

RESERVOIR SEDIMENT
DATA SUMMARY

Sediment Control Structure 3-7
Denton Creek Watershed

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

25-34 Rev. 6-66

NAME OF RESERVOIR

51- 47

DATA SHEET NO.

DAM	1. OWNER Merle T. Waggoner		2. STREAM Trib. of Mallard Cr.		3. STATE Texas			
	4. SEC. TWP. RANGE		5. NEAREST P.O. Montague		6. COUNTY Montague			
	7. LAT. 33° 36' 45" LONG 97° 38' 25"		8. TOP OF DAM ELEVATION		9. SPILLWAY CREST ELEV.			
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	1083.9 1/	6.92	53.45	82.68	12-69		
	b. MULTIPLE USE							
	c. POWER							
	d. WATER SUPPLY					16. DATE NORMAL OPER. BEGAN		
	e. IRRIGATION							
	f. CONSERVATION					12-69		
g. INACTIVE	1075.8 2/	4.04	29.23	29.23				
WATERSHED	17. LENGTH OF RESERVOIR		0.35 MILES	AV. WIDTH OF RESERVOIR		0.03 MILES		
	18. TOTAL DRAINAGE AREA		0.31 SQ. MI.	22. MEAN ANNUAL PRECIPITATION		29.97 INCHES		
	19. NET SEDIMENT CONTRIBUTING AREA		0.30 SQ. MI.	23. MEAN ANNUAL RUNOFF		3.50 INCHES		
	20. LENGTH	0.88 MILES	AV. WIDTH	0.35 MILES	24. MEAN ANNUAL RUNOFF		57.86 AC.-FT.	
	21. MAX. ELEV.		MIN. ELEV.		25. ANNUAL TEMP: MEAN 64°F RANGE 44°F - 84°F		1058	
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.
	12-69	-	-			6.92	82.68	1.43
	10-76	6.83	6.83			7.82	68.68	1.19
	12-69	-	-			4.04	29.23	
	10-76	6.83	6.83			3.36	24.73	
	12-69	-	-			-	53.45	
	10-76	6.83	6.83			-	43.95	
	12-69	-	-			-	53.45	
	10-76	6.83	6.83			-	43.95	
	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	
	10-76	14.00	2.05	6.83	14.00	2.05	6.83	
	10-76	4.50	0.66	2.20	4.50	0.66	2.20	
10-76	9.5	1.39	4.64	9.5	1.39	4.64		
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	
10-76	-	12286.84	12286.84	2.48	16.93	-	-	
10-76	97.8	9883.59	9883.59	-	-	-	-	
10-76	50.6	2424.55	2424.55	2.26	15.40	-	-	

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							
1064	0.80	1.07													
1068	1.69	5.94													
1072	2.34	13.96													
1075.8	3.36	24.73													
1080	5.42	43.00													
1083.9	7.82	68.68													
47. REMARKS AND REFERENCES															
<u>1/</u> Total Reservoir <u>2/</u> Sediment Pool only <u>3/</u> Detention Pool only Geology - Antlers Sand, Lower Cretaceous Age Land Resource Area - Cross Timbers															
48. AGENCY MAKING SURVEY				49. AGENCY SUPPLYING DATA				50. DATE							
				Soil Conservation Service				4-77							