

RESERVOIR SEDIMENT
DATA SUMMARY

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Site No. 2, Logan-Slough Watershed
NAME OF RESERVOIR

49 - 11

SCS-34 Rev. 6-66

DATA SHEET NO.

DAM	1. OWNER John Thompson			2. STREAM Trib of Slough Cr.			3. STATE Texas					
	4. SEC. TWP. RANGE			5. NEAREST P. O. Direct			6. COUNTY Lamar					
	7. LAT. 33° 48' 28" LONG. 95° 48' 25"			8. TOP OF DAM ELEVATION 470.0			9. SPILLWAY CREST ELEV. 467.5					
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		467.5 1/		46.80		294.23		342.43		10-24-65	
	b. MULTIPLE USE										16. DATE NORMAL OPER. BEGAN	
	c. POWER										10-24-65	
	d. WATER SUPPLY											
	e. IRRIGATION											
	f. CONSERVATION											
g. INACTIVE		456.5 2/		12.22		48.20		48.20				
WATERSHED	17. LENGTH OF RESERVOIR 0.77 4/ MILES				AV. WIDTH OF RESERVOIR 0.09 MILES							
	18. TOTAL DRAINAGE AREA 0.65 SQ. MI.				22. MEAN ANNUAL PRECIPITATION 45.11 (87) INCHES							
	19. NET SEDIMENT CONTRIBUTING AREA 0.58 SQ. MI.				23. MEAN ANNUAL RUNOFF 10.0 INCHES							
	20. LENGTH 0.93 MILES		AV. WIDTH 0.70 MILES		24. MEAN ANNUAL RUNOFF 346.64 AC.-F. T.							
	21. MAX. ELEV. 560.0		MIN. ELEV. 443.0		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.			
	1/ 10-28-66		-	-			46.80	342.43	0.99			
	1/ 9-19-73		6.9	6.9	Range - Contour	42 R	46.56	336.24	0.97			
	2/ 10-28-66		-	-	(D)	2' CI	12.22	48.20	--			
	2/ 9-19-73		6.9	6.9			12.04	43.93	--			
	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/ 9-19-73		6.19	0.90	1.55	6.19	0.90	1.55					
2/ 9-19-73		4.27	0.62	0.98	4.27	0.62	0.98					
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/ 9-19-73		-	2663.3	2663.3	0.26	1.81	-	-				
2/ 9-19-73		75 (4)	1602.3	1602.3	1.29	8.86	-	-				
3/ 9-19-73		101 (4)	1061.0	1601.0	-	-	-	-				

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							
448.0	0.80	0.05	460.0	19.74	99.19										
450.0	1.36	1.23	462.0	25.02	143.87										
452.0	4.25	6.58	464.0	31.82	200.60										
454.0	8.19	18.81	466.0	39.47	271.79										
456.5	12.04	43.93	467.0	46.56	336.24										
458.0	15.21	64.32													
47. REMARKS AND REFERENCES															
<p>1/ Total Reservoir below crest elevation (467.5')</p> <p>2/ Sediment Pool only</p> <p>3/ Detention Pool only</p> <p>4/ West arm 0.49 mile; east arm 0.28 mile</p> <p>Land Use: Cropland, 9%; Pasture & Rangeland, 84%; Miscellaneous, 7%</p> <p>Land Resource Area - Cross Timbers</p> <p>Geology - Pleistocene fluviatile terrace deposits (QT 1) underlain by Eagle Ford shale of Upper Cretaceous Age</p>															
48. AGENCY MAKING SURVEY				Soil Conservation Service											
49. AGENCY SUPPLYING DATA				Temple, Texas				50. DATE January - 1974							

RESERVOIR SEDIMENT
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NAME OF RESERVOIR

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49 - 11a

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	4. SEC. TWP. RANGE		5. NEAREST P.O. Direct			6. COUNTY Lamar		
	7. LAT 33° 48' 28" LONG. 95° 48' 25"		8. TOP OF DAM ELEVATION 470.0		9. SPILLWAY CREST ELEV. 467.5			
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/ 467.5	46.80	294.23	342.43	10-24-65		
	b. MULTIPLE USE							
	c. POWER							
	d. WATER SUPPLY					16. DATE NORMAL OPER. BEGAN		
	e. IRRIGATION					10-24-65		
	f. CONSERVATION							
g. INACTIVE	2/ 456.5	12.22	48.20	48.20				
WATERSHED	17. LENGTH OF RESERVOIR 4/			0.77 MILES		AV. WIDTH OF RESERVOIR 0.09 MILES		
	18. TOTAL DRAINAGE AREA			0.65 SQ. MI.		22. MEAN ANNUAL PRECIPITATION 45.11 (87) INCHES		
	19. NET SEDIMENT CONTRIBUTING AREA			0.58 SQ. MI.		23. MEAN ANNUAL RUNOFF 10.00 INCHES		
	20. LENGTH 0.93 MILES	AV. WIDTH 0.70 MILES	24. MEAN ANNUAL RUNOFF 346.64 AC.-FT.					
	21. MAX. ELEV. 560.0	MIN. ELEV. 443.0	25. ANNUAL TEMP: MEAN 64° FRANGE 44° - 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.
	10-28-66	-	-	Range-	42 R	46.80	342.43	0.99
	9-19-73	6.9	6.9	Contour	2' CI	46.56	336.24	0.97
	8-28-79	5.9	12.8	(D)		46.52	332.70	0.96
	10-28-66	-	-			12.22	48.20	
	9-19-73	6.9	6.9			12.04	43.93	
	8-28-79	5.9	12.8			11.95	41.81	
	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		
8-28-79	3.54	0.60	1.03	9.73	0.76	1.31		
8-28-79	2.12	0.36	0.62	6.39	0.50	0.86		
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	
8-28-79	-	1615.2	2253.8	0.22	2.84			
8-28-79	68 (6)	723.1	1273.7	1.04	13.25			
8-28-79	100 (4)	892.1	980.1					

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							
450	1.16	0.77	460	19.70	96.47										
452	4.15	5.77	462	25.00	141.06										
454	7.70	17.44	464	31.69	197.62										
456.5	11.95	41.81	466	39.26	268.44										
458	14.94	61.94	467.5	46.52	332.70										
47. REMARKS AND REFERENCES															
<u>1/</u> Total reservoir below crest elevation (467.5). <u>2/</u> Sediment pool only. <u>3/</u> Detention pool only. <u>4/</u> West arm 0.49 mile; East arm 0.28 mile.															
Land Use: cropland, 9%; pasture & rangeland, 84%; miscellaneous, 7%. Land Resource Area: Cross Timbers. Geology: Pleistocene fluvial terrace deposits (QT 1) underlain by Eagle Ford shale of Upper Cretaceous Afe.															
48. AGENCY MAKING SURVEY				SCS, Temple, Texas											
49. AGENCY SUPPLYING DATA				SCS, Temple, Texas				50. DATE January 1980							