

RESERVOIR SEDIMENT
DATA SUMMARY

SCS-34 Rev. 6-66

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Smith Pond
NAME OF RESERVOIR

46-47

DATA SHEET NO.

DAM	1. OWNER Smith			2. STREAM Trib to Pawnee River			3. STATE Kansas						
	4. SEC. NE10 TWP. 21 RANGE 23			5. NEAREST P.O. Jetmore			6. COUNTY Hodgeman						
	7. LAT 38° 12' 54" LONG. 99° 55' 35"			8. TOP OF DAM ELEVATION 100.00*			9. SPILLWAY CREST ELEV. 97.00*						
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										December 1951		
	b. MULTIPLE USE												
	c. POWER												
	d. WATER SUPPLY		97.00*		2.40		5.93		5.93		16. DATE NORMAL OPER. BEGAN		
	e. IRRIGATION										December 1951		
	f. CONSERVATION												
	g. INACTIVE												
17. LENGTH OF RESERVOIR 0.13 MILES					AV. WIDTH OF RESERVOIR 0.03 MILES								
18. TOTAL DRAINAGE AREA 0.30 SQ. MI.					22. MEAN ANNUAL PRECIPITATION 20 INCHES								
19. NET SEDIMENT CONTRIBUTING AREA 0.30 SQ. MI.					23. MEAN ANNUAL RUNOFF 0.40 INCHES								
20. LENGTH 1.00 MILES			AV. WIDTH 0.30 MILES		24. MEAN ANNUAL RUNOFF 6 AC.-FT.								
21. MAX. ELEV.			MIN. ELEV.		25. ANNUAL TEMP.: MEAN 56 RANGE -26 to 113								
SURVEY DATA	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.	
	August 23 1967		15.75	15.75	Range		5	2.40		Original 5.93 Present 3.56		0.93 0.59	
	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					
	August 23 1967		2.37	0.15	0.50	2.37	0.15	0.50					
	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					
August 23 1967		60*	653	653	2.50	40.00							

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
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

* Assumed

Pasture (fair - good) = 52% with 4% slopes
 Cropland = 48% lct. with 3% slopes
 T. E. = 95%
 Watershed yield = 0.53 ac. ft./sq. mi./yr.

48. AGENCY MAKING SURVEY

49. AGENCY SUPPLYING DATA U.S.D.A., Soil Conservation Service

50. DATE September 1, 1967