

RESERVOIR SEDIMENT
DATA SUMMARY

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Site No. 31, Lower Plum Creek

SCS-34 Rev. 6-66

NAME OF RESERVOIR

52 - 18

DATA SHEET NO.

DAM	1. OWNER			2. STREAM Trib of Plum Creek			3. STATE Texas						
	4. SEC.		TWP.		RANGE		5. NEAREST P.O. Lockhart			6. COUNTY Caldwell			
	7. LAT. 29° 47' 30"			LONG. 97° 32' 30"			8. TOP OF DAM ELEVATION 413.4			9. SPILLWAY CREST ELEV. 410.0			
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		410.0 1/		160.25		970.37		1047.67		5-17-66		
	b. MULTIPLE USE										16. DATE NORMAL OPER. BEGAN		
	c. POWER										5-17-66		
	d. WATER SUPPLY												
	e. IRRIGATION												
	f. CONSERVATION												
	g. INACTIVE		396.8 2/		14.90		77.30		77.30				
WATERSHED	17. LENGTH OF RESERVOIR 0.85 MILES				AV. WIDTH OF RESERVOIR 0.29 MILES								
	18. TOTAL DRAINAGE AREA 3.51 SQ. MI.				22. MEAN ANNUAL PRECIPITATION 32.63 (86) INCHES								
	19. NET SEDIMENT CONTRIBUTING AREA 3.26 SQ. MI.				23. MEAN ANNUAL RUNOFF 4.90 INCHES								
	20. LENGTH 3.33 MILES		AV. WIDTH 1.05 MILES		24. MEAN ANNUAL RUNOFF 917.22 AC.-FT.								
	21. MAX. ELEV. 640.0		MIN. ELEV. 384.0		25. ANNUAL TEMP: MEAN 68°F RANGE 51°F - 85°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.				
	11-66		-	-			160.25	1047.67	1.14				
	9-75		8.8	8.8	Range-Contour	17R	160.23	1032.22	1.13				
	11-66		-	-	(D)	2' CI	14.90	77.30	-				
	9-75		8.8	8.8			14.85	71.17	-				
	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					
9-75		15.45	1.76	0.54	15.45	1.76	0.54						
9-75		6.13	0.70	0.21	6.13	0.70	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. ANN.	b. TOT. TO DATE	a. PERIOD	b. TOT. TO DATE				
9-75		-		881.11	881.11	0.17	1.47	-	-				
9-75		46.5 (3)		212.68	212.68	0.91	7.93	-	-				
9-75		93.0		668.43	668.43	-	-	-	-				

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							
386.0	1.81	1.21	396.8	14.85	71.17	408.0	132.10	740.63							
388.0	3.05	6.01	398.0	18.90	91.37	410.0	160.23	1032.22							
390.0	4.13	13.16	400.0	30.60	140.35										
392.0	6.41	23.61	402.0	47.62	217.87										
394.0	9.11	39.03	404.0	71.90	336.44										
396.0	12.31	60.35	406.0	101.06	508.40										
47. REMARKS AND REFERENCES															
<u>1/</u> Total reservoir below emergency spillway crest elevation (410.0 ft.) <u>2/</u> Sediment pool only (elev. 396.8 ft.) <u>3/</u> Detention pool only Land Resource Area - Texas Claypan Area Geology - Wilcox Group - Lower Eocene Age															
48. AGENCY MAKING SURVEY Soil Conservation Service															
49. AGENCY SUPPLYING DATA Temple, TX															
50. DATE 1-76															