

**RESERVOIR SEDIMENT
DATA SUMMARY**
SCS-34 Rev. 6-62

Lake Elbow
NAME OF RESERVOIR

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

31-45

Kansas River Basin

DATA SHEET NO.

DAM	1. OWNER Lake Elbow Ass.		2. STREAM Trib. to Kansas R.		3. STATE Kansas					
	4. SEC. 26 TWP. 9S RANGE 8E		5. NEAREST TOWN Manhattan		6. COUNTY Pottawatomie					
	7. STREAM BED ELEVATION		8. TOP OF DAM ELEVATION 102.0		9. SPILLWAY CREST ELEV. 98*					
RESERVOIR	10. STORAGE ALLOCATION	11. ELEVATION TOP OF POOL	12. ORIGINAL SURFACE AREA ACRES	13. ORIGINAL CAPACITY ACRE-FEET	14. GROSS STORAGE ACRE-FEET	15. DATE STORAGE BEGAN				
	a. MULTIPLE USE					Spring 1949				
	b. FLOOD CONTROL									
	c. POWER									
	d. WATER SUPPLY	97.6*	33	206	206	16. DATE NORMAL OPER. BEGAN				
	e. IRRIGATION					Spring 1949				
	f. CONSERVATION									
	g. SEDIMENT									
	h. INACTIVE									
17. LENGTH OF RESERVOIR		0.50 MILES		AV. WIDTH OF RESERVOIR		0.10 MILES				
WATERSHED	18. TOTAL DRAINAGE AREA		3.20 SQ. MI.		22. MEAN ANNUAL PRECIPITATION		31.17 INCHES			
	19. NET SEDIMENT CONTRIBUTING AREA		3.14 SQ. MI.		23. MEAN ANNUAL RUNOFF		4.0 INCHES			
	20. LENGTH 2.5 MILES		AV. WIDTH 1.28 MILES		24. MEAN ANNUAL RUNOFF		680 AC.-FT.			
	21. MAX. ELEV. 1350		MIN. ELEV. 1100		25. CLIMATIC CLASSIFICATION		Humid			
	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.	
Sept. 8 1965		16.33	16.33	Range	11	33	176	56.0		
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	
	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. 8 1965		30.0 ^{1/}	1.84	0.58	30 ^{1/}	1.84	0.61 ^{1/}		
	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. AN.	b. TOT. TO DATE	a. PERIOD	b. TOT. TO DATE
	Sept. 8 1965		75	947	947	0.89	14.6			

* Assumed elevations

^{1/} Corrected to 95 percent trap efficiency

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

Trap efficiency = 95 percent

Land Use = 92 percent steeply rolling pasture (good)
8 percent cropland close to dam, severe erosion

48. AGENCY MAKING SURVEY

49. AGENCY SUPPLYING DATA USDA, Soil Conservation Service

50. DATE 11-8-65