RESERVOIR SEDIMENT
DATA SUMMARY
SCS-34 Rev. 6-66

Site 21, Upper Washita
NAME OF RESERVOIR

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

50 - 55
DATA SHEET NO.

DAM

1. OWNER	2. STREAM Gageby Creek	3. STATE Texas
4. SEC. TWP. RANGE	5. NEAREST P.O. Wheeler	6. COUNTY Wheeler
7. LAT N 35 37' 30" LONG W 100 17' 49"	8. TOP OF DAM ELEVATION 2600.7	9. SPILLWAY CREST ELEV. 2596.7

RESERVOIR

10. STORAGE ALLOCATION	11. ELEVATION TOP OF POOL	12. ORIGINAL SURFACE AREA, ACRES	13. ORIGINAL CAPACITY, ACRE-FEET	14. GROSS STORAGE, ACRE-FEET	15. DATE STORAGE BEGAN	16. DATE NORMAL OPER. BEGAN
a. FLOOD CONTROL	2596.7 1/	307.22	3152.95	3703.40	1-26-61	
b. MULTIPLE USE						
c. POWER						
d. WATER SUPPLY						
e. IRRIGATION						
f. CONSERVATION	2580.5 2/	101.91	324.56	550.45	1-26-61	
g. INACTIVE	2576.7 3/	65.90	225.89	225.89		

WATERSHED

17. LENGTH OF RESERVOIR 0.95 MILES		AV. WIDTH OF RESERVOIR 0.17 MILES	
18. TOTAL DRAINAGE AREA 16.94 4/ SQ. MI.		22. MEAN ANNUAL PRECIPITATION 22.29 (41) INCHES	
19. NET SEDIMENT CONTRIBUTING AREA 16.46 SQ. MI.		23. MEAN ANNUAL RUNOFF 1.0 INCHES	
20. LENGTH 4.6 MILES	AV. WIDTH 3.68 MILES	24. MEAN ANNUAL RUNOFF 903.41 AC.-FT.	
21. MAX. ELEV. 2930.0'	MIN. ELEV. 2568.0'	25. ANNUAL TEMP.: MEAN 59°F RANGE 36°F - 82°F	

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/I. RATIO, AC.-FT. PER AC.-FT.
1/	1-26-61	-	-			307.22	3703.40	4.10
1/	6-1-72	11.3	11.3	Range	28 R	307.22	3675.17	4.07
2/	1-26-61	-	-	Contour		101.91	550.45	--
2/	6-1-72	11.3	11.3	(D)	2' CI	101.91	522.22	--
3/	1-26-61	-	-			65.90	225.89	--
3/	6-1-72	11.3	11.3			65.54	198.39	--

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 CAPACITY LOSS, 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
1/	6-1-72	28.23	2.50	0.15	28.23	2.50	0.15
2/	6-1-72	28.23	2.50	0.15	28.23	2.50	0.15
3/	6-1-72	27.50	2.43	0.14	27.50	2.43	0.14

	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. ANN.	b. TOT. TO DATE	a. PERIOD	b. TOT. TO DATE
1/	6-1-72	-	-	-	0.07	0.76	-	-
2/	6-1-72	90*	292	292	0.45	5.13	-	-
3/	6-1-72	58*	183	183	1.08	12.17	-	-

*Assumed

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, 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
2568.0	0.29	0.29	2584.0	134.70	936.19			
2570.0	4.49	5.07	2586.0	157.57	1228.46			
2572.0	15.10	24.66	2588.0	178.41	1564.44			
2574.0	29.85	69.61	2590.0	206.64	1949.49			
2576.7	65.54	198.39	2592.0	233.60	2389.73			
2578.0	80.97	293.62	2594.0	271.10	2894.43			
2580.5	101.91	522.22	2596.7	307.22	3675.17			
2582.0	115.91	685.58						

47. REMARKS AND REFERENCES

1/ Total reservoir below emergency spillway crest elevation.
2/ Principal spillway crest (including sediment pool).
3/ Sediment pool only.
4/ Does not include drainage area of 7 SCS FP structures constructed upstream from Site 21.

Land Use: Approximately 70% cultivated, 30% range
Physiographic Area: Red Hills
Geology: Ogallala Formation, Pliocene Age

48. AGENCY MAKING SURVEY Soil Conservation Service
49. AGENCY SUPPLYING DATA Temple, Texas
50. DATE 6-73

USDA-SCS-HYATTSVILLE, MD. 1966