

RESERVOIR SEDIMENT
DATA SUMMARY

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Frickey Pond
NAME OF RESERVOIR

33-10
DATA SHEET NO.

SCS-34 Rev. 6-66

DAM	1. OWNER <u>Wendell Frickey</u>			2. STREAM <u>Trib. to Sappa Cr.</u>		3. STATE <u>Kansas</u>	
	4. SEC. <u>SW 28 TWP. 1</u> RANGE <u>26</u>			5. NEAREST P.O. <u>Norcatour, Ks.</u>		6. COUNTY <u>Decatur</u>	
	7. LAT. <u>39° 56'</u> " LONG <u>100° 15'</u> "			8. TOP OF DAM ELEVATION <u>95.0*</u>		9. SPILLWAY CREST ELEV. <u>91.0*</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		<u>91.0*</u>	<u>19.87</u>	<u>72.48</u>	<u>72.48</u>	<u>Dec. 1958</u>
	b. MULTIPLE USE						
	c. POWER						16. DATE NORMAL OPER. BEGAN
	d. WATER SUPPLY		<u>89.0*</u>				
	e. IRRIGATION						<u>Dec. 1958</u>
	f. CONSERVATION						
	g. INACTIVE						
17. LENGTH OF RESERVOIR <u>.48</u> MILES				AV. WIDTH OF RESERVOIR <u>.06</u> MILES			
WATERSHED	18. TOTAL DRAINAGE AREA <u>3.32</u> SQ. MI.			22. MEAN ANNUAL PRECIPITATION <u>20.2</u> INCHES			
	19. NET SEDIMENT CONTRIBUTING AREA <u>3.28</u> SQ. MI.			23. MEAN ANNUAL RUNOFF <u>.60</u> INCHES			
	20. LENGTH <u>4.50</u> MILES		AV. WIDTH <u>.74</u> MILES		24. MEAN ANNUAL RUNOFF <u>106</u> AC.-FT.		
	21. MAX. ELEV. <u>2660*</u>		MIN. ELEV. <u>2438*</u>		25. ANNUAL TEMP. MEAN <u>53°</u> F RANGE		
	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
<u>7-27-70</u>	<u>11.6</u>	<u>11.6</u>	<u>Range (D)</u>	<u>5</u>	<u>19.87</u>	<u>Original 72.48</u> <u>Present 63.17</u>	<u>0.683</u> <u>0.596</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>7-27-70</u>	<u>9.31</u>	<u>.80</u>	<u>.24</u>	<u>9.31</u>	<u>.80</u>	<u>.24</u>	
26. DATE OF SURVEY	39. AV. DRY WGT., LBS. PER CU. FT.	40. SED. DEP., TONS PERSQ. 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>7-27-70</u>	<u>*60#</u>	<u>320</u>	<u>320</u>	<u>1.11</u>	<u>12.85</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 (Fair) is 6-7%. Cropland is 2-3%.
 Land Use: 40% Range & 60% Cropland (of which 72% is LCT).
 Trap Efficiency: 91%
 Yield: 0.269 Ac. Ft./Sq. Mi./Yr. (351.58 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