

RESERVOIR SEDIMENTATION  
DATA SUMMARY

Hubbard City Lake (No. 4)

53-6

NAME OF RESERVOIR

DATA SHEET NO.

DAM	1. OWNER City of Hubbard			2. RIVER E. Cottonwood Creek			3. STATE Texas				
	4. SEC. - TWP. - RANGE -			5. NEAREST TOWN Hubbard			6. COUNTY Hill				
	7. STREAM BED ELEV.			8. TOP OF DAM ELEV.			9. SPILLWAY CREST ELEV. 111.86				
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					1917 2/					
	b. POWER										
	c. WATER SUPPLY	111.86 1/	33.4 2/	318.2 2/	318.2	16. DATE NORMAL OPER. BEGAN					
	d. IRRIGATION										
	e. CONSERVATION										
	f. INACTIVE					1917 2/					
17. LENGTH OF RESERVOIR		0.61		MILES		AV. WIDTH OF RESERVOIR		0.08		MILES	
WATERSHED	18. TOTAL DRAINAGE AREA		1.40		SQ. MI.		22. MEAN ANNUAL PRECIPITATION		36.3 *		INCHES
	19. NET SEDIMENT CONTRIBUTING AREA		1.35		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 <sub>w</sub> RATIO AC.-FT. PER SQ. MI.			
	1917 May 1949	- 32	- 32	- Range Detailed	- 9	33.4 33.4	318.2 255.4	227 182			
	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				
	May 1949	62.8	1.96	1.45	62.8	1.96	1.45				
	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				
May 1949			0.62	19.74	-	-			-		

1/ Local datum, elev. at date of survey.

2/ Dam raised 1925 and 1949, capacity based in 1949 figures.

\* 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
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  
 Report on Sedimentation in Hubbard City Lakes by R. E. Rogers and J. A. Ogle, May 1949.

The sediment is a gray to grayish black silty clay.

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

48. AGENCY SUPPLYING DATA

49. DATE November 1950