

RESERVOIR SEDIMENT DATA SUMMARY
LITTLE RACCOON CREEK WATERSHED-Structure 2C
(Rockville Lake)

NAME OF RESERVOIR

17
DATA SHEET NO.

DAM	1. OWNER Parke Co. Park Board		2. STREAM Williams Creek		3. STATE Indiana			
	4. SEC. 5/6 TWP. 15N RANGE 7W		5. NEAREST P.O. Rockville 1 NE		6. COUNTY Parke			
	7. LAT. 39° 46' 30" LONG. 87° 13' 00"		8. TOP OF DAM ELEVATION 658.4 ft		9. SPILLWAY CREST ELEV. 651.2 ft			
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	651.2 ft.	137	865 1/	1986	1971		
	b. MULTIPLE USE	644.0 ft.	99	1121 2/				
	c. POWER					16. DATE NORMAL OPER. BEGAN Summer 1971		
	d. WATER SUPPLY							
	e. IRRIGATION							
	f. CONSERVATION							
	g. INACTIVE							
17. LENGTH OF RESERVOIR (7600 ft)		1.4	MILES	AV. WIDTH OF RESERVOIR (570 ft.)		0.1 MILES		
WATERSHED	18. TOTAL DRAINAGE AREA		4.7	SQ. MI.	22. MEAN ANNUAL PRECIPITATION		43.3 INCHES	
	19. NET SEDIMENT CONTRIBUTING AREA		4.5	SQ. MI.	23. MEAN ANNUAL RUNOFF		14.0 INCHES	
	20. LENGTH 3.7		MILES	AV. WIDTH 1.3	MILES	24. MEAN ANNUAL RUNOFF		3500.0 AC.-FT.
	21. MAX. ELEV. 740 ft.		MIN. ELEV. 612 ft.	25. ANNUAL TEMP.: MEAN 53.1 RANGE (1) 16.8 (7) 87.33/				
	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.
10/27/94 to 2/16/95	23.5	23.5	Range	10	137	1854	0.53	
SURVEY DATA	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	
	10/27/94 to 2/16/95	43.3	3500	----	82,250	3500	82,250	
	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	
10/27/94 to 2/16/95	132 4/ 121 5/	5.6 5.1	1.2 1.1	132 121	5.6 5.1	1.2 1.1		
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	
10/27/94 to 2/16/95	75 *	1960	1960	0.28	6.6	1900	1900	

DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION												
	39.2-7.2	7.2-CREST	6/										
PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION													
10/27/94 to 2/16/95	91.7	8.3											

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														
10/27/94 to 2/16/95	0-7 9.8	7-13 7.6	13-27 12.1	27-37 9.8	37-48 16.7	48-54 11.4	54-63 19.7								
							54-60 6.1	60-66 6.8	7/						

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

6. ELEVATION-AREA-CAPACITY DATA								
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY

17. REMARKS AND REFERENCES
 1/ 815 ac-ft flood water & 50 ac-ft sediment storage capacity (from 644.0 to 651.2 ft)
 2/ 871 ac-ft recreation pool & 250 ac-ft sediment storage capacity (below 644.0 ft)
 3/ (1) mean monthly minimum for January, (7) mean monthly maximum for July
 4/ volume of capacity lost below elevation of emergency spillway (651.2 ft)
 5/ volume of capacity lost below elevation of principal spillway (644.0 ft)
 6/ crest equal to elevation of emergency spillway (651.2 ft)
 7/ east arm of reservoir

CONTINUATION SHEET FOR SCS-ENG-34

47. Remarks and References

A copy of the grain size analyses for two sediment samples from Little Raccoon Creek Watershed Structure 2C (Rockville Lake) is attached (see SCS-ENG-354).

Watershed Land Use:

Cropland.....	1800	acres
Pasture.....	150	acres
Forest.....	725	acres
Rural Homesteads.....	25	acres
Urban.....	200	acres
Golf Course and Fairgrounds...	100	acres
Highly Erodible Land.....	115	acres
Conservation Tillage.....	1500	acres
Cattle in Pasture.....	100	head
Swine in Confinement.....	1000	head

Physiography:

Southern limit of Tipton Till Plain