ. MI.				23. MEAN ANNUAL RUNOFF 17.5				INCHES			
	20. LENGTH 4.84		MILES		AV. WIDTH 1.24		MILES		24. MEAN ANNUAL RUNOFF 5710				AC.-FT.			
	21. MAX. ELEV. 830				MIN. ELEV. 544				25. CLIMATIC CLASSIFICATION				Humid			
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/W RATIO AC.-FT. PER SQ. MI.	
	1907		-		-		-		-		62.9		769		126	
	Jan, 1941		34		34		Range		8		62.9		564		92	
	June, 1959		18.5		52.5		Range Recon. Range Detailed		8		62.9		509		83	
	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		d. MEAN ANNUAL		e. TOTAL TO DATE			
	26. DATE OF SURVEY		37. PERIOD SEDIMENT DEPOSITS ACRE- FEET				38. TOTAL SED. DEPOSITS TO DATE ACRE- FEET.									
			a. PERIOD TOTAL		b. AV. ANNUAL		c. PER SQ. MI.-YEAR		d. TOTAL TO DATE		e. AV. ANNUAL		f. PER SQ. MI.-YEAR			
	Jan. 1941		205		6.03		1.00		205		6.03		1.00			
June, 1959		55		2.97		0.495		260		4.96		0.827				
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		c. AV. ANNUAL		d. TOT. TO DATE		e. PERIOD		f. TOT. TO DATE		
Jan, 1941		43		936		936		0.784		26.7						
June, 1959		43 1/2		463		775		0.646		33.9						

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET ABOVE, AND BELOW, CREST ELEVATION														
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION														
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														
June, 1959	13.1	13.1	13.1	13.1	11.3	10.1	9.9	7.8	5.3	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.								
46. ELEVATION-AREA-CAPACITY DATA															
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY							
47. REMARKS AND REFERENCES Original volume revised in accordance with higher order of accuracy of 1959 survey and drainage area corrected.  1/ Average of 2 samples  Soil Conservation Service U. S. Department of Agriculture Lexington, Kentucky															
48. AGENCY SUPPLYING DATA							49. DATE December, 1960								