

RESERVOIR SEDIMENTATION
DATA SUMMARY

McDaniel Lake
NAME OF RESERVOIR

31-4
DATA SHEET NO.

DAM	1. OWNER Springfield City Water Co.				2. RIVER Little Sac River		3. STATE Missouri			
	4. SEC. 25 TWP. 30N RANGE 21, 22W			5. NEAREST TOWN Springfield		6. COUNTY Greene				
	7. STREAM BED ELEV.				8. TOP OF DAM ELEV. 1,125.45		9. SPILLWAY CREST ELEV. 1120.45			
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					June 1929				
	b. POWER									
	c. WATER SUPPLY	1120.45	225	3452	3452	16. DATE NORMAL OPER. BEGAN				
	d. IRRIGATION									
	e. CONSERVATION									
	f. INACTIVE					June 1929				
17. LENGTH OF RESERVOIR 2.5				MILES	AV. WIDTH OF RESERVOIR				MILES	
WATERSHED	18. TOTAL DRAINAGE AREA 41.9			SQ. MI.	22. MEAN ANNUAL PRECIPITATION 40 (40)			INCHES		
	19. NET SEDIMENT CONTRIBUTING AREA 41.5			SQ. MI.	23. MEAN ANNUAL RUNOFF				INCHES	
	20. LENGTH		MILES	AV. WIDTH		MILES	24. MEAN ANNUAL RUNOFF			AG.-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.		
	1929	-	-	-	-	225	3452	82		
	June 1940	11	11	Rec.	64 meas.	225	3207	77		
	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	a. TOTAL TO DATE	b. AV. ANNUAL	c. PER SQ. MI.-YEAR			
	June 1940	245	22.3	0.538	245	22.3	0.538			
	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	c. PERIOD	d. TOT. TO DATE		
June 1940	60*		703	703	0.65	7.11				

* 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
 Checked and approved by Raymond E. Piner, Supt., Springfield City Water Co., Springfield, Missouri.

Flashboards installed June 1937
 Two 30" gates at bottom
 Check Dams built in gullies, 1935-40.

48. AGENCY SUPPLYING DATA Region 3, Soil Conservation Service
U. S. Dept. of Agriculture
Milwaukee, Wisconsin

49. DATE January 13, 1950