

RESERVOIR SEDIMENT
DATA SUMMARY

Sediment Control Structure 3-4
Denton Creek Watershed

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

CS-34 Rev. 6-66

NAME OF RESERVOIR

51 - 45

DATA SHEET NO.

DAM	1. OWNER Tompkins Estate		2. STREAM Trib of Mallard Ck.		3. STATE Texas			
	4. SEC. TWP. RANGE		5. NEAREST P.O. Montague		6. COUNTY Montague			
	7. LAT. 33° 37' 45" LONG. 97° 38' 00"		8. TOP OF DAM ELEVATION 1174.4		9. SPILLWAY CREST ELEV. 1172.4			
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/ 1172.4	5.31	22.88	43.87	12-69		
	b. MULTIPLE USE							
	c. POWER							
	d. WATER SUPPLY					16. DATE NORMAL OPER. BEGAN		
	e. IRRIGATION							
	f. CONSERVATION					12-69		
g. INACTIVE	2/ 1167.0	3.01	20.99	20.99				
WATERSHED	17. LENGTH OF RESERVOIR 4/		0.34 MILES	AV. WIDTH OF RESERVOIR		0.03 MILES		
	18. TOTAL DRAINAGE AREA		0.17 SQ. MI.	22. MEAN ANNUAL PRECIPITATION		29.97 INCHES		
	19. NET SEDIMENT CONTRIBUTING AREA		0.16 SQ. MI.	23. MEAN ANNUAL RUNOFF		3.50 INCHES		
	20. LENGTH	0.24 MILES	AV. WIDTH	0.70 MILES	24. MEAN ANNUAL RUNOFF		31.73 AC.-FT.	
	21. MAX. ELEV.	1220	MIN. ELEV.	1148.0	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/ 12-69	-	-	Range-Contour (D)	16 R	5.31	43.87	1.38
	1/ 10-76	6.83	6.83		4' CI	5.48	38.44	1.21
	2/ 12-69	-	-			3.01	20.99	
	2/ 10-76	6.83	6.83			2.64	16.98	
	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/ 10-76	5.43	0.80	4.97	5.43	0.80	4.97	
	2/ 10-76	4.01	0.59	3.67	4.01	0.59	3.67	
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/ 10-76		6813.70	6813.70	1.82	12.38			
3/ 10-76	Det.P 97.8	2769.11	2769.11					
2/ 10-76	Sed.P 50.6	4044.59	4044.59	2.80	19.10			

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. 1976 ELEVATION-AREA-CAPACITY DATA															
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY							
1148	0.07	0.09													
1152	0.24	0.68													
1156	0.46	2.06													
1160	1.07	5.03													
1164	1.70	10.52													
1167	2.64	16.98													
1172.4	5.48	38.44													
47. REMARKS AND REFERENCES															
<u>1/</u> Total reservoir. <u>2/</u> Sediment pool. <u>3/</u> Detention pool only. <u>4/</u> SE arm is 0.23 mi. in length; NE arm is 0.11 mi. in length. Geology: Antlers sand, Lower Cretaceous Age. Land Resource Area: Cross Timbers. Land Use: 10% wooded pasture, 89% pastureland, 1% miscellaneous.															
48. AGENCY MAKING SURVEY				Sedimentation Survey Party - TEXAS											
49. AGENCY SUPPLYING DATA				SCS											
50. DATE							4-77								