

RESERVOIR SEDIMENT
DATA SUMMARY

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Obion Creek FRS #24

16-32a

SCS-34 Rev. 6-66

NAME OF RESERVOIR

DATA SHEET NO.

Fancy Farm Quadrangle
Unnamed tributary

DAM	1. OWNER Aubrey Goatley		2. STREAM of little Creek		3. STATE Kentucky														
	4. SEC. TWP. RANGE		5. NEAREST P. O. Fancy Farm		6. COUNTY Hickman														
	7. LAT. 36° 46' 01" LONG 88° 49' 28"		8. TOP OF DAM ELEVATION 413.7		9. SPILLWAY CREST ELEV. 410.8														
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		410.8		14.3		42.2		72.55		Nov. 1960								
	b. MULTIPLE USE																		
	c. POWER																		
	d. WATER SUPPLY										16. DATE NORMAL OPER. BEGAN								
	e. IRRIGATION																		
	f. CONSERVATION										Nov. 1960								
g. INACTIVE ^{2/}		408.5		7.6		30.35		30.35											
17. LENGTH OF RESERVOIR		0.38 MILES		AV. WIDTH OF RESERVOIR		0.059 MILES													
18. TOTAL DRAINAGE AREA		0.37 SQ. MI.		22. MEAN ANNUAL PRECIPITATION		46.48 (10 1/2 yr) INCHES													
19. NET SEDIMENT CONTRIBUTING AREA		0.35 SQ. MI.		23. MEAN ANNUAL RUNOFF		17.5 1/2 INCHES													
20. LENGTH 0.80 MILES		AV. WIDTH 0.46 MILES		24. MEAN ANNUAL RUNOFF		345 AC.-FT.													
21. MAX. ELEV. 480		MIN. ELEV. 396		25. ANNUAL TEMP.: MEAN		59° RANGE Jan. 36°-July 78°													
WATERSHED	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. 1960		-		-		-		7 (CI)		7.6		72.55 ^{3/}		0.21				
	Nov. 2, 1965		5		5		Range-Contour (D)		7(R)-7(CI)		7.18		28.80 ^{2/}		0.083				
June 23, 1971		5.4		10.4		Range-Contour (D)		7(R)-7(CI)		6.94		26.55 ^{2/}		0.077					
SURVEY DATA	26. DATE OF SURVEY		34. PERIOD ANNUAL PRECIPITATION		35. PERIOD WATER INFLOW, ACRE-FEET			36. WATER INFL. TO DATE, AC.-FT.											
	Nov. 2, 1965		48.65																
	June 23, 1971		46.48																
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		
Nov. 2, 1965		1.55 ^{2/}			0.31			0.89			1.55 ^{2/}			0.31			0.89		
June 23, 1971		2.25 ^{2/}			0.42			1.20			3.80 ^{2/}			0.37			1.05		
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							
Nov. 2, 1965		80*		1543 ^{2/}		0.43		2.14											
June 23, 1971		80*		2074 ^{2/}		0.50		5.24											

*Assumed

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION														
	14-12	12-10	10-8	8-6	6-4	4-2	2-0								
June 23, 1971	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION														
	15	9	8	11	24	19	14								
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
June 23, 1971	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN REACH DESIGNATION														
	Seg 1	Seg 2	Seg 3	Seg 4	Seg 5	Seg 6	Seg 7								
	58	3	4	10	1	22	2								
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>Original Capacity</u>		1960	406		16.71	401		2.11							
397		0.01	407		21.47	402		3.52							
398		0.22	408		27.34	403		5.32							
399		0.83	408.5	7.6	30.35	404		7.46							
400		1.84	410.8	14.3	72.55	405		9.93							
401		3.27	<u>1971 Capacity</u>			406		13.11							
402		5.16	397		0.00	407		17.04							
403		7.42	398		0.04	408		21.70							
404		12.88	400		1.03	408.5	6.94	24.70							
405						410.8		37.88							
47. REMARKS AND REFERENCES															
1/ Average annual runoff from USGS Circular 52															
2/ Sediment pool only															
3/ Total reservoir below crest elevation (410.8')															
Land use in watershed: 3& cropland, 55% grassland, 40% woodland, and 2% misc.															
Geology: Jackson Purchase Physiographic Region - loess deposits of Pleistocene capping continental deposits of Pliocene and Pleistocene.															
48. AGENCY MAKING SURVEY River Basin-Watershed Planning Staff, Lexington, Kentucky															
49. AGENCY SUPPLYING DATA Soil Conservation Service															
50. DATE <u>Sept. 23, 1971</u>															