

RESERVOIR SEDIMENT
DATA SUMMARY

ROUGH RIVER RESERVOIR

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

SCS-34 Rev. 6-66

NAME OF RESERVOIR

18-12

DATA SHEET NO.

DAM	1. OWNER Corps of Engineers, USA			2. STREAM Rough River		3. STATE Kentucky		
	4. SEC. TWP. RANGE		5. NEAREST P.O. Falls of Rough			6. Breckinridge-Grayson		
	7. LAT. 37° 37' 12" LONG. 86° 29' 58"			8. TOP OF DAM ELEVATION 554.0		9. SPILLWAY CREST ELEV. 524.0		
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		524	10,523 ^{2/}	214,310	332,940 ^{2/}	1 Oct. 1959	
	b. MULTIPLE USE							
	c. Seasonal		495	5,002 ^{2/}	89,190	118,640 ^{2/}		
	d. WATER SUPPLY						16. DATE NORMAL OPER. BEGAN	
	e. IRRIGATION						8 Dec. 1960	
	f. Permanent		470 ^{1/}	2,241 ^{2/}	29,450	29,450 ^{2/}		
	g. INACTIVE							
WATERSHED	17. LENGTH OF RESERVOIR 70^{2/} MILES				AV. WIDTH OF RESERVOIR .235 MILES			
	18. TOTAL DRAINAGE AREA 454 SQ. MI.				22. MEAN ANNUAL PRECIPITATION (25-71 yr) 45.52 in.			
	19. NET SEDIMENT CONTRIBUTING AREA 437.56 SQ. MI.				23. MEAN ANNUAL RUNOFF 15.88^{4/} INCHES			
	20. LENGTH 29 MILES		AV. WIDTH 15.7 MILES		24. MEAN ANNUAL RUNOFF 384,480 AC.-FT.			
	21. MAX. ELEV. 1100		MIN. ELEV. 424		25. ANNUAL TEMP: MEAN 56° RANGE -27° to 113°			
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.
	1 Dec. 1959			Contour	10 feet	10,523	332,940	0.866
	5 July 1969	9.75	9.75	Range (D)	107	10,523	329,670	0.857
	26. DATE OF SURVEY	34. PERIOD ANNUAL PRECIPITATION		35. PERIOD WATER INFLOW, ACRE-FEET		36. WATER INFL. TO DATE, AC.-FT.		
	5 July 1969	45.52		a. MEAN ANNUAL	b. MAX. ANNUAL	c. PERIOD TOTAL	a. MEAN ANNUAL	b. TOTAL TO DATE
		384,480	563,960	3,748,680	384,480	3,748,680		
	26. DATE OF SURVEY	37. PERIOD CAPACITY LOSS, ACRE-FEET			38. TOTAL SED. DEPOSITS TO DATE, ACRE-FEET			
	5 July 1969	a. PERIOD TOTAL	b. AV. ANNUAL	c. PER SQ. MI.-YEAR	a. TOTAL TO DATE	b. AV. ANNUAL	c. PER SQ. MI.-YEAR	
		3270	335	0.765	3270	335	0.765	
	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	
5 July 1969	70.27 (8)	a. PERIOD	b. TOTAL TO DATE	a. AV. ANN.	b. TOT. TO DATE	a. PERIOD	b. TOT. TO DATE	
	1170	1170	1170	0.10	0.98	979	979	

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION												
	98-94	94-84	84-74	74-64	64-54	54-44	44-34	34-29	29-24	24-14	14-4	4-crest	
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION												
5 July 69	-0.50	1.13	17.16	26.67	35.28	20.92	3.62	-1.93	-0.58	-1.13	-0.63	0.00	

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 July 69	-2.33	23.38	38.52	19.45	55.38	7.55	5.17	2.78	0.00	0.00					

45. RANGE IN RESERVOIR OPERATION							
WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.	WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.
1961	511.07	460.04	442,181				
1962	498.31	464.96	473,644				
1963	492.75	464.92	281,291				
1964	513.04	464.59	340,066				
1965	490.86	463.30	374,344				
1966	497.83	462.01	326,128				
1967	514.07	464.99	371,958				
1968	504.48	464.82	413,728				
1969	495.8	465.06	322,068				

46. ELEVATION-AREA-CAPACITY DATA								
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY
ORIGINAL 1959			460	1,269	12,056	495	5,002	115,300
524	10,523	332,940	450	464	3,520	490	4,332	91,900
520	9,241	293,410	440	137	669	480	3,311	53,800
510	7,291	210,850	430	24	39	470	2,241	26,900
500	5,779	118,640	1969 CAPACITY			460	1,269	10,600
495	5,002	95,306	524	10,523	329,670	450	464	2,940
490	4,332	57,137	520	9,241	290,100	440	137	650
480	3,311	29,450	510	7,291	207,600	430	24	55
470	2,241	19,537	500	5,779	142,300			

47. REMARKS AND REFERENCES

- 1/ Raised from 465 to 470, 23 December 1969.
- 2/ Original values per 1969 sedimentation survey, due to new mapping.
- 3/ Rough River 45 miles; N. F. Rough River 25 miles.
- 4/ U.S.G.S. Water Resources Data for Kentucky.

48. AGENCY MAKING SURVEY Louisville District
 49. AGENCY SUPPLYING DATA Corps of Engineers, US Army
 Louisville, Kentucky

50. DATE May 1970