

RESERVOIR SEDIMENT
DATA SUMMARY

SCS-34 Rev. 6-66

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Elko Camera Reservoir
NAME OF RESERVOIR

31-54

DATA SHEET NO.

DAM	1. OWNER <u>Kurlo Real Estate Co.</u>		2. STREAM <u>Trib. to Bull Creek</u>		3. STATE <u>Kansas</u>		
	4. SEC. <u>SE 32</u> TWP. <u>14</u> RANGE <u>23</u>		5. NEAREST P. O. <u>Gardner, Ks.</u>		6. COUNTY <u>Johnson</u>		
	7. LAT. <u>38° 47'</u> " LONG. <u>94° 52'</u> "		8. TOP OF DAM ELEVATION <u>101.4*</u>		9. SPILLWAY CREST ELEV. <u>98.7*</u>		
RESERVOIR	10. STORAGE ALLOCATION		11. ELEVATION TOP OF POOL		12. ORIGINAL SURFACE AREA, ACRES		
	a. FLOOD CONTROL		<u>98.7*</u>		<u>32.8</u>		
	b. MULTIPLE USE		<u>94.0*</u>		<u>13.5</u>		
	c. POWER						
	d. WATER SUPPLY						
	e. IRRIGATION						
	f. CONSERVATION						
	g. INACTIVE						
				13. ORIGINAL CAPACITY, ACRE-Feet			
				14. GROSS STORAGE, ACRE-Feet			
				15. DATE STORAGE BEGAN			
				16. DATE NORMAL OPER. BEGAN			
				17. LENGTH OF RESERVOIR <u>.41</u> MILES AV. WIDTH OF RESERVOIR <u>.13</u> MILES			
				18. TOTAL DRAINAGE AREA <u>.77</u> SQ. MI. 22. MEAN ANNUAL PRECIPITATION <u>36.0</u> INCHES			
				19. NET SEDIMENT CONTRIBUTING AREA <u>.69</u> SQ. MI. 23. MEAN ANNUAL RUNOFF <u>8.2</u> INCHES			
				20. LENGTH <u>1.63</u> MILES AV. WIDTH <u>.47</u> MILES 24. MEAN ANNUAL RUNOFF <u>336</u> AC.-FT.			
				21. MAX. ELEV. <u>1075'*</u> MIN. ELEV. <u>985'</u> 25. ANNUAL TEMP: MEAN <u>56° F</u> RANGE			
WATERSHED	26. DATE OF SURVEY		27. PERIOD YEARS		28. ACCL. YEARS		
	9-1-70		10.2		10.2		
					29. TYPE OF SURVEY		
					30. NO. OF RANGES OR CONTOUR INT.		
					31. SURFACE AREA, ACRES		
					32. CAPACITY, ACRE-Feet		
					33. C/I. RATIO, AC.-FT. PER AC.-FT.		
					Original <u>204.3</u>		
					Present <u>191.1</u>		
					.607		
				.568			
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 CAPACITY LOSS, ACRE-Feet			38. TOTAL SED. DEPOSITS TO DATE, ACRE-Feet		
		a. PERIOD TOTAL			a. TOTAL TO DATE		
		b. AV. ANNUAL			b. AV. ANNUAL		
		c. PER SQ. MI.-YEAR			c. PER SQ. MI.-YEAR		
9-1-70		<u>13.23</u>			<u>13.23</u>		
		<u>1.30</u>			<u>1.30</u>		
		<u>1.88</u>			<u>1.88</u>		
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. ANN.	
						b. TOT. TO DATE	
						a. PERIOD	
						b. TOT. TO DATE	
9-1-70		<u>*60#</u>		<u>2457</u>		<u>.64</u>	
				<u>2457</u>		<u>6.48</u>	

*Estimate

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, 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

Slope: 3-4% on both Range (Good) & Cropland.
 Land Use: 22% Range & 78% Cropland (of which 19% is LCT).
 Trap Efficiency: 93%
 Yield: 2.022 Ac. Ft./Sq. Mi./Yr. (2642.75 Tons/Sq. Mi./Yr.)

48. AGENCY MAKING SURVEY Kansas Watershed Planning Staff, Soil Conservation Service
 49. AGENCY SUPPLYING DATA Soil Conservation Service

50. DATE 9-30-70