

RESERVOIR SEDIMENT
DATA SUMMARY

SCS-34 Rev. 6-66

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Herrington City Lake
NAME OF RESERVOIR

32-54

Kansas River Basin

DATA SHEET NO.

DAM	1. OWNER <u>City of Herrington</u>			2. STREAM <u>Lyons Creek</u>			3. STATE <u>Kansas</u>									
	4. SEC. <u>NW 16</u> TWP. <u>16</u> RANGE <u>4E</u>			5. NEAREST P.O. <u>Herrington</u>			6. COUNTY <u>Dickinson</u>									
	7. LAT. <u>38° 40' 00"</u> LONG. <u>97° 00' 00"</u>			8. TOP OF DAM ELEVATION <u>1336</u>			9. SPILLWAY CREST ELEV. <u>1326</u>									
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. FLOOD CONTROL										May 1922					
	b. MULTIPLE USE															
	c. POWER										16. DATE NORMAL OPER. BEGAN July 1922					
	d. WATER SUPPLY		<u>1326</u>		<u>212</u>		<u>2180</u>		<u>2180</u>							
	e. IRRIGATION															
	f. CONSERVATION															
	g. INACTIVE															
17. LENGTH OF RESERVOIR			<u>1.3</u> MILES			AV. WIDTH OF RESERVOIR			<u>0.25</u> MILES							
18. TOTAL DRAINAGE AREA			<u>17.24</u> SQ. MI.			22. MEAN ANNUAL PRECIPITATION			<u>29</u> INCHES							
19. NET SEDIMENT CONTRIBUTING AREA			<u>16.93</u> SQ. MI.			23. MEAN ANNUAL RUNOFF			<u>3.5</u> INCHES							
20. LENGTH			<u>7.5</u> MILES			AV. WIDTH			<u>2.3</u> MILES							
21. MAX. ELEV.			<u>1450</u>			MIN. ELEV.			<u>1293</u>							
						25. ANNUAL TEMP: MEAN			RANGE							
WATERSHED	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/I. RATIO, AC.-FT. PER AC.-FT.	
	<u>May 1, 1966</u>		<u>44</u>		<u>44</u>		<u>Range (D)</u>		<u>17 (R)</u>		<u>211</u>		<u>2,180</u> <u>1,455</u>		<u>0.68</u> <u>0.45</u>	
	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		b. AV. ANNUAL		c. PER SQ. MI.-YEAR		a. TOTAL TO DATE		b. AV. ANNUAL		c. PER SQ. MI.-YEAR			
	<u>May 1, 1966</u>		<u>725</u>		<u>16.48</u>		<u>0.96</u>		<u>725</u>		<u>16.48</u>		<u>0.96</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			
<u>May 1, 1966</u>		<u>70 1/2</u>		<u>1463</u>		<u>1463</u>		<u>0.75</u>		<u>33.0</u>						

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. May 1, 1966		ELEVATION-AREA-CAPACITY DATA						
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY
1310	7.7	2	1324	183.4	1061			
1312	16.7	26	1326	211.0	1455			
1314	27.4	70						
1316	53.4	151						
1318	88.3	293						
1320	104.5	486						
1322	143.6	734						

47. REMARKS AND REFERENCES

Land use - 53 percent pasture, poor condition, 4-5 percent slope
 47 percent rolling cropland, 2-3 percent slope
 Yield - 0.98 ac.ft./sq.mi./yr.
 1/ Assumed
 2/ Individual arms 0.3 mile

48. AGENCY MAKING SURVEY Soil Conservation Service
 49. AGENCY SUPPLYING DATA Soil Conservation Service
 50. DATE May 13, 1966