

RESERVOIR SEDIMENTATION  
DATA SUMMARY

Lake Purdy

NAME OF RESERVOIR

12-5

DATA SHEET NO.

DAM	1. OWNER <b>Birmingham Waterworks Co.</b>			2. RIVER <b>Little Cahaba</b>			3. STATE <b>Alabama</b>			
	4. SEC. <b>17</b> TWP. <b>18S</b> RANGE <b>1W</b>			5. NEAREST TOWN <b>Birmingham</b>			6. COUNTY <b>Jefferson, Shelby</b>			
	7. STREAM BED ELEV.			8. TOP OF DAM ELEV.			9. SPILLWAY CREST ELEV. <b>550.37</b>			
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. 1910				
	b. POWER									
	c. WATER SUPPLY	<b>550.37</b>	<b>972</b>	<b>19,080</b>	<b>19,080</b>	16. DATE NORMAL OPER. BEGAN				
	d. IRRIGATION									
	e. CONSERVATION									
	f. INACTIVE									
17. LENGTH OF RESERVOIR <b>3.88<sup>1/</sup></b>			<b>1.63<sup>2/</sup></b> MILES			AV. WIDTH OF RESERVOIR <b>.22</b> MILES				
WATERSHED	18. TOTAL DRAINAGE AREA <b>41.74</b> SQ. MI.			22. MEAN ANNUAL PRECIPITATION <b>49.48</b> INCHES						
	19. NET SEDIMENT CONTRIBUTING AREA <b>40.22</b> SQ. MI.			23. MEAN ANNUAL RUNOFF INCHES						
	20. LENGTH <b>17</b> MILES		AV. WIDTH <b>2.5</b> MILES		24. MEAN ANNUAL RUNOFF AC.-FT.					
	21. MAX. ELEV. <b>1150</b>			MIN. ELEV.			25. CLIMATIC CLASSIFICATION <b>Humid</b>			
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. 1910	-	-	-	-	972	19,080	457		
	Nov. 1935	25.2	25.2	Range Detailed	38	972	18,594	445		
	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	486	19.3	.479	486	19.3	.479			
	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				0.10	2.55					

1/ On Little Cahaba  
2/ On Cox Creek

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
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

Eargle, D. Hoye, Advance Report on the sedimentation survey of Lake Purdy, Birmingham, Alabama, Soil Conserv. Serv., SCS-SS-5, 11 pp., illus., processed, Washington, D. C., July 1936.

Region 2, Soil Conservation Service  
U. S. Dept. of Agriculture

48. AGENCY SUPPLYING DATA Spartanburg, South Carolina

49. DATE Sept. 27, 1950