

RESERVOIR SEDIMENT
DATA SUMMARY

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS

Proctor Lake

NAME OF RESERVOIR

53-51

DATA SHEET NO

DAM	1. OWNER Corps of Engineers			2. STREAM Leon River			3. STATE Texas									
	4. SEC. TWP. RANGE			5. NEAREST P O Comanche			6. COUNTY Comanche									
	7. LAT 31° 58' 07" LONG 90° 29' 90"			8. TOP OF DAM ELEVATION 1206.0			9. SPILLWAY CREST ELEV 1162.0									
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		1197.0		14,010		374,157		433,606		30 Sep 63 16. DATE NORMAL OPER. BEGAN					
	b. MULTIPLE USE															
	c. POWER															
	d. WATER SUPPLY															
	e. IRRIGATION															
	f. CONSERVATION		1162.0		4,610		59,387		59,449							
	g. INACTIVE		1128.0		20		62		62							
17. LENGTH OF RESERVOIR 238.9 MILES					AV. WIDTH OF RESERVOIR MILES											
WATERSHED	18. TOTAL DRAINAGE AREA 1,265 SQ. MI.					22. MEAN ANNUAL PRECIPITATION 30.14 INCHES										
	19. NET SEDIMENT CONTRIBUTING AREA 1,243 SQ. MI.					23. MEAN ANNUAL RUNOFF 1.23 INCHES										
	20. LENGTH 31.94 MILES			AV. WIDTH 39.6 MILES			24. MEAN ANNUAL RUNOFF 82,646 (22.67) AC. FT.									
	21. MAX. ELEV. 1206.0				MIN. ELEV. 1120.0				25. ANNUAL TEMP. MEAN 65.0 RANGE 115° to -6°							
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.	
	May 1986		22.67		22.67		Contour Range (D)		10-Foot 43		14,010 14,029		374,157 370,592		4.53 4.48	
	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			
	1986		30.14		82,646		(1968) 318,339		1,873,584		82,646		1,873,584			
	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			
	1986		3565		157.26		0.124		3565		157.26		0.124			
	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, FPM							
			a. PERIOD		b. TOTAL TO DATE		a. AV ANN.		b. TOT. TO DATE		a. PERIOD		b. TOT. TO DATE			
1986		73.08		197.4		197.4		.037 0.86		2228		2228				

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION											
	42-35	35-30	30-25	25-20	20-15	15-10	10-5	5-Crt	Crt. 10	10-20	20-30	30-35
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION											
May 1986	1.23	14.53	30.49	6.54	11.50	7.80	12.26	4.35	3.58	- .36	4.04	4.04

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														
1986	19.84	30.19	8.00	17.10	6.40	8.00	7.34	1.20	1.20	0.73	-	-	-	-	-

45. RANGE IN RESERVOIR OPERATION							
WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.	WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.
1964	1167.47	1152.42	104,160	1976	1161.12	1158.35	26,665
1965	1173.82	1154.47	188,437	1977	1168.38	1158.78	86,967
1966	1167.42	1154.28	102,607	1978	1158.77	1152.44	9,494
1967	1163.00	1152.82	66,233	1979	1161.84	1151.35	49,458
1968	1174.84	1154.25	318,339	1980	1162.08	1157.40	27,073
1969	1169.60	1160.32	132,490	1981	1158.33	1154.46	16,289
1970	1166.72	1159.35	131,811	1982	1169.07	1154.29	128,237
1971	1162.87	1159.06	44,639	1983	1160.35	1155.62	15,693
1972	1163.94	1158.90	51,016	1984	1155.58	1149.48	16,563
1973	1165.24	1156.52	64,705	1985	1166.45	1149.37	121,470
1974	1163.64	1156.82	44,123	1986*	1163.42	1158.02	37,473
1975	1165.05	1160.17	89,642				

46. ELEVATION-AREA-CAPACITY DATA								
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY
1132	0	0	1160	4,125	47,486	1185	10,328	225,029
1135	348	447	1162	4,611	56,225	1190	11,869	280,444
1140	974	3,793	1165	5,272	71,040	1195	13,378	343,384
1145	1,279	9,576	1170	6,411	100,311	1197	14,029	370,592
1150	1,926	17,656	1175	7,626	135,455			
1155	2,901	30,088	1180	8,933	176,844			

47. REMARKS AND REFERENCES

* 1986 Partial Year

48. AGENCY MAKING SURVEY _____

49. AGENCY SUPPLYING DATA _____

50. DATE October, 1987