

RESERVOIR SEDIMENT  
DATA SUMMARY

Lake Daniel

SCS-34 Rev. 6-66

NAME OF RESERVOIR

U. S. DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE

53-45

DATA SHEET NO.

DAM	1. OWNER <b>City of Breckenridge</b>			2. STREAM <b>Gonzales Creek</b>		3. STATE <b>Texas</b>		
	4. SEC. <b>TWP.</b>		RANGE	5. NEAREST P.O. <b>Breckenridge</b>		6. COUNTY <b>Stephens</b>		
	7. LAT. <b>32°39'00"</b>			LONG. <b>98°52'10"</b>		8. TOP OF DAM ELEVATION <b>1293</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						9-48	
	b. MULTIPLE USE							
	c. POWER						16. DATE NORMAL OPER. BEGAN	
	d. WATER SUPPLY		<b>1278.0</b>	<b>924</b>	<b>10,731</b>	<b>10,731</b>		
	e. IRRIGATION						6-49	
	f. CONSERVATION							
	g. INACTIVE							
17. LENGTH OF RESERVOIR <b>4.52</b>				MILES		AV. WIDTH OF RESERVOIR <b>0.44</b> MILES		
WATERSHED	18. TOTAL DRAINAGE AREA <b>115</b>			SQ. MI.		22. MEAN ANNUAL PRECIPITATION <b>25.16 (42)</b> INCHES		
	19. NET SEDIMENT CONTRIBUTING AREA <b>113</b>			SQ. MI.		23. MEAN ANNUAL RUNOFF <b>2.15</b> INCHES		
	20. LENGTH <b>12.0 2/</b>		MILES	AV. WIDTH <b>9.58</b>		MILES		
	21. MAX. ELEV. <b>1650</b>		MIN. ELEV. <b>1250</b>	24. MEAN ANNUAL RUNOFF <b>13,186</b>		AC.-F.T.		
	25. ANNUAL TEMP: MEAN <b>65° F</b>				RANGE <b>44° F - 84° 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.
	<b>6-49</b>	<b>-</b>	<b>-</b>	<b>Range (D)</b>	<b>17 Ranges</b>	<b>924</b>	<b>10731</b>	<b>0.81</b>
	<b>11-70</b>	<b>21.4</b>	<b>21.4</b>			<b>924</b>	<b>9515</b>	<b>0.72</b>
	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	
	<b>11-70</b>	<b>1216</b>	<b>56.8</b>	<b>0.49</b>	<b>1216</b>	<b>56.8</b>	<b>0.49</b>	
	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	
<b>11-70</b>	<b>48 (8)</b>	<b>512</b>	<b>512</b>	<b>0.53</b>	<b>11.3</b>	<b>-</b>	<b>-</b>	

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 Table 3)								

47. REMARKS AND REFERENCES

1/ Service spillway crest elev. 1278; emergency spillway crest elev. 1284.5.

2/ Reservoir composed of two principal arms. Lengths of each arm are as follows: Gonzales Creek arm = 2.57 miles  
Big Branch arm = 1.95 miles

48. AGENCY MAKING SURVEY      Soil Conservation Service-Texas  
49. AGENCY SUPPLYING DATA      Sedimentation Survey Party

50. DATE      3-71

TABLE 3

AREA AND CAPACITY DATA  
LAKE DANIEL  
1970 Survey

ELEVATION	:	AREA	:	CAPACITY	:	CAPACITY
	:	Acres	:	Acre-Feet	:	Gallons
1250.0		0.9		2		651,700
1254.0		7		19		6,191,150
1257.0		15		40		13,034,000
1258.0		33		101		32,910,850
1259.0		44		120		39,102,000
1260.0		67		290		94,496,500
1261.0		105		450		146,632,500
1262.0		241		662		215,712,700
1263.0		270		900		293,265,000
1264.0		292		1186		386,458,100
1265.0		318		1506		490,730,100
1266.0		344		1860		606,081,100
1267.0		383		2247		732,184,950
1268.0		420		2677		872,300,450
1269.0		463		3137		1,022,191,450
1270.0		511		3609		1,175,992,650
1271.0		559		4142		1,349,670,700
1272.0		612		4728		1,540,618,800
1273.0		668		5400		1,759,590,000
1274.0		727		6139		2,000,393,150
1275.0		779		6905		2,249,994,250
1276.0		829		7730		2,518,820,500
1277.0		878		8617		2,807,849,450
1278.0		924		9515		3,100,462,750
1284.5		1578		17827		5,808,927,950