

RESERVOIR SEDIMENTATION
DATA SUMMARY

Shafer Lake

NAME OF RESERVOIR

17-3

DATA SHEET NO.

50% 04
50% 25

DAM	1. OWNER No. Indiana Pub. Serv. Co.			2. RIVER Tippecanoe			3. STATE Indiana			
	4. SEC. 21 TWP. 27N RANGE 3 W			5. NEAREST TOWN Monticello			6. COUNTY White			
	7. STREAM BED ELEV. 614.6			8. TOP OF DAM ELEV. 648			9. SPILLWAY CREST ELEV. 645.1			
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					June 1923				
	b. POWER	645.1	1,400	14,722	14,722					
	c. WATER SUPPLY					16. DATE NORMAL OPER. BEGAN				
	d. IRRIGATION					June 1923				
	e. CONSERVATION									
	f. INACTIVE									
17. LENGTH OF RESERVOIR 10 MILES			AV. WIDTH OF RESERVOIR Very irregular MILES							
WATERSHED	18. TOTAL DRAINAGE AREA 1,700 SQ. MI.			22. MEAN ANNUAL PRECIPITATION 37 INCHES						
	19. NET SEDIMENT CONTRIBUTING AREA 1,698 SQ. MI.			23. MEAN ANNUAL RUNOFF INCHES						
	20. LENGTH MILES			AV. WIDTH MILES			24. MEAN ANNUAL RUNOFF per sq. mi. 532* AG.-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.	
June 1923		-	-	-	-	1,400	14,722	8.66		
August 1940		17.2	17.2	Range Recon.	17	1,400	14,041	8.26		
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				
August 1940			507 per sq. mi. *		507 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			
August 1940		681 (683)	39.6 (39.7)	0.023 (0.023)	681 (683)	39.6 (39.7)	0.023 (0.023)			
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	c. AV. ANNUAL	d. TOT. TO DATE	e. PERIOD	f. TOT. TO DATE			
August 1940	75 *	38	38	0.27	4.63	140 *	140*			

* 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															
<p>Brune, Gunnar M. Rates of sediment production in midwestern United States. U. S. Soil Conserv. Serv., SCS-TP-65, 40 pp., illus., processed, Milwaukee, Wisconsin, December 1948.</p> <p>Checked and approved by N. C. Seward, Division Manager, Northern Indiana Public Service Co., Monticello, Indiana</p> <p>Region 3, Soil Conservation Service U. S. Department of Agriculture</p>															
48. AGENCY SUPPLYING DATA Milwaukee, Wisconsin										49. DATE July 25, 1949					