

RESERVOIR SEDIMENT
DATA SUMMARY

CS-34 Rev. 6-66

Lake Santa Rosa

NAME OF RESERVOIR

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

50 - 7a

DATA SHEET NO.

DAM	1. OWNER W.T. Waggoner Estate		2. STREAM Beaver Creek		3. STATE Texas		
	4. SEC. TWP. RANGE		5. NEAREST P.O. Vernon		6. COUNTY Wilbarger		
	7. LAT. 33° 56' 19" LONG. 99° 15' 39"		8. TOP OF DAM ELEVATION 1176.9		9. SPILLWAY CREST ELEV. 1167.0		
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	
	a. FLOOD CONTROL					8-29	
	b. MULTIPLE USE						
	c. POWER					16. DATE NORMAL OPER. BEGAN	
	d. WATER SUPPLY						
	e. IRRIGATION	1167.0	1630.19	15139.55	15139.55	8-29	
	f. CONSERVATION						
	g. INACTIVE						
17. LENGTH OF RESERVOIR 3.7 MILES			AV. WIDTH OF RESERVOIR 0.68 MILES				
WATERSHED	18. TOTAL DRAINAGE AREA 328.00 SQ. MI.		22. MEAN ANNUAL PRECIPITATION 25.04 (38) INCHES				
	19. NET SEDIMENT CONTRIBUTING AREA 325.45 SQ. MI.		23. MEAN ANNUAL RUNOFF 1.80 INCHES				
	20. LENGTH 36 MILES	AV. WIDTH 9.11 MILES	24. MEAN ANNUAL RUNOFF 31486.03 AC.-FT.				
	21. MAX. ELEV. 1744	MIN. ELEV. 1140	25. ANNUAL TEMP.: MEAN 63.5° RANGE 29° - 98° F				
	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
8-29	-	-	Range	23 R	1630.19	15139.55	0.48
6-76	46.83	46.83			1625.19	9556.01	0.30
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
SURVEY DATA	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
	6-76	5583.54	119.23	0.37	5583.54	119.23	0.37
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
6-76	42.7 (6)	344.10	344.10	0.79	36.88		

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
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. 1976 ELEVATION-AREA-CAPACITY DATA								
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY
1145	0.10	0.07	1163	988.94	4296.42			
1147	0.48	0.60	1165	1341.94	6607.33			
1149	1.84	2.76	1167	1625.19	9556.00			
1151	31.50	29.93						
1153	77.01	134.61						
1155	150.22	356.74						
1157	250.80	751.61						
1159	457.01	1445.88						
1161	717.58	2605.19						

47. REMARKS AND REFERENCES

48. AGENCY MAKING SURVEY SCS, Temple, Texas
 49. AGENCY SUPPLYING DATA SCS, Temple, Texas
 50. DATE Jan. 1977