

RESERVOIR SEDIMENT  
DATA SUMMARY

U. S. DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE

SCS-34 Rev. 6-66

Twelve Mile Creek, Site No. 12

NAME OF RESERVOIR

8 - 8

DATA SHEET NO.

DAM	1. OWNER <b>Tony Smith</b>			2. STREAM <b>Rices Creek</b>		3. STATE <b>South Carolina</b>			
	4. SEC. <b>TWP.</b>		RANGE	5. NEAREST P. O. <b>Easley 2.5NW</b>		6. COUNTY <b>Pickens</b>			
	7. LAT. <b>34° 52' 14"</b>			LONG. <b>82° 37' 49"</b>		8. TOP OF DAM ELEVATION <b>1039.5'</b>		9. SPILLWAY CREST ELEV. <b>1035.5'</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	<b>1035.5'</b>	<b>21.3</b>	<b>173.9</b>	<b>215.3</b>		<b>11/1954</b>		
	b. MULTIPLE USE								
	c. POWER								
	d. WATER SUPPLY								
	e. IRRIGATION						16. DATE NORMAL OPER. BEGAN		
	f. CONSERVATION								
g. INACTIVE <b>1/</b>	<b>1023.0'</b>	<b>7.9</b>	<b>41.4</b>	<b>41.4</b>		<b>12/54</b>			
WATERSHED	17. LENGTH OF RESERVOIR <b>0.76</b>			MILES	AV. WIDTH OF RESERVOIR <b>0.04</b>		MILES		
	18. TOTAL DRAINAGE AREA <b>0.72</b>			SQ. MI.	22. MEAN ANNUAL PRECIPITATION ( <b>25 yr</b> ) <b>49</b> INCHES				
	19. NET SEDIMENT CONTRIBUTING AREA <b>0.69</b>			SQ. MI.	23. MEAN ANNUAL RUNOFF ( <b>30 yr</b> ) <b>25</b> INCHES				
	20. LENGTH <b>1.4</b>		MILES	AV. WIDTH <b>0.51</b>		MILES	24. MEAN ANNUAL RUNOFF <b>959.9</b>		AC.-FT.
	21. MAX. ELEV. <b>1380.0'</b>		MIN. ELEV. <b>1009.0'</b>		25. ANNUAL TEMP: MEAN <b>61°F</b> RANGE <b>10°F - 98°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.	
	November, 1954	-	-	Range - Contour	10"(R)"	7.9 (21.3)	41.4 (215.3)	(.224)	
	December, 1974	20.08	20.08	"(D)"	2.0"(CI)"	6.9 (21.3)	36.6 (205.4)	(.214)	
	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		
	December, 1974	49"	957	-	20,250	957	20,250		
	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		
	December, 1974	4.8 (9.9)	.24 (.49)	.35 (.71)	4.8 (9.9)	.24 (.49)	.35 (.71)		
	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			
December, 1974	Sed. P. 78 Det. P. 82 (80.6)	564 (1194)	564 (1194)	.6 (.23)	11.6 (4.6)	(627) (627)			

26. DATE OF SURVEY 1335.5'-1009.0	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION													
	35-33	33-31	31-29	29-27	27-25	25-23	23-21	21-19	19-17	17-15	15-13			
PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION														
December, 1974	26.8	3.0	1.4	1.8	4.4	13.6	15.6	6.7	6.2	5.6	5.9	9.0		
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
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						
Original Capacity-1954						1029	13.4	97.6						
1035.5	21.3	215.3	1019	4.5	17.0	1027	11.4	73.0						
1033	17.7	166.6	1017	3.1	9.5	1025	9.3	52.6						
1031	15.6	133.4	1013	0.9	1.4	1023	6.9	36.6						
1029	13.4	104.4	1009	0.0	0.0	1021	5.6	24.2						
1027	11.5	79.6	1974 Capacity			1019	4.3	14.4						
1025	9.4	58.7	1035.5	21.3	205.4	1017	2.8	7.5						
1023	7.9	41.4	1033	17.4	159.4	1013	0.6	0.5						
1021	6.1	27.5	1031	15.5	126.5	1009	0.0	0.0						
47. REMARKS AND REFERENCES														
1/ Sediment Pool														
2/ Non-contributing area negligible														
3/ Figures in parentheses include totals for both pools														
Land use: Cultivated 3%, Forest 85%, Pasture-Idle Land 11%, Other 1%														
Land Resource Area: Southern Piedmont														
Soils: Cecil, Pacolet (K=.32)														
Geology: hornblende gneiss, medium to coarse crystalline														
48. AGENCY MAKING SURVEY River Basin-Watershed Planning Staff, SCS, Columbia, S.C.														
49. AGENCY SUPPLYING DATA Soil Conservation Service so. DATE 2/75														

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Twelve Mile Creek, Site No. 12  
NAME OF RESERVOIR

U. S. DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE

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DATA SHEET NO.

1. OWNER Tony Smith	2. STREAM Rices Creek		3. STATE South Carolina					
4. SEC. TWP. RANGE	5. NEAREST P.O. Easley, 2.5 NW		6. COUNTY Pickens					
7. LAT. 34° 52' 14" LONG. 82° 37' 49"	8. TOP OF DAM ELEVATION 1039.5'		9. SPILLWAY CREST ELEV. 1035.5'					
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	1035.5'	21.3	173.9	215.3	11/1954			
b. MULTIPLE USE								
c. POWER								
d. WATER SUPPLY					16. DATE NORMAL OPER. BEGAN			
e. IRRIGATION					12/1954			
f. CONSERVATION								
g. INACTIVE 1/	1023.0'	7.9	41.4	41.4				
17. LENGTH OF RESERVOIR	0.76	MILES	AV. WIDTH OF RESERVOIR	0.04	MILES			
18. TOTAL DRAINAGE AREA	0.72	SQ. MI.	22. MEAN ANNUAL PRECIPITATION (30 yr)	50	INCHES			
19. NET SEDIMENT CONTRIBUTING AREA 2/	0.69	SQ. MI.	23. MEAN ANNUAL RUNOFF (35 yr)	26	INCHES			
20. LENGTH	1.4	MILES	AV. WIDTH	0.51	MILES			
21. MAX. ELEV.	1380.0'	MIN. ELEV.	1009.0'	25. ANNUAL TEMP. MEAN	61°F RANGE 10°F-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.	
Nov. 1954	-	-	Range-	10 ranges	7.9 (21.3)	41.4(215.3)	.041 (.216)	
Dec. 1974	20.08	20.08	Contour(D)	2.0' CI	6.9 (21.3)	36.6(205.4)	.037 (.206)	
Oct. 1979	4.75	24.83			6.3 (21.2)	30.3(197.9)	.030 (.198)	
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
Dec. 1974	49"	960	-	19,277	960	19,277	960	19,277
Oct. 1979	57" 4/	998	-	4,741	967	24,018	967	24,018
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
Dec. 1974	4.8 (9.9)	0.23(0.49)	0.34 (0.72)	4.8( 9.9)	0.24 (0.49)	0.34 (0.72)	0.24 (0.49)	0.34 (0.72)
Oct. 1979	6.3 (7.5) 5/	1.33(1.58)	1.87 (2.29)	11.1(17.4)	0.45 (0.70)	0.63 (1.02)	0.45 (0.70)	0.63 (1.02)
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. TOT. TO DATE	a. PERIOD	b. TOT. TO DATE
Dec. 1974	Sed.P. 78 Det.P. 82	574	574	.6	11.6	(627)	(627)	(627)
Oct. 1979	Sed.P. 56	1602	770	1.1	26.8	(852)	(675)	(675)

CREST 2.5 4.5 6.5 8.5 10.5 12.5 14.5 16.5 18.5 20.5 22.5

26. DATE OF SURVEY	43. to DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION to											
	2.5	4.5	6.5	8.5	10.5	12.5	14.5	16.5	18.5	20.5	22.5	26.5
PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION												
Dec. 1974	26.8	3.0	1.4	1.8	4.4	13.6	15.6	6.7	6.2	5.6	5.9	9.0
Oct. 1979	3.5	1.7	2.3	2.3	10.3	15.5	16.7	10.8	8.7	10.3	10.3	7.6

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
Original Capacity - 1954			1019	4.5	17.0	1029	13.3	88.3
1035.5	21.3	215.3	1017	3.1	9.5	1027	11.1	63.9
1033	17.7	166.6	1013	0.9	1.4	1025	8.3	44.8
1031	15.6	133.4	1009	0.0	0.0	1023	6.3	30.2
1029	13.4	104.4				1021	4.9	19.2
1027	11.5	79.6	1979 Capacity			1019	3.7	10.6
1025	9.4	58.7	1035.5	21.2	197.9	1017	2.3	4.6
1023	7.9	41.4	1033	17.5	149.8	1013	0.1	0.1
1021	6.1	27.5	1031	15.4	116.9	1012	0.0	0.0

47. REMARKS AND REFERENCES

- 1/ Sediment pool.
- 2/ Non-contributing area negligible.
- 3/ Figures in parentheses include totals for both pools.
- 4/ Significant increase in last ten years.
- 5/ Home sites and road(s) have contributed significantly since 1974 survey.

Land Use: forest-82%; pasture-idle land-14%; other-4%.  
 Land Resource Area: Southern Piedmont.  
 Soils: Cecil, Pacolet (k = .32).  
 Geology: hornblende gneiss, medium to coarse crystalline.

48. AGENCY MAKING SURVEY River Basin-Watershed Staff, SCS, Columbia, SC  
 49. AGENCY SUPPLYING DATA Soil Conservation Service  
 50. DATE December 1979