

RESERVOIR SEDIMENT
DATA SUMMARY

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Plum Creek No. 15

17-16b

SCS-34 Rev. 6-66

NAME OF RESERVOIR

DATA SHEET NO.

DAM	1. OWNER			2. STREAM Little Plum Creek			3. STATE Kentucky					
	4. SEC. TWP. RANGE		5. NEAREST P. O. Taylorville			6. COUNTY Spencer						
	7. LAT. 38° 06' W " LONG. 85° 25' W "			8. TOP OF DAM ELEVATION 662.5			9. SPILLWAY CREST ELEV. 657.5					
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		657.5		19.8		162.7		224.3		Sept., 1956	
	b. MULTIPLE USE		--									
	c. POWER		--									
	d. WATER SUPPLY		645.0		7.7		61.6		61.6		16. DATE NORMAL OPER. BEGAN Sept., 1956	
	e. IRRIGATION		--									
	f. CONSERVATION		--									
g. INACTIVE		--										
17. LENGTH OF RESERVOIR					0.58 MILES		AV. WIDTH OF RESERVOIR 0.053 MILES					
WATERSHED	18. TOTAL DRAINAGE AREA				1.03 SQ. MI.		22. MEAN ANNUAL PRECIPITATION (68 yrs) 47 INCHES					
	19. NET SEDIMENT CONTRIBUTING AREA				0.99 SQ. MI.		23. MEAN ANNUAL RUNOFF 16.3 INCHES					
	20. LENGTH 1.70 MILES		AV. WIDTH 0.61 MILES		24. MEAN ANNUAL RUNOFF 895 AC.-F.T.							
	21. MAX. ELEV. 780		MIN. ELEV. 627		25. ANNUAL TEMP: MEAN RANGE							
	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.		
9/14/56		-	-	Range Detailed	10 ² / ₁	7.7 ¹ / ₁ (19.8) ² / ₁	61.6 (224.3)		0.07 (0.25)			
4/2/59		2.5	2.5			7.7 ¹ / ₁ (19.8) ² / ₁	56.8 (219.6)		0.06 (0.25)			
10/13/60		1.5	4.0	Range (D)	3 ¹ / ₁	7.7 ¹ / ₁ (19.8) ² / ₁	50.5 (213.2)		0.06 (0.24)			
3/5/75		14.4	18.4			7.7 ¹ / ₁	41.3		0.05			
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		
SURVEY DATA	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		
	4/2/59		4.80	1.92	1.94	4.80		1.92		1.94		
	10/13/60		6.30	4.20	4.24	11.07		2.77		2.80		
3/5/75		9.20	0.64	0.65	20.3		1.10		1.11			
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		
4/2/59		45		1901	1901	3.12	7.8					
10/13/60		53		5460	3227	4.50	18.0					
3/5/75		86.4		850	1363	(1.79)	32.9					

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														
4/2/59	21	25	30	14	8	2	0	0	0	0					
	27	29	22	13	7	2	0	0	0	0					
3/5/75	R-1	R-2	R-3	R-4											
	11	46	23	20											
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							
47. REMARKS AND REFERENCES															
<u>1/</u> At Principal Spillway Elevation (Sediment Pool) <u>2/</u> At Emergency Spillway Crest Elevation Drainage area corrected 1/61 and all affected data revised accordingly Land use in watershed: 20% cropland; 65% grassland; and 15% woodland Major soil types in drainage area: Lowell and Fairmount															
48. AGENCY MAKING SURVEY															
49. AGENCY SUPPLYING DATA USDA-SCS Lexington, Kentucky															
50. DATE March 1975															