

RESERVOIR SEDIMENT
DATA SUMMARY

Site No. 11-B, Elm Fork Watershed

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

SCS-34 Rev. 6-66

NAME OF RESERVOIR

51-31a

DATA SHEET NO.

DAM	1. OWNER			2. STREAM Trinity River			3. STATE Texas					
	4. SEC. TWP. RANGE			5. NEAREST P.O. Gainesville			6. COUNTY Cooke					
	7. LAT. " LONG. "			8. TOP OF DAM ELEVATION 825.0			9. SPILLWAY CREST ELEV. 819.8					
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		819.8 1/		80.2		537.0		678.2		11-18-58	
	b. MULTIPLE USE										16. DATE NORMAL OPER. BEGAN	
	c. POWER											
	d. WATER SUPPLY											
	e. IRRIGATION											
	f. CONSERVATION											
g. INACTIVE		808.1 2/		21.6		141.2		141.2		11-18-58		
WATERSHED	17. LENGTH OF RESERVOIR 0.87 MILES				AV. WIDTH OF RESERVOIR 0.18 MILES							
	18. TOTAL DRAINAGE AREA 2.00 SQ. MI.				22. MEAN ANNUAL PRECIPITATION 34.54 (75) INCHES							
	19. NET SEDIMENT CONTRIBUTING AREA 1.87 SQ. MI.				23. MEAN ANNUAL RUNOFF 4.80 INCHES							
	20. LENGTH 3.0 MILES		AV. WIDTH 0.67 MILES		24. MEAN ANNUAL RUNOFF 512 AC.-FT.							
	21. MAX. ELEV. MIN. ELEV. 789.2				25. ANNUAL TEMP: MEAN 64° F RANGE 44° F - 83° 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.		
	11-18-58		-	-	Range-Contour (D)		16 R	80.2	678.2	1.33		
	7-18-63		4.67	4.67				80.2	670.0	1.31		
	10-18-68		5.25	9.92				80.0	654.6	1.28		
	11-18-58		-	-	2' CI		2' CI	21.6	141.2	-		
	7-18-63		4.67	4.67				21.6	133.0	-		
	10-18-68		5.25	9.92				20.5	126.9	-		
	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					
10-18-68		15.4	2.93	1.57	23.6	2.39	1.28					
10-18-68		6.1	1.16	0.62	14.3	1.44	0.77					
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				
2/ 10-18-68		81.0	1358	1358	1.02	10.13	-	-				
3/ 10-18-68		94.0	1044	1044	-	-	-	-				
1/ 10-18-68		-	2402	2402	0.35	3.48	-	-				

Aug. = 87 lbs/ft.³

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
792.0	0.10	0.07	802.0	9.40	38.85	812.0	35.70	234.00
794.0	0.90	0.93	804.0	12.60	60.77	814.0	43.90	313.46
796.0	2.60	4.29	806.0	15.70	89.02	816.0	50.40	407.69
798.0	4.60	11.39	808.1	20.50	126.91	818.0	65.80	523.54
800.0	6.80	22.72	810.0	26.80	171.72	819.8	80.00	654.55

47. REMARKS AND REFERENCES

1/ Total reservoir below crest elevation (819.8').

2/ Sediment pool only.

3/ Detention Pool.

48. AGENCY MAKING SURVEY Soil Conservation Service

49. AGENCY SUPPLYING DATA Temple, Texas

50. DATE 12-68

RESERVOIR SEDIMENT
DATA SUMMARY

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Site No. 11-B, Elm Fork Watershed

51 - 31b

DATA SHEET NO.

SCS-34 Rev. 6-66

NAME OF RESERVOIR

DAM	1. OWNER Schmidlkofer & Mc Creary		2. STREAM Trib of Trinity R.		3. STATE Texas												
	4. SEC. TWP RANGE		5. NEAREST P.O. Gainesville		6. COUNTY Cooke												
7. LAT. 33° 39' 15" LONG. 97° 6' 10"			8. TOP OF DAM ELEVATION 825.0		9. SPILLWAY CREST ELEV. 819.8												
RESERVOIR	10. STORAGE ALLOCATION		11. ELEVATION TOP OF POOL		12. ORIGINAL SURFACE AREA, ACRES												
	a. FLOOD CONTROL		819.8 1/		80.2												
	b. MULTIPLE USE				537.0												
	c. POWER				678.2												
	d. WATER SUPPLY																
	e. IRRIGATION																
	f. CONSERVATION																
	g. INACTIVE		808.1 2/		21.6												
				141.2													
				141.2													
14. GROSS STORAGE, ACRE-FEET		15. DATE STORAGE BEGAN		16. DATE NORMAL OPER. BEGAN													
		11-18-58		11-18-58													
17. LENGTH OF RESERVOIR		0.87 MILES		AV. WIDTH OF RESERVOIR		0.14 MILES											
WATERSHED	18. TOTAL DRAINAGE AREA		2.00 SQ. MI.		22. MEAN ANNUAL PRECIPITATION		34.54 (77) INCHES										
	19. NET SEDIMENT CONTRIBUTING AREA		1.87 SQ. MI.		23. MEAN ANNUAL RUNOFF		4.80 INCHES										
	20. LENGTH		3.0 MILES		AV. WIDTH		0.67 MILES										
	24. MEAN ANNUAL RUNOFF		512 AC.-FT.		25. ANNUAL TEMP. MEAN		64°F RANGE 44° - 83°F										
	21. MAX. ELEV.		1000.0		MIN. ELEV.		789.2										
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.		
	11-18-58		-		-		Range - Contour (D)		16 R		80.2		678.2		1.33		
	7-18-63		4.67		4.67						80.2		670.0		1.31		
	10-18-68		5.25		9.92						80.0		654.6		1.28		
	9-4-73		4.88		14.80						79.33		648.8		1.27		
	11-18-58		-		-		2' CI		21.6		141.2						
	7-18-63		4.67		4.67				21.6		133.0						
	10-18-68		5.25		9.92				20.5		126.9						
	9-4-73		4.88		14.80				19.81		125.3						
	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. 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/ 9-4-73		5.8			1.19			0.63			29.4		1.99		1.06	
2/ 9-4-73		1.6			0.33			0.18			15.9		1.07		0.57		
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/ 9-4-73		-		1869.02		0.29		4.34									
2/ 9-4-73		57.02 (5)		707.88		0.76		11.26									
3/ 9-4-73		108.8 (3)		1161.14		-		-									

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
794.0	0.81	0.54	806.0	15.50	88.35	818.0	64.65	519.41
796.0	3.10	4.20	808.1	19.81	125.33	819.8	79.33	648.77
798.0	4.23	11.51	810.0	26.09	168.78			
800.0	6.61	22.27	812.0	34.51	229.21			
802.0	9.44	38.97	814.0	43.80	307.37			
804.0	12.27	60.63	816.0	49.40	400.56			

47. REMARKS AND REFERENCES

1/ Total Reservoir below crest elevation (819.8)
 2/ Sediment Pool only
 3/ Detention Pool only

Land Resource Area - Grand Prairie
 Geology - Pawpaw Formation, Lower Cretaceous Age
 Land Use - Pasture, 78%; Woodland, 18%; Cultivated, 3%, Miscellaneous, 1%

48. AGENCY MAKING SURVEY Soil Conservation Service
 49. AGENCY SUPPLYING DATA Temple, Texas

50. DATE 1-74

RESERVOIR SEDIMENT
DATA SUMMARY

Site No. 11-B, Elm Fork Watershed

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

SCS-34 Rev. 6-66

NAME OF RESERVOIR

51-31c

DATA SHEET NO.

DAM	1. OWNER Schmidlkofer & McCreary		2. STREAM Trib. Trinity		3. STATE Texas				
	4. SEC. TWP. RANGE		5. NEAREST P.O. Gainesville		6. COUNTY Cooke				
	7. LAT. 33° 39' 15" LONG. 97° 6' 10"		8. TOP OF DAM ELEVATION 825.0		9. SPILLWAY CREST ELEV. 819.8				
RESERVOIR	10. STORAGE ALLOCATION		11. ELEVATION TOP OF POOL		12. ORIGINAL SURFACE AREA ACRES				
	a. FLOOD CONTROL		819.8 1/		80.2				
	b. MULTIPLE USE				537.0				
	c. POWER				678.2				
	d. WATER SUPPLY								
	e. IRRIGATION								
	f. CONSERVATION								
WATERSHED	13. ORIGINAL CAPACITY, ACRE-FEET		14. GROSS STORAGE, ACRE-FEET		15. DATE STORAGE BEGAN				
	g. INACTIVE		808.1 2/		21.6				
					141.2				
					141.2				
SURVEY	17. LENGTH OF RESERVOIR 0.87 MILES		AV. WIDTH OF RESERVOIR 0.14 MILES		16. DATE NORMAL OPER. BEGAN				
	18. TOTAL DRAINAGE AREA 2.00 SQ. MI.		22. MEAN ANNUAL PRECIPITATION 34.54 (77) INCHES		11-18-58				
	19. NET SEDIMENT CONTRIBUTING AREA 1.87 SQ. MI.		23. MEAN ANNUAL RUNOFF 4.80 INCHES						
	20. LENGTH 3.0 MILES		AV. WIDTH 0.67 MILES		11-18-58				
	21. MAX. ELEV. 1000.0		MIN. ELEV. 789.2						
				24. MEAN ANNUAL RUNOFF 512 AC.-FT.					
				25. ANNUAL TEMP: MEAN 64F RANGE 44F - 83F					
SURVEY	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.	
	11-18-58	-	-	Range-Contour (D)	16R	80.20	678.20	1.33	
	7-18-63	4.67	4.67			80.20	670.00	1.31	
	10-18-68	5.25	9.92			80.00	654.60	1.28	
	9-04-73	4.88	14.80			79.33	648.80	1.27	
	6-11-79	5.75	20.55			79.33	640.20	1.25	
	26. DATE OF SURVEY								
	11-18-58	-	-			21.60	141.20	--	
	7-18-63	4.67	4.67			21.60	133.00	--	
	10-18-68	5.25	9.92			20.50	126.90	--	
9-04-73	4.88	14.80			19.81	125.30	--		
6-11-79	5.75	20.55			19.54	119.80	--		
SURVEY	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		
	6-11-79	8.60	1.50	0.80	38.00	1.85	0.99		
6-11-79	5.50	0.96	0.51	21.40	1.04	0.56			
SURVEY	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	
	6-11-79	--	963.17	1615.57	0.27	5.60	--	--	
6-11-79	57.9 (7)	673.39	706.19	0.74	15.16	--	--		
6-11-79	97.1 (5)	289.78	909.38	--	--	--	--		

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. 1979 ELEVATION-AREA-CAPACITY DATA															
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY							
794	0.48	0.32	808.1	19.54	119.77	.	.	-							
796	2.96	3.41	810	25.92	162.81	.	.	-							
798	4.10	10.44	812	34.17	222.71	.	.	-							
800	6.44	20.89	814	43.28	299.98	.	.	-							
802	8.73	36.00	816	51.96	395.09	.	.	-							
804	11.98	56.62	818	64.31	511.14	.	.	-							
806	15.03	83.57	819.8	79.33	640.18	.	.	-							
47. REMARKS AND REFERENCES															
1/ Total Reservoir below crest elevation (819.8) 2/ Sediment Pool only 3/ Detention Pool only Land Resource Area - Grand Prairie Geology - Pawpaw Formation, Lower Cretaceous Age Land Use - Pasture, 78%; Woodland, 18%; Cultivated, 3%; Misc, 1%															
48. AGENCY MAKING SURVEY				Soil Conservation Service											
49. AGENCY SUPPLYING DATA				Temple, Texas											
						50. DATE		1-80							