

RESERVOIR SEDIMENTATION
DATA SUMMARY

Lake Olathe
NAME OF RESERVOIR

31-11
DATA SHEET NO.

DAM	1. OWNER City of Olathe			2. RIVER Cedar Creek			3. STATE Kansas				
	4. SEC. 10 TWP. 14S RANGE 23E			5. NEAREST TOWN Olathe			6. COUNTY Johnson				
	7. STREAM BED ELEV. 948 (Approx.)			8. TOP OF DAM ELEV. 979.4			9. SPILLWAY CREST ELEV. 978				
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					July 1932					
	b. POWER										
	c. WATER SUPPLY	978	70 1/	721 1/	721 1/	16. DATE NORMAL OPER. BEGAN					
	d. IRRIGATION					July 1932					
	e. CONSERVATION										
	f. INACTIVE										
WATERSHED	17. LENGTH OF RESERVOIR 1.21 2/			MILES			AV. WIDTH OF RESERVOIR			MILES	
	18. TOTAL DRAINAGE AREA 6.20			SQ. MI.			22. MEAN ANNUAL PRECIPITATION 36.08 (45) INCHES				
	19. NET SEDIMENT CONTRIBUTING AREA 6.11			SQ. MI.			23. MEAN ANNUAL RUNOFF				INCHES
	20. LENGTH		MILES	AV. WIDTH		MILES	24. MEAN ANNUAL RUNOFF		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.			
	July 1932	-	-	-	-	70	721	116			
	June 1937	4.9	4.9	Range Detailed	33	70	666	107			
	July 1949	12.1	17.0	"	33	66	488	78.7			
	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				
	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 1937	55	11.2	1.84	55	11.2	1.84			
	June 1949	178 (182) 3/	14.7 (15.0)	2.41 (2.46)	233 (237)	13.7 (13.9)	2.24 (2.27)				
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 1937	60.4 (4)	2421	2421	1.55	7.63						
July 1949	57.6 (7)	3023 (3086)	2810 (2848)	1.90	32.3						

1/ Spillway raised 3 feet in 1938. All computations based on 1938 spillway elevation and will not, therefore, agree with previously published data.

2/ Reservoir composed of two major arms.

3/ Above-crest deposits within 1938 flow line.

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
 Jones, V. H. Advance report on the sedimentation survey of Lake Olathe, Olathe, Kansas. U.S. Soil Conserv. Serv., SCS-SS-24, 14 pp., illus., processed. Washington, D. C., July 1938.

Unpublished data

Region 5, Soil Conservation Service
 U. S. Department of Agriculture

48. AGENCY SUPPLYING DATA Lincoln, Nebraska 49. DATE May 25, 1951