

RESERVOIR SEDIMENT  
DATA SUMMARY

SCS-34 Rev. 6-66

Site No. 8, Deep Creek

NAME OF RESERVOIR

U. S. DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE

53- 43

DATA SHEET NO.

DAM		1. OWNER Phil Lane		2. STREAM Dry Prong		3. STATE Texas	
4. SEC. TWP. RANGE		5. NEAREST P. O. Brady		6. COUNTY McCulloch		7. LAT. ° ' " LONG. ° ' "	
8. TOP OF DAM ELEVATION 1232.8		9. SPILLWAY CREST ELEV. 1227.0		10. STORAGE ALLOCATION		11. ELEVATION TOP OF POOL	
RESERVOIR	a. FLOOD CONTROL	1227.0	152.52	1195.20	1409.81	15. DATE STORAGE BEGAN	
	b. MULTIPLE USE					16. DATE NORMAL OPER. BEGAN	
	c. POWER					12-13-51	
	d. WATER SUPPLY					12-13-51	
	e. IRRIGATION						
	f. CONSERVATION						
	g. INACTIVE	1212.0	30.68	214.61	214.61		
17. LENGTH OF RESERVOIR 1.09 MILES				AV. WIDTH OF RESERVOIR 0.22 MILES			
18. TOTAL DRAINAGE AREA 4.26 SQ. MI.		22. MEAN ANNUAL PRECIPITATION 24.94 (19) INCHES		19. NET SEDIMENT CONTRIBUTING AREA 4.02 SQ. MI.		23. MEAN ANNUAL RUNOFF 2.3 INCHES	
20. LENGTH 3.55 MILES		AV. WIDTH 1.20 MILES		24. MEAN ANNUAL RUNOFF 522.5 AC.-F.T.		25. ANNUAL TEMP.: MEAN RANGE Subhumid	
21. MAX. ELEV.		MIN. ELEV. 1197.4		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/R RATIO, AC.-FT. PER SQ. MI.		12-13-51 - -		1409.81 330.94	
9-13-66 14.8 14.8		Range 25 R		152.52 1367.81		321.08	
12-13-51 - -		Contour 2' CI		30.68 214.61			
9-13-66 14.8 14.8		(D)		30.68 184.28			
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/ 9-13-66		42.00 2.84 .71			42.00 2.84 .71		
2/ 9-13-66		30.33 2.05 .51			30.33 2.05 .51		
26. DATE OF SURVEY		39. AV. DRY WGT., LBS. PER CU. FT.		40. SED. DEP., TONS PER SQ. MI.-YR.		41. STORAGE LOSS, PCT.	
		a. PERIOD b. TOTAL TO DATE		a. AV. ANN. b. TOT. TO DATE		a. PERIOD b. TOT. TO DATE	
1/ 9-13-66		-- --		.20 2.98		-- --	
2/ 9-13-66		41.5 461		.96 14.13		-- --	

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
See Attached Sheet.								

47. REMARKS AND REFERENCES

1/ Both Pools.  
2/ Sediment pool only.

Land Use: Rangeland, 84%; Formerly cultivated, 10%; Cropland, 6%.  
 Estimated trap efficiency: 98%  
 Total annual sediment load, adjusted for trap efficiency: .72 1/, .52 2/

48. AGENCY MAKING SURVEY  
 49. AGENCY SUPPLYING DATA

Soil Conservation Service  
 Temple, Texas

50. DATE 2-67

Site No. 8, Deep Creek

46. Elevation - Area - Capacity Data

1951

Elevation	Area	Capacity	Elevation	Area	Capacity
1198	1.14	1.14	1214	40.04	284.26
1200	3.78	6.06	1216	49.98	374.28
1202	6.16	16.00	1218	61.50	485.76
1204	12.93	35.09	1220	76.94	624.20
1206	17.31	65.33	1222	96.09	797.23
1208	24.32	106.96	1224	116.54	1009.86
1210	26.86	158.14	1226	138.61	1265.01
1212	30.68	214.61	1227	152.52	1409.81

1966

1198	0.00	0.00	1214	37.15	252.04
1200	0.25	0.17	1216	48.55	337.53
1202	3.31	3.21	1218	60.04	445.97
1204	7.95	14.12	1220	78.04	583.73
1206	15.79	37.44	1222	95.31	756.88
1208	22.85	75.89	1224	116.24	968.19
1210	27.46	126.15	1226	138.35	1222.58
1212	30.68	184.28	1227	152.52	1367.81

RESERVOIR SEDIMENT  
DATA SUMMARY

U. S. DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE

SCS-34 Rev. 6-66

Site No. 8, Deep Creek Watershed

NAME OF RESERVOIR

53- 43a

DATA SHEET NO.

DAM	1. OWNER <b>Lane</b>		2. STREAM <b>Dry Prong</b>		3. STATE <b>Texas</b>											
	4. SEC. <b>TWP.</b> RANGE		5. NEAREST P.O. <b>Brady</b>		6. COUNTY <b>McCulloch</b>											
7. LAT. <b>31° 22' 19"</b>		LONG. <b>99° 08' 17"</b>		8. TOP OF DAM ELEVATION <b>1232.8</b>		9. SPILLWAY CREST ELEV. <b>1227.0</b>										
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		<b>1227.0</b>		<b>152.52</b>		<b>1195.20</b>		<b>1409.81</b>		<b>12-13-51</b>					
	b. MULTIPLE USE										16. DATE NORMAL OPER. BEGAN					
	c. POWER										<b>12-13-51</b>					
	d. WATER SUPPLY															
	e. IRRIGATION															
	f. CONSERVATION															
g. INACTIVE		<b>1212.0</b>		<b>30.68</b>		<b>214.61</b>		<b>214.61</b>								
WATERSHED	17. LENGTH OF RESERVOIR <b>1.09</b> MILES				AV. WIDTH OF RESERVOIR <b>0.22</b> MILES											
	18. TOTAL DRAINAGE AREA <b>5.41*</b> SQ. MI.				22. MEAN ANNUAL PRECIPITATION <b>24.94 (19)</b> INCHES											
	19. NET SEDIMENT CONTRIBUTING AREA <b>5.17</b> SQ. MI.				23. MEAN ANNUAL RUNOFF <b>2.30</b> INCHES											
	20. LENGTH <b>3.55</b> MILES		AV. WIDTH <b>1.52</b> MILES		24. MEAN ANNUAL RUNOFF <b>663.59</b> AC.-FT.											
	21. MAX. ELEV.		MIN. ELEV. <b>1197.4</b>		25. ANNUAL TEMP: MEAN <b>64°F</b> RANGE <b>48°F - 82°F</b>											
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/ 12-13-51		-		-		Range-Contour (D)		25 R		152.52		1409.81		2.12	
	1/ 9-13-66		14.8		14.8						152.52		1367.81		2.06	
	1/ 8-1-72		5.9		20.7						152.52		1359.54		2.05	
	2/ 12-13-51		-		-		2' CI		2' CI		30.68		214.61		--	
	2/ 9-13-66		14.8		14.8						30.68		184.28		--	
	2/ 8-1-72		5.9		20.7						20.68		178.63		--	
	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/ 8-1-72		8.27		1.40		0.27		50.27		2.43		0.47				
2/ 8-1-72		5.65		0.96		0.18		35.98		1.74		0.32				
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/ 8-1-72		-		-		-		0.17		3.57		--		--		
2/ 8-1-72		42.3 (4)		173.81		294.81		0.81		16.77		--		--		

\* Includes 1.38 sq.mi. drainage area of diversion pond above site.

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
1202	2.75	1.83	1216	47.88	331.14			
1204	7.37	11.59	1218	60.63	439.45			
1206	15.06	33.57	1220	77.95	577.74			
1208	22.48	70.88	1222	94.80	750.30			
1210	27.46	120.77	1224	115.91	960.77			
1212	30.68	178.63	1226	138.00	1214.49			
1214	37.30	246.14	1227	152.52	1359.54			

47. REMARKS AND REFERENCES

1/ Both Pools  
2/ Sediment Pool only

Physiographic Area: Palo Pinto Section  
 Estimated trap efficiency: 98%  
 Total annual sediment load, adjusted for trap efficiency: 0.48 ac.ft./sq.mi./yr. 1/  
 0.33 ac.ft./sq.mi./yr. 2/

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

50. DATE      2-1-73

RESERVOIR SEDIMENT  
DATA SUMMARY

CS-34 Rev. 6-66

Site 8, Deep Creek Watershed

NAME OF RESERVOIR

U. S. DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE

53 - 43b

DATA SHEET NO.

DAM	1. OWNER Lane			2. STREAM Dry Prong			3. STATE Texas									
	4. SEC. TWP. RANGE			5. NEAREST P.O. Brady			6. COUNTY McCulloch									
	7. LAT. 31° 22' 49" LONG. 99° 08' 47"			8. TOP OF DAM ELEVATION 1232.8			9. SPILLWAY CREST ELEV. 1227.0									
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/ 1227.0		152.5		1195.20		1409.81		12-13-51					
	b. MULTIPLE USE															
	c. POWER															
	d. WATER SUPPLY										16. DATE NORMAL OPER. BEGAN					
	e. IRRIGATION															
	f. CONSERVATION										12-13-51					
	g. INACTIVE		2/ 1221.0		30.68		214.61		214.61							
17. LENGTH OF RESERVOIR					1.09 MILES		AV. WIDTH OF RESERVOIR			0.22 MILES						
18. TOTAL DRAINAGE AREA				4/ 5.41 SQ. MI.		22. MEAN ANNUAL PRECIPITATION			24.94 (19) INCHES							
19. NET SEDIMENT CONTRIBUTING AREA					5.17 SQ. MI.		23. MEAN ANNUAL RUNOFF					2.30 INCHES				
20. LENGTH			3.55 MILES		AV. WIDTH		1.52 MILES		24. MEAN ANNUAL RUNOFF				663.59 AC.-FT.			
21. MAX. ELEV.				1600'		MIN. ELEV.		1197.4'		25. ANNUAL TEMP.: MEAN 64° F RANGE 48° - 82° 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/ 12-13-51		-		-		Range- Contour (D)		25 R 2' CI		152.52		1409.81		2.12	
	1/ 9-13-66		14.8		14.8						152.52		1367.81		2.06	
	1/ 8-1-72		5.9		20.7						152.52		1359.81		2.05	
	1/ 5-17-78		5.8		26.5						152.49		1348.36		2.03	
	2/ 12-13-51		-		-								30.68		214.61	
	2/ 9-13-66		14.8		14.8				30.68		184.28					
	2/ 8-1-72		5.9		20.7				30.68		178.63					
	2/ 5-17-78		5.8		26.5				29.93		175.50					
	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/ 5-17-78		11.45		1.97		0.38		61.45		2.32		0.45				
2/ 5-17-78		3.13		0.54		0.10		39.11		1.48		0.29				
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/ 5-17-78		-		791.02		615.43		0.16		4.36						
3/ 5-17-78 Det		P 94.5 (5)		609.63		329.31										
2/ 5-17-78 Sed		P 45.3 (7)		181.39		286.12		0.69		18.22						

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							
1202	2.65	1.77	1216	47.70	325.77										
1204	7.03	11.10	1218	59.84	433.08										
1206	15.10	32.72	1220	76.40	568.98										
1208	22.20	69.79	1222	94.60	739.66										
1210	26.84	118.76	1224	115.80	949.70										
1212	29.93	175.50	1226	138.00	1203.18										
1214	36.50	241.82	1227	152.49	1348.36										
47. REMARKS AND REFERENCES															
<p>1/ Total reservoir below emergency spillway crest elevation.</p> <p>2/ Sediment pool only.</p> <p>3/ Detention pool only.</p> <p>4/ Includes 1.38 square miles drainage area of diversion pond above site.</p> <p>Land Resource Area: Central Rolling Red Prairies.</p> <p>Land Use: 84% rangeland, 14% cultivated, 2% miscellaneous.</p> <p>Geology: Lower Canyon group of Pennsylvanian Age.</p>															
48. AGENCY MAKING SURVEY    USDA, SCS															
49. AGENCY SUPPLYING DATA    SCS, Temple, Texas															
50. DATE    11-78															