

RESERVOIR SEDIMENTATION
DATA SUMMARY

Sheridan County State Lake
NAME OF RESERVOIR

32-2
DATA SHEET NO.

DAM	1. OWNER <u>State Game & Fish Comm.</u>			2. RIVER <u>Saline</u>		3. STATE <u>Kansas</u>	
	4. SEC. <u>26, 35</u> TWP. <u>10 S</u> RANGE <u>26 W</u>			5. NEAREST TOWN <u>Quinter</u>		6. COUNTY <u>Sheridan</u>	
	7. STREAM BED ELEV. <u>97'</u>			8. TOP OF DAM ELEV. <u>118'</u>		9. SPILLWAY CREST ELEV. <u>118'</u>	
RESERVOIR	10. STORAGE ALLOCATION	11. ELEVATION TOP OF POOL	12. SURFACE AREA ACRES	13. STORAGE ACRE- FEET	14. ACCUMULATED ACRE- FEET	15. DATE STORAGE BEGAN	
	a. FLOOD CONTROL						
	b. POWER					Aug. 1, 1937a/	
	c. WATER SUPPLY					16. DATE NORMAL OPER. BEGAN	
	d. IRRIGATION						
	e. CONSERVATION	<u>117'</u>	<u>116.0</u>	<u>777</u>	<u>777</u>		
	f. INACTIVE						
17. LENGTH OF RESERVOIR <u>2.3</u> MILES		AV. WIDTH OF RESERVOIR <u>0.2</u> MILES					
WATERSHED	18. TOTAL DRAINAGE AREA <u>493</u> SQ. MI.		22. MEAN ANNUAL PRECIPITATION <u>b/</u> INCHES				
	19. NET SEDIMENT CONTRIBUTING AREA <u>463</u> SQ. MI.		23. MEAN ANNUAL RUNOFF <u>-</u> INCHES				
	20. LENGTH <u>7.4</u> MILES		AV. WIDTH <u>8</u> MILES		24. MEAN ANNUAL RUNOFF <u>-</u> AC.-FT.		
	21. MAX. ELEV. <u>3,686</u> d/		MIN. ELEV. <u>2,473</u> d/		25. CLIMATIC CLASSIFICATION <u>Semi-arid</u>		
	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
Aug. 1, 1948	10.8	10.8	Detailed Range Contour	4	116	436	1
26. DATE OF SURVEY	34. PERIOD ANNUAL PRECIPITATION	35. PERIOD WATER INFLOW ACRE- FEET			36. WATER INFL. TO DATE AG-FT.		
		a. MEAN ANNUAL	b. MAX. ANNUAL	c. PERIOD TOTAL	a. MEAN ANNUAL	b. TOTAL TO DATE	
Aug. 1, 1948	No stations in area.						
26. DATE OF SURVEY	37. PERIOD SEDIMENT DEPOSITS 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	
Aug. 1, 1948	341 426 c/	31.57 39.4 c/	.0681 .0852 c/	341 426 c/	31.57 39.4 c/	.0681 .0852 c/	
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. ANNUAL	b. TOT. TO DATE	a. PERIOD	b. TOT. TO DATE
Aug. 1, 1948	66.5	98.6 123.4 c/	98.6 123.4 c/	4.06	43.89		

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET ABOVE, AND BELOW, CREST ELEVATION											
	Crest-	2	2-	7	7-	9	9-	10.5	10.5-	17	17-	20
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION											
Aug. 1, 1948	1	43		22		12		20		2		

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
106.5	0	0						
107	0.6	0.1						
108	2.5	1.7						
109	6	6.0						
110	11	15						
115	79	241						
117	116	436						

47. REMARKS AND REFERENCES

a/ First closure Sept. 1935, first dam failure occurred less than one week later.

b/ Colby, Kansas 18.02"-56 yrs.; Goodland, Kansas 17.98"-40 yrs.; Hoxie, Kansas 19.35"-48 yrs.

c/ Contribution from watershed assuming trap efficiency as 80 percent.

d/ Approximate values obtained from aeronautical chart (Salina).