U.S. DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE

RESERVOIR SEDIMENTATION DATA SUMMARY

Germantown — NAME OF RESERVOIR

19-4 — DATA SHEET NO.

DAM

1. OWNER Miami Conservancy Dist.	2. RIVER Twin Creek	3. STATE Ohio
4. SEC. 11 TWP. 3 N RANGE 4 E	5. NEAREST TOWN Germantown	6. COUNTY Montgomery
7. STREAM BED ELEV. -	8. TOP OF DAM ELEV. -	9. SPILLWAY CREST ELEV. 815

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	815	3,600	106,000 1/	106,000	1920
b. POWER					
c. WATER SUPPLY					16. DATE NORMAL OPER. BEGAN
d. IRRIGATION					
e. CONSERVATION					1920
f. INACTIVE					

17. LENGTH OF RESERVOIR — MILES | AV. WIDTH OF RESERVOIR — MILES

WATERSHED

18. TOTAL DRAINAGE AREA 270 SQ. MI.	22. MEAN ANNUAL PRECIPITATION INCHES
19. NET SEDIMENT CONTRIBUTING AREA 264 SQ. MI.	23. MEAN ANNUAL RUNOFF INCHES
20. LENGTH MILES | AV. WIDTH MILES	24. MEAN ANNUAL RUNOFF 709 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 2/	-	-	-	-	3,600	106,000	393
1942	15	15	Range Detailed	-	3,600	105,618	391

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
1942		648 per sq.mi. *			648 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	a. TOTAL TO DATE	b. AV. ANNUAL	c. PER SQ. MI.-YEAR
1942	382	25.5	0.097	382	25.5	0.097

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
1942	79.5 (2)	168	168	0.024	0.36	700	700

1/ No conservation pool.
2/ Year that survey ranges were established
* 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 LENGH 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, G.M. Rates of sediment production in midwestern United States. Soil Conserv. Serv., SCS-TP-65, Milwaukee, Wis., Dec. 1948.

Miami Conservancy Dist. The Story of the Miami Conservancy Dist., Dayton, Ohio, '45.

U.S.Govt.-Tennessee Valley Authority, Corps of Engrs., Dept. of Agric., Geological Survey, Bureau of Reclamation, Indian Serv., & Iowa Inst. of Hydraulic Research. A study of methods used in measurement and analysis of sediment load in streams, Rpt. No.9, Density of sediments deposited in reservoirs, by E.W.Lane & V.A.Koelzer, St. Paul, U.S.Engr. Dist. Sub-office, Hydraulic Lab., Univ. of Iowa, Iowa City, Iowa, Nov. '43.

48. AGENCY SUPPLYING DATA Region 3, Soil Conservation Service 49. DATE July 22, 1949

U. S. Department of Agriculture
Milwaukee, Wisconsin

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