

RESERVOIR SEDIMENTATION  
DATA SUMMARY

Lake Booneville

NAME OF RESERVOIR

44-2

DATA SHEET NO.

DAM	1. OWNER Ark. Public Service Co.		2. RIVER Trib. to Petit Jean Creek		3. STATE Arkansas				
	4. SEC. 19 TWP. 6 N RANGE 12 W		5. NEAREST TOWN Booneville		6. COUNTY Logan				
	7. STREAM BED ELEV. 586		8. TOP OF DAM ELEV. 633		9. SPILLWAY CREST ELEV. 628.24				
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					March 1929			
	b. POWER								
	c. WATER SUPPLY	628	18.31	289	289	16. DATE NORMAL OPER. BEGAN			
	d. IRRIGATION								
	e. CONSERVATION					March 1929			
f. INACTIVE									
17. LENGTH OF RESERVOIR 0.3 MILES			AV. WIDTH OF RESERVOIR 0.1 MILES						
WATERSHED	18. TOTAL DRAINAGE AREA 2.60 SQ. MI.		22. MEAN ANNUAL PRECIPITATION 32 INCHES						
	19. NET SEDIMENT CONTRIBUTING AREA 2.57 SQ. MI.		23. MEAN ANNUAL RUNOFF 16 INCHES						
	20. LENGTH MILES		AV. WIDTH MILES		24. MEAN ANNUAL RUNOFF AC.-FT.				
	21. MAX. ELEV. 850		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 <sub>w</sub> RATIO AC.-FT. PER SQ. MI.	
	March 1929	-	-	-	-	18.31	289	111	
	Nov. 1935	6.75	6.75	Range Detailed	12	17.92	282	108	
	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		
	Nov. 1935	7.88	1.17	0.455	7.88	1.17	0.455		
	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	
Nov. 1935				0.40	2.72	-	-		

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  
 Glymph, Louis M., Jr., and Jones, Victor H. Advance Report on the Sedimentation Survey of Lake Booneville, Booneville, Arkansas. U. S. Soil Conserv. Serv., SCS-SS-3, 7 pp., illus., processed. Washington, D. C., May 1, 1936.

Taken as a whole, the sediment of Lake Booneville contains a relatively high proportion of fine sand. Just above the dam the sediment is a blue-black clayey silt.

48. AGENCY SUPPLYING DATA Region 4, Soil Conservation Service 49. DATE August 4, 1950  
U. S. Dept. of Agriculture  
Fort Worth, Texas