

RESERVOIR SEDIMENTATION
DATA SUMMARY

Lake Abilene
NAME OF RESERVOIR

54-1
DATA SHEET NO.

DAM	1. OWNER City of Abilene			2. RIVER Elm Creek			3. STATE Texas			
	4. SEC. - TWP. - RANGE -			5. NEAREST TOWN Abilene			6. COUNTY Taylor			
	7. STREAM BED ELEV. 1,979.5			8. TOP OF DAM ELEV. 2,027.5			9. SPILLWAY CREST ELEV. 2,018.1			
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					Aug. 1921				
	b. POWER									
	c. WATER SUPPLY	2,018.1	641	10,325	10,325	16. DATE NORMAL OPER. BEGAN				
	d. IRRIGATION									
	e. CONSERVATION									
	f. INACTIVE					Aug. 1921				
WATERSHED	17. LENGTH OF RESERVOIR 2.75 MILES			AV. WIDTH OF RESERVOIR MILES						
	18. TOTAL DRAINAGE AREA 98.5 SQ. MI.			22. MEAN ANNUAL PRECIPITATION 25 INCHES						
	19. NET SEDIMENT CONTRIBUTING AREA 97.5 SQ. MI.			23. MEAN ANNUAL RUNOFF - INCHES						
	20. LENGTH 18 MILES		AV. WIDTH 5.5 MILES		24. MEAN ANNUAL RUNOFF - AC.-FT.					
	21. MAX. ELEV.		MIN. ELEV.		25. CLIMATIC CLASSIFICATION Subhumid					
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.		
	Aug. 1921 Sept. 1948	- 27	- 27	- 1/ Range Detailed	- 8	641 641	10,325 9,786	105 99		
	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			
	Sept. 1948	539	20.0	0.21	539	20.0	0.21			
	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		
Sept. 1948	60*	274	274	0.19	5.22	-	-			

1/ A contour map has been developed from range data but contour capacities were not computed.

* 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
 Reference: Report of Sedimentation in Lake Abilene, by Ross E. Rogers, Nov. 1948, (Unpublished).

Sediment in the lower part of the lake is chiefly fine textured, compact, silt and clay with colors varying from reddish brown to dark gray. In the upper portion of the lake the sediment is a light brown, medium sand, underlain by bands of silt and sand along the channel.

48. AGENCY SUPPLYING DATA Region 4, Soil Conservation Service 49. DATE August 7, 1950
 U. S. Dept. of Agriculture
 Fort Worth, Texas