

RESERVOIR SEDIMENT  
DATA SUMMARY

SCS-34 Rev. 6-66

Town Creek Watershed, Site 22

NAME OF RESERVOIR

Sheet 1 of 2  
U. S. DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE

18 - 18

DATA SHEET NO.

L.I.M.	1. OWNER W/S Conservancy Dist.		2. STREAM Trib. of Town Cr.		3. STATE Alabama			
	4. SEC. 26 TWP. 7S RANGE 9W		5. NEAREST P.O. Mount Hope, AL		6. COUNTY Lawrence			
	7. LAT. 34° 25' " LONG. 87° 26' "		8. TOP OF DAM ELEVATION 686.6		9. SPILLWAY CREST ELEV. 684.6			
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	684.6	42	309	346	5/8/68		
	b. MULTIPLE USE							
	c. POWER							
	d. WATER SUPPLY					16. DATE NORMAL OPER. BEGAN		
	e. IRRIGATION							
	f. CONSERVATION					5/8/68		
g. INACTIVE	671.1	10	37	37				
WATERSHED	17. LENGTH OF RESERVOIR 0.38 MILES		AV. WIDTH OF RESERVOIR 0.17 MILES					
	18. TOTAL DRAINAGE AREA (689 ac.)		1.07 SQ. MI.	22. MEAN ANNUAL PRECIPITATION 1/ 50.4 INCHES				
	19. NET SEDIMENT CONTRIBUTING AREA		1.00 SQ. MI.	23. MEAN ANNUAL RUNOFF 18.64 INCHES				
	20. LENGTH 1.17 MILES		AV. WIDTH 0.91 MILES	24. MEAN ANNUAL RUNOFF 1064 AC.-F.T.				
	21. MAX. ELEV. 1040		MIN. ELEV. 662	25. ANNUAL TEMP: MEAN 61.6° RANGE (102) - (-10)° 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.
	Original Capacity 5/68	-	-	Range-Contour (D)	2' CI	3/ 42.49 4/ 9.84	3/ 345.53 4/ 36.90	3/ 0.325
	5/70	2.0	2.0	Range-Contour (D)	2' CI	3/ 42.49 4/ 9.84	3/ 344.36 4/ 35.73	3/ 0.324
	10/80	10.4	12.4	Range-Contour (D)	2' CI	3/ 40.7 4/ 9.84	3/ 330.46 4/ 33.99	3/ 0.311
	26. DATE OF SURVEY	34. PERIOD ANNUAL PRECIPITATION	35. 6/ PERIOD WATER INFLOW, ACRE-FEET		6/	36. WATER INFL. TO DATE, AC.-FT.		
			a. MEAN ANNUAL	b. MAX. ANNUAL	c. PERIOD TOTAL	a. MEAN ANNUAL	b. TOTAL TO DATE	
	5/70	56.18"	5/ 976	5/ 976	5/ 1952	5/ 976	5/ 1952	
	10/80	52 "	903	903	11292	903	11287	
	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	
5/70	3/ 1.17	0.58	0.58	1.17	0.58	0.58		
10/80	3/13.9	1.34	1.26	15.07	1.22	1.15		
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	
5/70	60*	3/ 761	761	0.17	0.34	564	581	
10/80	60*	1739	1581	.35	4.36	782	1283.8	

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION											
	24-22	22-20	20-18	18-16	16-14	14-12	12-10	10- 8	8- 6	6- 4	4- 2	2-CR
PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION												
1970	0	14	37	20	25	4	0	0	0	0	0	0
1980	1	4	3	4	-4	5	0	22	25	5	19	8

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														
Not available - area-capacity data developed by contour method.														

45. RANGE IN RESERVOIR OPERATION							
WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.	WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.

46. 1968 Capacity ELEVATION-AREA-CAPACITY DATA								
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY
664.0	0.46	0.30	680.0	26.57	192.14	671.1	9.84	35.73
666.0	2.85	3.27	682.0	32.50	251.11	672.0	12.06	45.56
668.0	6.10	12.02	684.0	37.89	321.43	674.0	14.99	72.56
670.0	8.68	26.72	684.6	42.49	345.53	676.0	17.16	104.69
671.0	9.84	36.90	1970 Capacity			678.0	21.36	143.13
672.0	12.06	46.74	664.0	0.21	0.14	680.0	26.57	190.97
674.0	14.99	73.74	666.0	2.82	2.67	682.0	32.50	249.94
676.0	17.16	105.86	668.0	5.88	11.18	684.0	37.89	320.26
678.0	21.36	144.31	670.0	8.61	25.59	684.6	42.49	344.36

47. REMARKS AND REFERENCES (Continued on second sheet)

1/ Northern Valley Division.  
 2/ Moulton, AL; 10 yrs. record.  
 3/ Total reservoir below spillway crest (684.4).  
 4/ Sediment pool only.  
 5/ Water year 1969 only.  
 6/ Big Nance Creek at Courtland 3-5865.  
 \* Assumed

48. AGENCY MAKING SURVEY USDA-SCS Auburn, AL 36830  
 49. AGENCY SUPPLYING DATA USDA-SCS  
 50. DATE \_\_\_\_\_



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. 1980 Capacity			ELEVATION-AREA-CAPACITY DATA					
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY
664.0	0.16	0.11	680.0	26.3	181.93			
666.0	2.7	2.46	682.0	31.9	240.07			
668.0	5.86	10.82	684.0	35.6	307.57			
670.0	8.33	24.95	684.6	40.7	330.46			
671.0	9.84	33.99						
672.0	11.28	44.49						
674.0	14.99	70.68						
676.0	17.1	102.76						
678.0	18.0	137.87						

47. REMARKS AND REFERENCES

48. AGENCY MAKING SURVEY  
 49. AGENCY SUPPLYING DATA Soil Conservation Service  
 50. DATE 1980