

RESERVOIR SEDIMENTATION
DATA SUMMARY

Spring Mill
NAME OF RESERVOIR

17-4

DATA SHEET NO.

DAM	1. OWNER State Conservation Dept.			2. RIVER Mill Creek		3. STATE Indiana		
	4. SEC. 33 TWP. 4 N RANGE 1 E			5. NEAREST TOWN Mitchell		6. COUNTY Lawrence		
	7. STREAM BED ELEV. -			8. TOP OF DAM ELEV. -		9. SPILLWAY CREST ELEV. 603		
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					October 1938		
	b. POWER					16. DATE NORMAL OPER. BEGAN		
	c. WATER SUPPLY					October 1938		
	d. IRRIGATION							
	e. CONSERVATION	603	28.0	178	178			
	f. INACTIVE							
WATERSHED	17. LENGTH OF RESERVOIR			MILES	AV. WIDTH OF RESERVOIR		MILES	
	18. TOTAL DRAINAGE AREA 15.03			SQ. MI.	22. MEAN ANNUAL PRECIPITATION 44 (27)		INCHES	
	19. NET SEDIMENT CONTRIBUTING AREA 5.29			SQ. MI.	23. MEAN ANNUAL RUNOFF		INCHES	
	20. LENGTH	MILES	AV. WIDTH	MILES	24. MEAN ANNUAL RUNOFF		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.
	October 1938	-	-	-	-	28.0	178	11.8
	Sept. 2, 1948	9.9	9.9	Range Recon.	16	25.2	127	8.4
	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	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	
	Sept. 2, 1948	51.1 (51.9)	5.16 (5.24)	0.975 (0.991)	51.1 (51.9)	5.16 (5.24)	0.975 (0.991)	
	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	
Sept. 2, 1948	67 *	1,420	1,420	2.90	28.7			

* 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
 Brune, G. M. Reservoir sedimentation in Limestone Sinkhole Terrain, Agricultural Engineering, 30(2):73-77, February 1949

This reservoir drains limestone sinkhole terrain. The non-contributing drainage area is chiefly closed, or plugged sinkholes. The lower figure in Item 37c for the entire drainage area exclusive of the lake area is 0.35.

Sediment is mostly silt, with some clays in lower part of lake.

48. AGENCY SUPPLYING DATA: Region 3, Soil Conservation Service 49. DATE: January 10, 1950

U. S. Department of Agriculture
 Milwaukee, Wisconsin