

RESERVOIR SEDIMENT
DATA SUMMARY

Upper Ollis Creek Reservoir

NAME OF RESERVOIR

20-28a

DATA SHEET NO.

DAM	1. OWNER City of LaFollette		2. STREAM Ollis Creek		3. STATE Tennessee			
	4. SEC. TWP. RANGE		5. NEAREST POST OFF. LaFollette		6. COUNTY Campbell			
	7. LAT. 36° 22' 12" LONG. 84° 10' 31"		8. TOP OF DAM ELEVATION 1371		9. SPILLWAY CREST ELEV. 1360			
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					March 1964		
	b. MULTIPLE USE							
	c. POWER							
	d. WATER SUPPLY	1360	35	633	661	16. DATE NORMAL OPER. BEGAN		
	e. IRRIGATION							
	f. CONSERVATION					April 1964		
	g. INACTIVE	1330	6	28	28			
WATERSHED	17. LENGTH OF RESERVOIR 1/ 0.9 MILES		AV. WIDTH OF RESERVOIR 0.06 MILES					
	18. TOTAL DRAINAGE AREA 10.8 SQ. MI.		22. MEAN ANNUAL PRECIPITATION 51.0 INCHES					
	19. NET SEDIMENT CONTRIBUTING AREA 10.75 SQ. MI.		23. MEAN ANNUAL RUNOFF 22.64 INCHES					
	20. LENGTH 4.2 MILES		AV. WIDTH 0.4 MILES		24. MEAN ANNUAL RUNOFF 13,040 AC.-FT.			
	21. MAX. ELEV. 2800		MIN. ELEV. 1316		25. ANNUAL TEMP: MEAN 58° RANGE 4° - 97°			
2/ 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.
	4- 1-64	0	0	Range	46	35	661	.051
	10- 6-70	6.5	6.5	Range	46	3/	649	.050
	9-15-71	0.9	7.4	Range	46	3/	649	.050
	10-27-72	1.1	8.5	Range	46	3/	638	.049
	10-12-73	1.0	9.5	Range	46	3/	625	.048
	10-17-74	1.0	10.5	Range	45	3/	619	.047
	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	
	10- 6-70	48.9						
	9-15-71	47.3						
	10-27-72	65.3						
	10-12-73	62.0						
	10-17-74	67.6						
	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		
10- 6-70	11.6	1.78	0.166	11.6	1.78	0.166		
9-15-71	0.5	0.56	0.052	12.1	1.64	0.153		
10-27-72	10.7	9.73	0.905	22.8	2.68	0.249		
10-12-73	13.1	13.1	1.219	35.9	3.78	0.352		
10-17-74	6.5	6.5	0.605	42.4	4.04	0.376		
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. TOTAL TO DATE	b. PERIOD	a. AV. AN.	b. TOT. TO DATE	a. PERIOD	b. TOT. TO DATE	
10- 6-70	62*	224	224	.269	1.75			
9-15-71	62*	207	70	.248	1.83			
10-27-72	62*	336	1,222	.405	3.45			
10-12-73	62*	475	1,646	.572	5.43			
10-17-74	62*	508	817	.611	6.41			

*Assumed

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION										
	44-40	40-35	35-30	30-25	25-20	20-15	15-10	10-5	5-0		
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION										
10-6-70	0	0	5	23	28	18	11	11	4		
9-15-71	0	0	6	22	26	18	11	12	5		
10-27-72	4	5	8	19	23	14	9	12	5		
10-12-73	3	6	10	18	22	17	9	10	6		
10-17-74	3	5	9	15	21	17	11	12	7		

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														
10-6-70	0	0	0	4	13	19	24	16	18	6					
9-15-71	0	0	0	4	15	16	23	16	19	7					
10-27-72	4	3	2	11	20	13	15	12	15	5					
10-12-73	3	3	2	15	25	12	13	12	11	4					
10-17-74	2	3	2	17	27	10	11	12	12	4					

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	Capacity	Capacity	CAPACITY	Capacity	Capacity	CAPACITY
	3/	(1964)	(1970)	(1971)	(1972)	(1973)	(1974)	
1316	0	0	0	0	0	0	0	
1325	2	8	8	8	5	5	4	
1330	6	28	28	28	24	22	21	
1335	11	71	68	68	62	58	57	
1340	17	141	134	134	127	120	118	
1345	22	238	229	229	221	211	208	
1350	26	357	347	347	338	327	322	
1360	35	661	649	649	638	625	619	

47. REMARKS AND REFERENCES

1/ Ollis Creek - 0.7 mile, Laurel Creek - 0.2 mile

2/ Assumed date - data obtained from probings taken in 1970

3/ Areas not measured or calculated after initial survey.

48. AGENCY MAKING SURVEY Tennessee Valley Authority

49. AGENCY SUPPLYING DATA Data Services Branch

50. DATE November 1, 1976

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DATA SUMMARY

Upper Ollis Creek Reservoir
NAME OF RESERVOIR

20-28a cont'd.
DATA SHEET NO.

DAM	1. OWNER City of LaFollette			2. STREAM Ollis Creek			3. STATE Tennessee									
	4. SEC. TWP. RANGE			5. NEAREST 'POST' OFF. LaFollette			6. COUNTY Campbell									
	7. LAT. 36° 22' 12" LONG. 84° 10' 31"			8. TOP OF DAM ELEVATION 1371			9. SPILLWAY CREST ELEV. 1360									
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	a. FLOOD CONTROL										March 1964					
	b. MULTIPLE USE										16. DATE NORMAL OPER. BEGAN					
	c. POWER										April 1964					
	d. WATER SUPPLY		1360		35		633		661							
	e. IRRIGATION															
	f. CONSERVATION															
g. INACTIVE		1330		6		28		28								
17. LENGTH OF RESERVOIR 1/			0.9 MILES			AV. WIDTH OF RESERVOIR			0.06 MILES							
WATERSHED	18. TOTAL DRAINAGE AREA				10.8 SQ. MI.				22. MEAN ANNUAL PRECIPITATION				51.0 INCHES			
	19. NET SEDIMENT CONTRIBUTING AREA				10.75 SQ. MI.				23. MEAN ANNUAL RUNOFF				22.64 INCHES			
	20. LENGTH 4.2 MILES				AV. WIDTH 0.4 MILES				24. MEAN ANNUAL RUNOFF				13,040 AC.-FT.			
	21. MAX. ELEV. 2800				MIN. ELEV. 1316				25. ANNUAL TEMP: MEAN 580				RANGE 40 - 970			
	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.	
4-1-64		0		0		Range		46		35		661		.051		
10-20-75		1.0		11.5		Range		46		3/		615		.047		
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				
10-20-75		64.3														
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				
10-20-75		3.9		3.9		0.363		46.3		4.03		0.375				
26. DATE OF SURVEY		39. AV. DRY WGT. LBS. PER CU. FT.		40. SED. DEP. TONS PERSQ. MI.-YR.		41. STORAGE LOSS PCT.		42. SED. INFLOW PPM								
		a. TOTAL TO DATE		b. PERIOD		a. AV. AN.		b. TOT. TO DATE		a. PERIOD		b. TOT. TO DATE				
10-20-75		62*		506		490		.610		7.00						

*Assumed

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION										
	44-40	40-35	35-30	30-25	25-20	20-15	15-10	10-5	5-0		
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION										
10-20-75	2	6	10	14	22	18	10	11	7		

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														
10-20-75	3	3	3	17	28	9	11	11	12	3					

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	Capacity	Capacity	CAPACITY	ELEVATION	AREA	CAPACITY
	3/	(1964)	(1975)					
1316	0	0	0					
1325	2	8	4					
1330	6	28	20					
1335	11	71	56					
1340	17	141	116					
1345	22	238	205					
1350	26	357	319					
1360	35	661	615					

47. REMARKS AND REFERENCES

1/ Ollis Creek - 0.7 mile, Laurel Creek - 0.2 mile

2/ Assumed date - data obtained from probings taken in 1970

3/ Area not measured or calculated after initial survey.