

RESERVOIR SEDIMENTATION
DATA SUMMARY

Pine Lake

25-6

NAME OF RESERVOIR

DATA SHEET NO.

DAM	1. OWNER State of Iowa			2. RIVER Pine Creek			3. STATE Iowa		
	4. SEC. 5 TWP. 87 N RANGE 19 W			5. NEAREST TOWN Eldora			6. COUNTY Hardin		
	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					1924			
	b. POWER								
	c. WATER SUPPLY					16. DATE NORMAL OPER. BEGAN			
	d. IRRIGATION								
	e. CONSERVATION		65	738	738	1924			
	f. INACTIVE								
17. LENGTH OF RESERVOIR			MILES	AV. WIDTH OF RESERVOIR		MILES			
WATERSHED	18. TOTAL DRAINAGE AREA 15.34			SQ. MI.	22. MEAN ANNUAL PRECIPITATION			INCHES	
	19. NET SEDIMENT CONTRIBUTING AREA 15.24			SQ. MI.	23. MEAN ANNUAL RUNOFF			INCHES	
	20. LENGTH		MILES	AV. WIDTH	MILES	24. MEAN ANNUAL RUNOFF 325/sq.mi. *		AC.-FT.	
	21. MAX. ELEV.		MIN. ELEV.		25. CLIMATIC CLASSIFICATION				
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.	
	1924	-	-	-	-	65	738	48.1	
	Winter 1932	8	8	Range Detailed	25	65	552	36.0	
	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	
	Winter 1932			312 per sq. mi. *			312 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		
	Winter 1932	186	23.2	1.52	186	23.2	1.52		
	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		
Winter 1932	60 *	1,990*	1,990*	3.15	25.2	5,900*	5,900*		

* 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
 Eakin, H. M., and Brown, C.B. Silting of reservoirs. U.S.D.A. Technical Bulletin 524, Washington, D. C., Revised August 1939. p. 24.
 Brune, G.M. Rates of sediment production in midwestern United States. U.S. Soil Conserv. Serv., SCS-TP-65, 40 pp., illus., processed, Milwaukee, Wis., Dec. '48.
 Marston, G. A. Sedimentation in southern Iowa reservoirs. Unpublished master's thesis, University of Iowa, 75 pp., 1933.

48. AGENCY SUPPLYING DATA Region 3, Soil Conservation Service 49. DATE June 1950
 U. S. Department of Agriculture
 Milwaukee, Wisconsin