

RESERVOIR SEDIMENT
DATA SUMMARY

SCS-34 Rev. 6-66

Dutchman Creek Watershed Site No. 10

NAME OF RESERVOIR

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

6 - 17

DATA SHEET NO.

OWNER	1. OWNER Clyde H. Bogar			2. STREAM Sugar Creek			3. STATE North Carolina							
	4. SEC. TWP. RANGE			5. NEAREST P.O. Mocksville			6. COUNTY Davie							
	7. LAT. 35° 59' 49" LONG. 80° 30' 34"			8. TOP OF DAM ELEVATION 725			9. SPILLWAY CREST ELEV. 721							
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		721		145		1007		1156		11-3-72			
	b. MULTIPLE USE										16. DATE NORMAL OPER. BEGAN			
	c. POWER										11-3-72			
	d. WATER SUPPLY													
	e. IRRIGATION													
	f. CONSERVATION													
	g. INACTIVE		707		37		149		1/					
WATERSHED	17. LENGTH OF RESERVOIR				1.8 MILES		AV. WIDTH OF RESERVOIR				0.13 MILES			
	18. TOTAL DRAINAGE AREA				5.04 SQ. MI.		22. MEAN ANNUAL PRECIPITATION				44.76 INCHES			
	19. NET SEDIMENT CONTRIBUTING AREA				4.81 SQ. MI.		23. MEAN ANNUAL RUNOFF				18.2 INCHES			
	20. LENGTH		3.6 MILES		AV. WIDTH		1.4 MILES		24. MEAN ANNUAL RUNOFF				4902 AC.-FT.	
	21. MAX. ELEV.		903		MIN. ELEV.		697		25. ANNUAL TEMP.: MEAN				59°F RANGE 1°F - 99°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.				
	11-3-72		0	0	Range (D)	65	145	1156		0.236				
	5-2-80		7.5	7.5	Range (D)	62	145	2/ 1141		0.233				
	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					
	5-2-80		44.76		4902*	4902	36765	4902*	36765					
	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						
	5-2-80		3/ 15.16	2.02	0.42	15.16	2.02	0.420						
	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							
5-2-80		4/ 46.73	427	427	0.175	1.31	308	315						

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION														
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION														
5-2-80	5/														
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														
5-2-80	33	15	26	10	7	4	5	0	0	0					
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							
5/															
47. REMARKS AND REFERENCES <u>1/</u> Design life 100 years. <u>2/</u> Volume for pool was computed by Dobson Prismoidal Equation. <u>3/</u> Volume of sediment accumulation in both sediment and flood pools. <u>4/</u> Weighted average. Both aerated and submerged sediment. <u>5/</u> Method of computation prevented determination of this information. Land use in site watershed: 25% cropland, 39% woodland, 19% pasture, 3% idle, 14% miscellaneous. Geology: Diorites and gabbros, which are massive to weakly foliated, gray to dark greenish gray rocks, composed mostly of plagioclase, hornblende and pyroxene. * Assumed															
48. AGENCY MAKING SURVEY					USDA, Soil Conservation Service										
49. AGENCY SUPPLYING DATA					USDA, Soil Conservation Service										
							50. DATE		Dec 24, 1980						