

RESERVOIR SEDIMENTATION

Roosevelt Lake

19-35

DATA SUMMARY State of Ohio

NAME OF RESERVOIR

Mackletree

DATA SHEET NO.

DAM	1. OWNER Div. of Parks			2. RIVER Turkey Cr. at/ Run			3. STATE Ohio										
	4. SEC. TWP. Nile RANGE			5. NEAREST TOWN Friendship			6. COUNTY Scioto										
	7. STREAM BED ELEV.			8. TOP OF DAM ELEV.			9. SPILLWAY CREST ELEV. 671										
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										1935						
	b. POWER																
	c. WATER SUPPLY										16. DATE NORMAL OPER BEGAN						
	d. IRRIGATION																
	e. CONSERVATION		671		15.82		101.1		101.1		1935						
	f. INACTIVE																
17. LENGTH OF RESERVOIR			0.40			MILES			AV. WIDTH OF RESERVOIR			0.06			MILES		
18. TOTAL DRAINAGE AREA			16.38			SQ. MI.			22. MEAN ANNUAL PRECIPITATION			42.3 (25yr)			INCHES		
19. NET SEDIMENT CONTRIBUTING AREA			15.76			SQ. MI.			23. MEAN ANNUAL RUNOFF			15.0 est. (9 yrs.)			INCHES		
20. LENGTH			4.8			MILES			AV. WIDTH			3.4			MILES		
24. MEAN ANNUAL RUNOFF			13,104			AG.-FT.			25. CLIMATIC CLASSIFICATION			humid					
21. MAX. ELEV.			1280			MIN. ELEV.			650								
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 AG.-FT. PER SQ. MI.		
	1935		-		-		-		-		16		101		6.17		
	Jul. 13, 1950		15.3		15.3		R. Detail		15		15		67		4.09		
	26. DATE OF SURVEY		34. PERIOD ANNUAL PRECIPITATION		35. PERIOD WATER INFLOW ACRE- FEET		36. WATER INFL. TO DATE AG-FT.										
			a. MEAN ANNUAL		b. MAX. ANNUAL		c. PERIOD TOTAL		d. MEAN ANNUAL		e. TOTAL TO DATE						
	July 1950		44.8		-		-		-		-		-		-		
	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	
	July 1950		33.67			2.20			0.140			33.67		2.20		0.140	
	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		c. PERIOD		d. TOT. TO DATE					
July 1950		61.0		186		186		2.18		33.3		-		-			

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

Sediment: Grey to yellowish & buff color, mainly silt at lower end, with some clay & fine sand. Upper end has more sand & some small gravelly material. Considerable organic matter in upper arms of lake

48. AGENCY SUPPLYING DATA Ohio Division of Water 49. DATE June 18, 1954