

RESERVOIR SEDIMENT  
DATA SUMMARY

SCS-34 Rev. 6-66

U. S. DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE

Bruna Pond  
NAME OF RESERVOIR

32- 35  
DATA SHEET NO.

DAM	1. OWNER Charles Bruna			2. STREAM Trib. to Little Blue			3. STATE Kansas									
	4. SEC. NW 2 TWP. 3 RANGE 4			5. NEAREST P. Washington, Ks.			6. COUNTY Washington									
	7. LAT. 39 49' " LONG. 96° 56' "			8. TOP OF DAM ELEVATION 115.0*			9. SPILLWAY CREST ELEV. 112.0*									
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		112.0*		9.54		86.03		86.03		1/ Apr. 1956					
	b. MULTIPLE USE															
	c. POWER															
	d. WATER SUPPLY		103.0*								16. DATE NORMAL OPER. BEGAN					
	e. IRRIGATION										1/ Feb. 1957					
	f. CONSERVATION															
	g. INACTIVE															
WATERSHED	17. LENGTH OF RESERVOIR .24 MILES				AV. WIDTH OF RESERVOIR .06 MILES											
	18. TOTAL DRAINAGE AREA 1.20 SQ. MI.				22. MEAN ANNUAL PRECIPITATION 28.7 INCHES											
	19. NET SEDIMENT CONTRIBUTING AREA 1.16 SQ. MI.				23. MEAN ANNUAL RUNOFF 3.40 INCHES											
	20. LENGTH 1.38 MILES		AV. WIDTH .87 MILES		24. MEAN ANNUAL RUNOFF 217 AC. FT.											
	21. MAX. ELEV. 1450'*		MIN. ELEV. 1305'*		25. ANNUAL TEMP: MEAN 53° RANGE											
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.	
	6-16-70		1/ 13.3		1/ 13.3		Range (D)		7		9.54		Original 86.033 Present 78.19		.395 .360	
	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			
	6-16-70		7.84		.59		.51		7.84		.59		.51			
	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			
6-16-70		75#*		831		831		.686		9.11						

\*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) 8-10% & Cropland 2-3%.  
 Land Use: 48% Range & 52% Cropland (of which 37% is IOT).  
 Trap Efficiency: 96%  
 Yield: .530 Ac. Ft./Sq. Mi./Yr. (866.02 Tons/Sq. Mi./Yr.)

1/ Pond was built in April 1956. In Oct 1959 the spillway was partially washed out and repaired. District conservationist estimated 75% of silt accumulated stayed in pond -- hence the adjusted normal operation date.

48. AGENCY MAKING SURVEY Kansas Watershed Planning Staff, Soil Conservation Service  
 49. AGENCY SUPPLYING DATA Soil Conservation Service  
 50. DATE 9-30-70