

RESERVOIR SEDIMENTATION
DATA SUMMARY

Lake Michie
NAME OF RESERVOIR

6-5
DATA SHEET NO.

DAM	1. OWNER City of Durham			2. RIVER Flat River			3. STATE North Carolina					
	4. SEC. TWP. RANGE		5. NEAREST TOWN 13 Mi. NE Durham			6. COUNTY Durham						
	7. STREAM BED ELEV.			8. TOP OF DAM ELEV.			9. SPILLWAY CREST ELEV. 340					
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						April 1926					
	b. POWER											
	c. WATER SUPPLY	340	507		12,671	12,671	16. DATE NORMAL OPER. BEGAN					
	d. IRRIGATION											
	e. CONSERVATION											
	f. INACTIVE											
17. LENGTH OF RESERVOIR				MILES		17. AV. WIDTH OF RESERVOIR MILES						
WATERSHED	18. TOTAL DRAINAGE AREA 167.5			SQ. MI.		22. MEAN ANNUAL PRECIPITATION 43.15 (25) INCHES						
	19. NET SEDIMENT CONTRIBUTING AREA 166.7			SQ. MI.		23. MEAN ANNUAL RUNOFF INCHES						
	20. LENGTH 21		MILES		20. AV. WIDTH 10		MILES		24. MEAN ANNUAL RUNOFF AC.-FT.			
	21. MAX. ELEV. 650		MIN. ELEV.			25. CLIMATIC CLASSIFICATION Humid						
	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.			
April 1926		-	-	-	-	507	12,671	75.6				
Jan. 1935		8.75	8.75	Range Detailed	32	507	12,276	73.3				
SURVEY DATA	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. 1935		395		45.14	0.271		395		45.14		0.271	
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
Jan. 1935						0.36		3.12				

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
 Martin, I. L. and Bass, T. C. Erosion and related land use condition on the Lake Michie watershed near Durham, N. C. U. S. Soil Conservation watershed and conservation surveys, Washington, D. C., 1940

Eakin, H. M. Silting of reservoirs. U. S. Dept. Agr. Tech. Bul. 524. Rev. by C. B. Brown, 168 pp., illus. Washington, U. S. Govt. print. off., 1939

Region 2, Soil Conservation Service
 U. S. Department of Agriculture
 Spartanburg, South Carolina

48. AGENCY SUPPLYING DATA
 49. DATE October 1950