

RESERVOIR SEDIMENT  
DATA SUMMARY

U. S. DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE

SCS-34 Rev. 6-66

Raleigh Pond  
NAME OF RESERVOIR

32- 48

DATA SHEET NO.

DAM	1. OWNER <u>Francis Raleigh</u>		2. STREAM <u>Trib. to Salt Creek</u>		3. STATE <u>Kansas</u>	
	4. SEC. <u>NE 36 TWP. 4</u> RANGE <u>2'</u>		5. NEAREST P.O. <u>Agenda, Ks. - 6 SW</u>		6. COUNTY <u>Republic</u>	
	7. LAT. <u>39° 40'</u> " LONG. <u>97° 29'</u> "		8. TOP OF DAM ELEVATION <u>95.5*</u>		9. SPILLWAY CREST ELEV. <u>92.0*</u>	
RESERVOIR	10. STORAGE ALLOCATION		11. ELEVATION TOP OF POOL		12. ORIGINAL SURFACE AREA, ACRES	
	a. FLOOD CONTROL		<u>92.0*</u>		<u>14.0</u>	
	b. MULTIPLE USE				<u>81.5</u>	
	c. POWER				<u>81.5</u>	
	d. WATER SUPPLY		<u>90.0*</u>			
	e. IRRIGATION					
	f. CONSERVATION					
	g. INACTIVE					
WATERSHED	17. LENGTH OF RESERVOIR		<u>.41</u> MILES		AV. WIDTH OF RESERVOIR <u>.05</u> MILES	
	18. TOTAL DRAINAGE AREA		<u>.90</u> SQ. MI.		22. MEAN ANNUAL PRECIPITATION <u>26.8</u> INCHES	
	19. NET SEDIMENT CONTRIBUTING AREA		<u>.80</u> SQ. MI.		23. MEAN ANNUAL RUNOFF <u>2.60</u> INCHES	
	20. LENGTH <u>1.63</u> MILES		AV. WIDTH <u>.55</u> MILES		24. MEAN ANNUAL RUNOFF <u>125</u> AC.-FT.	
	21. MAX. ELEV. <u>1585'*</u>		MIN. ELEV. <u>1378'*</u>		25. ANNUAL TEMP: MEAN <u>52°</u> F RANGE	
	SURVEY DATA	26. DATE OF SURVEY		27. PERIOD YEARS		28. ACCL. YEARS
<u>7-8-70</u>		<u>6.3</u>		<u>6.3</u>		
		29. TYPE OF SURVEY		30. NO. OF RANGES OR CONTOUR INT.		
		<u>Range (D)</u>		<u>6</u>		
		31. SURFACE AREA, ACRES		32. CAPACITY, ACRE-Feet		
		<u>14.0</u>		Original <u>81.5</u> Present <u>79.4</u>		
		33. C/I RATIO, AC.-FT. PER AC.-FT.		<u>.653</u> <u>.635</u>		
26. DATE OF SURVEY		34. PERIOD ANNUAL PRECIPITATION		35. PERIOD WATER INFLOW, ACRE-Feet		
		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	
26. DATE OF SURVEY		39. AV. DRY WGT., LBS. PER CU. FT.		40. SED. DEP., TONS PER SQ. MI.-YR.		
		a. PERIOD		b. TOTAL TO DATE		
		a. AV. ANN.		b. TOT. TO DATE		
		a. PERIOD		b. TOT. TO DATE		
<u>7-8-70</u>		<u>*60#</u>		<u>544</u>		
				<u>544</u>		
				<u>.41</u>		
				<u>2.58</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: Range (Good) 6-8%. Cropland 2-3%.  
 Land Use: 76% Range & 24% Cropland (no ICT).  
 Trap Efficiency: 93%  
 Yield: .447 Ac. Ft./Sq. Mi./Yr. (584.23 Tons/Sq. Mi./Yr.)

48. AGENCY MAKING SURVEY Kansas Watershed Planning Staff, Soil Conservation Service  
 49. AGENCY SUPPLYING DATA Soil Conservation Service  
 50. DATE 9-29-70