

RESERVOIR SEDIMENT
DATA SUMMARY
SCS-34 Rev. 6-66

Bear Creek Watershed, Site No. 13
NAME OF RESERVOIR

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

6 - 16

DATA SHEET NO.

DAM	1. OWNER Roland Coker				2. STREAM Trib. of Bear Creek		3. STATE North Carolina					
	4. SEC. TWP. RANGE		5. NEAREST P.O. Goldsboro		6. COUNTY Wayne							
	7. LAT. 35° 22' 06" LONG. 77° 49' 23"				8. TOP OF DAM ELEVATION 99.5		9. SPILLWAY CREST ELEV. 97.5					
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		97.5		62		135		248		Dec 19, 1966	
	b. MULTIPLE USE											
	c. POWER											
	d. WATER SUPPLY											
	e. IRRIGATION										16. DATE NORMAL OPER. BEGAN	
	f. CONSERVATION											
	g. INACTIVE		1/ 89.5		16		113		1/		Dec 19, 1966	
17. LENGTH OF RESERVOIR 1.05 MILES					AV. WIDTH OF RESERVOIR 0.10 MILES							
WATERSHED	18. TOTAL DRAINAGE AREA 1.85 SQ. MI.				22. MEAN ANNUAL PRECIPITATION 49.85 (98yr) INCHES							
	19. NET SEDIMENT CONTRIBUTING AREA 1.75 SQ. MI.				23. MEAN ANNUAL RUNOFF 18.0 INCHES							
	20. LENGTH 2.6 MILES		AV. WIDTH 0.7 MILES		24. MEAN ANNUAL RUNOFF 1776 AC. FT.							
	21. MAX. ELEV. 124		MIN. ELEV. 82		25. ANNUAL TEMP: MEAN 61.6° RANGE 14° - 98° F							
	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.			
Dec 19, 1966		0	0	-	-	62	248	0.140				
Sep 20, 1979		12.8	12.8	Range (D)	26	62	2/ 243	0.137				
SURVEY DATA	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			
	Sep 20, 1979		49.85		1776*			22,733	1776*	23,733		
	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				
Sep 20, 1979		3/ 5.03	0.39	0.22	5.03	0.39	0.22					
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					
Sep 20, 1979		4/ 31.24 (10)	152	152	0.16	2	108	111				

25. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION														
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION														
Sep 20, 1979	<u>5/</u>														
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														
Sep 20, 1979	25	20	31	22	2	0	0	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							
<u>5/</u>															
47. REMARKS AND REFERENCES <u>1/</u> Design life 50 years. <u>2/</u> Volume for the pool computed by the Dobson Prismoidal Equation. <u>3/</u> Total period volume of accumulated sediment in both sediment and flood pools. <u>4/</u> Weighted average weight. All samples submerged sediment. <u>5/</u> Method of computation prevented the determination of this information. Land Use: 680 ac woodland, 403 ac cultivated, 14 ac pasture, 54 ac housesites, 14 ac paved roads, 3 ac dirt roads, 16 ac water. Geology: Coastal Plain, Black Creek Formation. Black to gray interbedded sands, clays and marls. Sediment pool water elevation at time of survey was 89.5. * Assumed															
48. AGENCY MAKING SURVEY				USDA, Soil Conservation Service											
49. AGENCY SUPPLYING DATA				USDA, Soil Conservation Service											
						50. DATE		June 16, 1980							