

RESERVOIR SEDIMENTATION
DATA SUMMARY

Lake Bailey

NAME OF RESERVOIR

44-4

DATA SHEET NO.

DAM	1. OWNER State Park Commission		2. RIVER Cedar Creek		3. STATE Arkansas			
	4. SEC. 33,34 TWP. 6 N RANGE 18 W		5. NEAREST TOWN Morrilton		6. COUNTY Conway			
	7. STREAM BED ELEV. 852.5		8. TOP OF DAM ELEV. 882.5		9. SPILLWAY CREST ELEV. 874.5			
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					Sept. 1937		
	b. POWER							
	c. WATER SUPPLY					16. DATE NORMAL OPER. BEGAN		
	d. IRRIGATION							
	e. CONSERVATION	874.5	115	629	629	Aug. 1938		
f. INACTIVE								
WATERSHED	17. LENGTH OF RESERVOIR 1.0 MILES		AV. WIDTH OF RESERVOIR 0.18 MILES					
	18. TOTAL DRAINAGE AREA 15.2 SQ. MI.		22. MEAN ANNUAL PRECIPITATION 43.0 (21) INCHES					
	19. NET SEDIMENT CONTRIBUTING AREA 15 SQ. MI.		23. MEAN ANNUAL RUNOFF		INCHES			
	20. LENGTH	MILES	AV. WIDTH	MILES	24. MEAN ANNUAL RUNOFF			
	21. MAX. ELEV.		MIN. ELEV.		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.
	Sept. 1937	-	-	-	-	115	629	41
	May 1940	2.7	2.7	Recon.	28 meas.	115	602	40
	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	
	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	a. TOTAL TO DATE	b. AV. ANNUAL	c. PER SQ. MI.- YEAR	
	May 1940	27	10.0	0.66	27	10.0	0.66	
	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	a. AV. ANNUAL	b. TOT. TO DATE	a. PERIOD	b. TOT. TO DATE	
May 1940				1.59	4.29	-	-	

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														

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
 The sediment is a light gray silt containing subordinate amounts of fine and very fine sand with a greater abundance of coarser material in the delta area.

Region 4, Soil Conservation Service
 U. S. Dept. of Agriculture
 Fort Worth, Texas

48. AGENCY SUPPLYING DATA

49. DATE January 1951