

RESERVOIR SEDIMENTATION
DATA SUMMARY

Stoney Lake

21 - 18

NAME OF RESERVOIR

DATA SHEET NO.

DAM	1. OWNER Stoney Lake Co.			2. RIVER McGuire Creek			3. STATE Ohio			
	4. SEC. 6 TWP. 14N RANGE 6W			5. NEAREST TOWN Perrysville			6. COUNTY Carroll			
	7. STREAM BED ELEV.			8. TOP OF DAM ELEV.			9. SPILLWAY CREST ELEV.			
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					1927				
	b. POWER									
	c. WATER SUPPLY							16. DATE NORMAL OPER. BEGAN		
	d. IRRIGATION									
	e. CONSERVATION			19.0	120.8	120.8	1927			
	f. INACTIVE									
WATERSHED	17. LENGTH OF RESERVOIR			MILES	AV. WIDTH OF RESERVOIR			MILES		
	18. TOTAL DRAINAGE AREA			8.57	SQ. MI.	22. MEAN ANNUAL PRECIPITATION			INCHES	
	19. NET SEDIMENT CONTRIBUTING AREA			8.54	SQ. MI.	23. MEAN ANNUAL RUNOFF			INCHES	
	20. LENGTH		MILES	AV. WIDTH		MILES	24. MEAN ANNUAL RUNOFF			672 per sq. mi. * AC.-FT.
	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.		
	1927	-	-	-	-	19.0	120.8	14.1		
	Dec. 1938	11.0	11.0	Grid recon.	-	19.0	79.7	9.30		
	April 1949	10.4	21.4	Range detailed	8	14.5	60.7	7.08		
	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				
	April 1949			647 per * sq. mi.		647 per * sq. mi.				
	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			
	Dec. 1938	41.1	3.74	0.438	41.1	3.74	0.438			
April 1949	19.0	1.83	0.214	60.1	2.81	0.329				
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			
Dec. 1938		620	620	3.10	34.02	1,400*	1,400*			
April 1949	65 *	303	466	2.33	49.75					

* Estimated

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															
Sanderson, E.E., Sedimentation of Reservoirs in Ohio, Ohio Water Resources Board, Bulletin 17, Columbus, Ohio, April 1948.															
Brune, Gunnar M., Rates of sediment production in Midwestern United States, U.S. Soil Conserv. Serv. SCS-TP-65, 40 pp., illus., processed, Milwaukee, Wis. December 1948.															
Region 3, Soil Conservation Service U. S. Dept. of Agriculture Milwaukee, Wisconsin															
48. AGENCY SUPPLYING DATA												49. DATE July 22, 1949			

RESERVOIR SEDIMENTATION
DATA SUMMARY

Stony Lake

NAME OF RESERVOIR

21-18a

DATA SHEET NO.

DAM	1. OWNER Private			2. RIVER McGuire Cr.		3. STATE Ohio		
	4. SEC. 6 TWP. Perry RANGE 6W			5. NEAREST TOWN Perrysville		6. COUNTY Carroll		
	7. STREAM BED ELEV.			8. TOP OF DAM ELEV.		9. SPILLWAY CREST ELEV.		
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					Winter 1927-28		
	b. POWER					16. DATE NORMAL OPER. BEGAN		
	c. WATER SUPPLY					Winter 1927--28		
	d. IRRIGATION							
	e. CONSERVATION		19.0		120.8	120.8		
f. INACTIVE								
WATERSHED	17. LENGTH OF RESERVOIR 0.37 MILES			AV. WIDTH OF RESERVOIR 0.05 MILES				
	18. TOTAL DRAINAGE AREA 11.75 SQ. MI.			22. MEAN ANNUAL PRECIPITATION 39.2 (25 yrs.) INCHES				
	19. NET SEDIMENT CONTRIBUTING AREA 11.72 SQ. MI.			23. MEAN ANNUAL RUNOFF INCHES				
	20. LENGTH 5.5 MILES AV. WIDTH 1.6 MILES			24. MEAN ANNUAL RUNOFF AC.-FT.				
	21. MAX. ELEV. 1340 MIN. ELEV. 990			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.
	1927	-	-	-	-	-	121	10.3
	Dec. 1938	11.0	11.0	Grid	-	190	80	6.81
	May 1949	10.4	21.4	Range detailed	8 ranges	14.5	61	5.19
	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	
	Dec. 1938	38.0	-	-	-	-	-	-
	May 1949	38.9	-	-	-	-	-	-
	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	
Dec. 1938	41.1	3.74	0.319	41.1	3.74	0.319		
May 1949	19.0	1.83	0.156	60.1	2.81	0.240		
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	
Dec. 1938	65 (est.)	452	452	3.10	34.0	1400 (est.)	1400 (est.)	
May 1949	65 (est.)	221	340	2.33	49.8			

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

48. AGENCY SUPPLYING DATA Ohio Division of Water

49. DATE June 18, 1951