

RESERVOIR SEDIMENTATION
DATA SUMMARY

Wilson Reservoir

NAME OF RESERVOIR

45-2

DATA SHEET NO.

DAM	1. OWNER City of Fayetteville			2. RIVER Wilson Creek			3. STATE Arkansas			
	4. SEC. 2 & 11 TWP. 15 N RANGE 30 W			5. NEAREST TOWN Fayetteville			6. COUNTY Washington			
	7. STREAM BED ELEV.			8. TOP OF DAM ELEV. 50*			9. SPILLWAY CREST ELEV. 40.5*			
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					Oct. 1930				
	b. POWER									
	c. WATER SUPPLY	40.5*	28.8	522	522	16. DATE NORMAL OPER. BEGAN				
	d. IRRIGATION									
	e. CONSERVATION									
	f. INACTIVE					Oct. 1930				
WATERSHED	17. LENGTH OF RESERVOIR 0.5 MILES			AV. WIDTH OF RESERVOIR			MILES			
	18. TOTAL DRAINAGE AREA 2.35 SQ. MI.			22. MEAN ANNUAL PRECIPITATION 41.4 (3) INCHES						
	19. NET SEDIMENT CONTRIBUTING AREA 2.30 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.		
	Oct. 1930	-	-	-	-	28.8	522	222		
	June 1940	9.75	9.75	Recon.	36 meas.	28.8	517	220		
	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	d. MEAN ANNUAL	e. 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			
	June 1940	5.12	0.52	0.23	5.12	0.52	0.23			
	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		
June 1940				0.10	0.98	-	-			

* Assumed

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET ABOVE, AND BELOW, GREST 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
 The sediment is a light grayish brown fine textured material. In the upper part of the lake the old soil is a brown sandy loam, while in the lower portion it is a gray to brown silty clay loam to silt loam with some sand.

Region 4, Soil Conservation Service
 U. S. Dept. of Agriculture
 Fort Worth, Texas

48. AGENCY SUPPLYING DATA
 49. DATE January 1951