

RESERVOIR SEDIMENTATION  
DATA SUMMARY

Decker Lake  
NAME OF RESERVOIR

19-14a  
DATA SHEET NO.

DAM	1. OWNER <u>Private</u>			2. RIVER <u>Patterson Run</u>			3. STATE <u>Ohio</u>			
	4. SEC. <u>35</u> TWP. <u>9N</u> RANGE <u>8E</u>			5. NEAREST TOWN <u>Piqua</u>			6. COUNTY <u>Miami</u>			
	7. STREAM BED ELEV.			8. TOP OF DAM ELEV.			9. SPILLWAY CREST ELEV. <u>950</u>			
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					1940				
	b. POWER									
	c. WATER SUPPLY					16. DATE NORMAL OPER. BEGAN				
	d. IRRIGATION									
	e. CONSERVATION			<u>19.78</u>	<u>114.7</u>	<u>114.7</u>	1940			
	f. INACTIVE									
17. LENGTH OF RESERVOIR <u>0.59</u> MILES			AV. WIDTH OF RESERVOIR <u>0.057</u> MILES							
WATERSHED	18. TOTAL DRAINAGE AREA <u>2.33</u> SQ. MI.			22. MEAN ANNUAL PRECIPITATION <u>36.3 (25 INCHES)</u>						
	19. NET SEDIMENT CONTRIBUTING AREA <u>2.30</u> SQ. MI.			23. MEAN ANNUAL RUNOFF <u>11 est. (31&amp;34 yrs.) INCHES</u>						
	20. LENGTH <u>2.6</u> MILES		AV. WIDTH <u>0.9</u> MILES		24. MEAN ANNUAL RUNOFF <u>1367</u> AG.-FT.					
	21. MAX. ELEV. <u>1010</u>		MIN. ELEV. <u>940</u>		25. CLIMATIC CLASSIFICATION <u>Humid</u>					
	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.	
1940		-	-	-	-	20	115	49		
June 27, 1950		10	10	P. Detail	10	19	94	40		
SURVEY DATA	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		
	June 27, 1950		37.3	-	-	-	-	-	-	
	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		
June 27, 1950		21.0	2.10	0.913	21.0	2.10	0.913			
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			
June 27, 1950		51.91	1032	1032	1.83	18.30	-	-		

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: Light gray & gray to buff silty clay material with little organic matter.

48. AGENCY SUPPLYING DATA Ohio Div. of Water      49. DATE June 28, 1954