

RESERVOIR SEDIMENTATION
DATA SUMMARY

Lowell Reservoir

NAME OF RESERVOIR

45-16

DATA SHEET NO.

DAM	1. OWNER Empire Dist. Elec. Co.			2. RIVER Sprg. R. & Shoal Cr.			3. STATE Kansas		
	4. SEC. 24 (App. Twp. 34S RANGE 24E			5. NEAREST TOWN Baxter Sprgs.			6. COUNTY Cherokee		
	7. STREAM BED ELEV. 113*			8. TOP OF DAM ELEV. 143*			9. SPILLWAY CREST ELEV. 139*		
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					March 4, 1905			
	b. POWER	139	862	10,404	10,404				
	c. WATER SUPPLY							16. DATE NORMAL OPER. BEGAN	
	d. IRRIGATION								
	e. CONSERVATION							March 4, 1905	
	f. INACTIVE								
17. LENGTH OF RESERVOIR 12 1/2			MILES			AV. WIDTH OF RESERVOIR MILES			
WATERSHED	18. TOTAL DRAINAGE AREA 2210.0			SQ. MI.			22. MEAN ANNUAL PRECIPITATION 41.86 (45) INCHES		
	19. NET SEDIMENT CONTRIBUTING AREA 2208.6			SQ. MI.			23. MEAN ANNUAL RUNOFF INCHES		
	20. LENGTH MILES			AV. WIDTH MILES			24. MEAN ANNUAL RUNOFF AC.-FT.		
	21. MAX. ELEV.			MIN. ELEV.			25. CLIMATIC CLASSIFICATION Humid		
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/W RATIO AC.-FT. PER SQ. MI.	
	March 4, 1905	-	-	-	-	862	10,404	4.71	
	August 1939	34.4	34.4	Recon.	156 meas.	862	7,580	3.43	
	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 SEDIMENT DEPOSITS ACRE- FEET			38. TOTAL SED. DEPOSITS TO DATE ACRE- FEET.				
		a. PERIOD TOTAL	b. AV. ANNUAL	c. PER SQ. MI.-YEAR	d. TOTAL TO DATE	e. AV. ANNUAL	f. PER SQ. MI.-YEAR		
	August 1939	2824	82.1	0.04	2824	82.1	0.04		
	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		
August 1939	60*	52.3	52.3	0.79	27.1				

* Assumed

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET ABOVE, AND BELOW, 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
1/7 miles along Spring River and 5 miles along Shoal Creek.

Region 5, Soil Conservation Service
U. S. Dept. of Agriculture
Lincoln, Nebraska

48. AGENCY SUPPLYING DATA _____ 49. DATE May 25, 1951