

RESERVOIR SEDIMENT

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

DATA SUMMARY

Site No. 7, Clear Fork Watershed

SCS-34 Rev. 6-66

NAME OF RESERVOIR

51- 39

DATA SHEET NO.

DAM	1. OWNER			2. STREAM Trinity River			3. STATE Texas						
	4. SEC.		TWP.	RANGE		5. NEAREST P.O. Poolville			6. COUNTY Parker				
	7. LAT. ° ' "		" LONG. ° ' "		8. TOP OF DAM ELEVATION 1083.5			9. SPILLWAY CREST ELEV. 1078.0					
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		1078.0 1/		68.24		571.90		746.90		10-55		
	b. MULTIPLE USE												
	c. POWER												
	d. WATER SUPPLY										16. DATE NORMAL OPER. BEGAN		
	e. IRRIGATION												
	f. CONSERVATION										10-55		
g. INACTIVE		1064.0 2/		23.00		175.00		175.00					
WATERSHED	17. LENGTH OF RESERVOIR				0.80 MILES		AV. WIDTH OF RESERVOIR				0.14 MILES		
	18. TOTAL DRAINAGE AREA				2.55 SQ. MI.		22. MEAN ANNUAL PRECIPITATION				31.97 (76) INCHES		
	19. NET SEDIMENT CONTRIBUTING AREA				2.44 SQ. MI.		23. MEAN ANNUAL RUNOFF				3.50 INCHES		
	20. LENGTH		2.50 MILES		AV. WIDTH		1.02 MILES		24. MEAN ANNUAL RUNOFF		475.97 AC.-FT.		
	21. MAX. ELEV.			1290.0			MIN. ELEV.			1042.0			
						25. ANNUAL TEMP: MEAN 64°F RANGE 44-84°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/ 10-55		-	-	Range Contour		41 R		68.24		746.90		1.57
	1/ 4-69		13.5	13.5					68.24		626.29		1.32
	2/ 10-55		-	-	(D)		2' CI		23.00		175.0		-
	2/ 4-69		13.5	13.5					15.30		78.55		-
	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/ 4-69		120.61		8.93		3.66		120.61		8.93		3.66	
2/ 4-69		96.45		7.14		2.93		96.45		7.14		2.93	
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. TODATE		a. PERIOD	b. TOT. TODATE
1/ 4-69		47.2		3760		3760		1.20		16.15		-	-
2/ 4-69		34.0		2170		2170		4.08		55.11		-	-
3/ 4-69		100.0		1590		1590		-		-		-	-

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
1054	1.56	1.04	1064	15.30	78.55	1074	48.65	394.30
1056	3.25	5.75	1066	22.24	115.88	1076	57.69	500.51
1058	6.12	14.97	1068	28.77	166.75	1078	68.24	626.29
1060	9.20	30.18	1070	34.10	229.54			
1062	12.00	51.32	1072	41.11	304.64			

47. REMARKS AND REFERENCES
1/ Total reservoir below emergency spillway crest elev. (1078.0')
2/ Sediment pool only
3/ Detention pool only

48. AGENCY MAKING SURVEY Texas Sedimentation Survey Party
Soil Conservation Service

49. AGENCY SUPPLYING DATA August, 1969

50. DATE _____

RESERVOIR SEDIMENT
DATA SUMMARY

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Site 7, Clear Fork of Trinity

SCS-34 Rev. 6-66

NAME OF RESERVOIR

51-507

DATA SHEET NO.

DAM	1. OWNER		2. STREAM Trib of Trinity R		3. STATE Texas											
	4. SEC. TWP RANGE		5. NEAREST P.O. Poolville		6. COUNTY Parker											
7. LAT. 32° 56' 9" LONG. 97° 18' 23"			8. TOP OF DAM ELEVATION 1083.5		9. SPILLWAY CREST ELEV. 1078.0											
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		1078.0 1/		68.24		571.90		746.90		10-55					
	b. MULTIPLE USE										16. DATE NORMAL OPER. BEGAN					
	c. POWER										10-55					
	d. WATER SUPPLY															
	e. IRRIGATION															
	f. CONSERVATION															
g. INACTIVE		1064.0 2/		23.00		175.00		175.00								
WATERSHED	17. LENGTH OF RESERVOIR 0.80 MILES				AV. WIDTH OF RESERVOIR 0.13 MILES											
	18. TOTAL DRAINAGE AREA 2.55 SQ. MI.				22. MEAN ANNUAL PRECIPITATION 31.97 (86) INCHES											
	19. NET SEDIMENT CONTRIBUTING AREA 2.44 SQ. MI.				23. MEAN ANNUAL RUNOFF 3.50 INCHES											
	20. LENGTH 2.50 MILES		AV. WIDTH 1.02 MILES		24. MEAN ANNUAL RUNOFF 475.97 AC.-FT.											
	21. MAX. ELEV. 1290.0		MIN. ELEV. 1042.0		25. ANNUAL TEMP. MEAN 64°F RANGE 44 - 84°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.	
	10-55		-		-		Range-Contour		41 R		68.24		746.90		1.57	
	4-69		13.5		13.5		(D)		2' CI		68.24		626.29		1.32	
	4-74		5.0		18.5						68.24		600.09		1.26	
	10-55		-		-						23.00		175.00		-	
	4-69		13.5		13.5						15.30		78.55		-	
	4-74		5.0		18.5						14.56		68.79		-	
	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				
4-74		26.2		5.24		2.14		146.81		7.94		3.25				
4-74		9.76		1.95		0.78		106.21		5.74		2.28				
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		
4-74		-		3388		3619		1.06		19.66		--		--		
4-74		33 (5)		391		1430		3.28		60.69		--		--		
4-74		101 (4)		2997		1980		-		-		--		--		

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							
1054.0	0.50	0.03	1066.0	20.82	104.00	1078.0	68.24	600.09							
1056.0	2.65	2.07	1068.0	27.03	151.74										
1058.0	5.26	9.84	1070.0	32.93	211.63										
1060.0	8.52	23.50	1072.0	39.05	283.56										
1062.0	11.16	43.13	1074.0	47.11	369.64										
1064.0	14.56	68.79	1076.0	57.66	474.28										
47. REMARKS AND REFERENCES															
Land Resource Area - Cross Timbers Geology - Paluxy Formation, Lower Cretaceous Age Land Use - 70% Pastureland, 27% Wooded Pasture, 3% Miscellaneous 1/ Total reservoir below emergency spillway crest elevation (1078.0) 2/ Sediment pool only 3/ Detention pool only Estimated trap efficiency - 97%															
48. AGENCY MAKING SURVEY				Soil Conservation Service											
49. AGENCY SUPPLYING DATA				Temple, Texas											
50. DATE						January 1975									

RESERVOIR SEDIMENT
DATA SUMMARY

DS-34 Rev. 6-66

Site 7, Clear Fork of Trinity

NAME OF RESERVOIR

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

51 - 39b

DATA SHEET NO.

DAM	1. OWNER		2. STREAM Cottonwood Creek		3. STATE Texas					
	4. SEC. TWP. RANGE		5. NEAREST P.O. Poolville		6. COUNTY Parker					
	7. LAT. 32° 56' 9" LONG. 97° 48' 23"		8. TOP OF DAM ELEVATION 1083.5		9. SPILLWAY CREST ELEV. 1078.0					
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	1/ 1078.0	68.24	571.90	746.90	10-55				
	b. MULTIPLE USE									
	c. POWER									
	d. WATER SUPPLY									
	e. IRRIGATION					16. DATE NORMAL OPER. BEGAN				
	f. CONSERVATION									
	g. INACTIVE	2/ 1064.0	23.00	175.00	175.00					
17. LENGTH OF RESERVOIR	0.80	MILES	AV. WIDTH OF RESERVOIR	0.13	MILES					
WATERSHED	18. TOTAL DRAINAGE AREA		2.55		SQ. MI.	22. MEAN ANNUAL PRECIPITATION	31.97 (86)	INCHES		
	19. NET SEDIMENT CONTRIBUTING AREA		2.44		SQ. MI.	23. MEAN ANNUAL RUNOFF		3.50	INCHES	
	20. LENGTH	2.50	MILES	AV. WIDTH	1.02	MILES	24. MEAN ANNUAL RUNOFF		475.97	AC.-FT.
	21. MAX. ELEV.	1290.0	MIN. ELEV.	1042.0	25. ANNUAL TEMP: MEAN 64° FRANGE 44° - 84° 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	33. C/I. RATIO, AC.-FT. PER AC.-FT.		
10-55	-	-	Range- Contour (D)	41 R 2' CI	68.24	746.90	1.57			
4-69	13.5	13.5			68.24	626.29	1.32			
4-74	5.0	18.5			68.24	600.09	1.26			
9-78	4.4	22.9			68.20	587.89	1.24			
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.	
10-55	-	-			23.00	175.00				
4-69	13.5	13.5			15.30	78.55				
4-74	5.0	18.5			14.56	68.79				
9-78	4.4	22.9			14.39	65.04				
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				
9-78	12.20	2.77	1.14	159.01	6.94	2.85				
9-78	3.75	0.85	0.35	109.96	4.80	1.97				
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				
9-78	-	2511.83	0.93	21.29						
9-78	36.28 (8)	982.73	2.74	62.83						
9-78	89.20 (4)	1529.10								

1
2
2
2
1
2

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. 1978 ELEVATION-AREA-CAPACITY DATA															
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY							
1056	2.39	1.59	1068	26.15	145.29										
1058	4.55	8.42	1070	32.39	203.72										
1060	8.18	20.97	1072	38.68	274.70										
1062	10.82	39.91	1074	46.46	359.72										
1064	14.39	65.04	1076	56.93	462.93										
1066	20.00	99.28	1078	68.20	587.89										
47. REMARKS AND REFERENCES															
<u>1/</u> Total reservoir below emergency spillway crest elevation (1078.0). <u>2/</u> Sediment pool only. <u>3/</u> Detention pool only.															
Land Resource Area: Cross Timbers. Geology: Paluxy Formation, Lower Cretaceous Age. Land Use: 70% pastureland, 27% wooded pasture, 3% miscellaneous. Estimated trap efficiency: 97%.															
48. AGENCY MAKING SURVEY SCS, Temple, Texas															
49. AGENCY SUPPLYING DATA SCS, Temple, Texas				50. DATE <u>January 1979</u>											