

**RESERVOIR SEDIMENT
DATA SUMMARY**

SCS-34 Rev. 6-62

Whitewater Lake

NAME OF RESERVOIR

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

19-49

DATA SHEET NO.

DAM	1. OWNER Indiana Dept of Conserv.		2. STREAM Silver Creek		3. STATE Indiana			
	4. SEC. 14, 15, TWP 11N RANGE 2W		3. NEAREST TOWN Liberty, Ind		6. COUNTY Union			
	7. STREAM BED ELEVATION 770		5. TOP OF DAM ELEVATION 832		9. SPILLWAY CREST ELEV. 820.8			
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. MULTIPLE USE					Sept 1954		
	b. FLOOD CONTROL							
	c. POWER							
	d. WATER SUPPLY							
	e. IRRIGATION					16. DATE NORMAL OPER. BEGAN		
	f. CONSERVATION	820.8	184.8	3590	3590	April 1955		
	g. SEDIMENT							
h. INACTIVE								
17. LENGTH OF RESERVOIR		1.9	MILES	AV. WIDTH OF RESERVOIR		0.16		
18. TOTAL DRAINAGE AREA		19.29	SQ. MI.	22. MEAN ANNUAL PRECIPITATION		40.7 (76)		
19. NET SEDIMENT CONTRIBUTING AREA		19.0	SQ. MI.	23. MEAN ANNUAL RUNOFF		14*		
20. LENGTH		13.7	MILES	AV. WIDTH		1.4		
21. MAX. ELEV.		1152		MIN. ELEV.		770		
25. CLIMATIC CLASSIFICATION		Humid						
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/W RATIO AC.-FT. PER SQ. MI.
	7/8-18/63	8.8	8.8	DR	18	177.9	3415.6	179.8
SURVEY DATA	26. DATE OF SURVEY	34. PERIOD ANNUAL PRECIPITATION	35. PERIOD WATER INFLOW ACRE-FEET			36. WATER INFL. TO DATE AC.-FT.		
	7/8-18/63	39.6	a. MEAN ANNUAL	b. MAX. ANNUAL	c. PERIOD TOTAL	a. MEAN ANNUAL	b. TOTAL TO DATE	
SURVEY DATA	26. DATE OF SURVEY	37. PERIOD SEDIMENT DEPOSITS ACRE-FEET			38. TOTAL SED. DEPOSITS TO DATE ACRE-FEET.			
	7/8-18/63	a. PERIOD TOTAL	b. AV. ANNUAL	c. PER SQ. MI.-YEAR	a. TOTAL TO DATE	b. AV. ANNUAL	c. PER SQ. MI.-YEAR	
7/8-18/63	174.4 (187.7) ^{1/}	19.8 (21.3) ^{1/}	1.04 (1.12) ^{1/}	174.4 (187.7) ^{1/}	19.8 (21.3) ^{1/}	1.04 (1.12) ^{1/}		
SURVEY DATA	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	
	7/8-18/63	a. PERIOD	b. TOTAL TO DATE	a. AV. AN.	b. TOT. TO DATE	a. PERIOD	b. TOT. TO DATE	
7/8-18/63	67.5 (78.8) ^{1/} (9 samples)	1529 (1666.3) ^{1/}	1529.0 (1666.3) ^{1/}	0.55	4.9			

* Estimated--no gage data available.

^{1/} Figures include all above crest deposits related to reservoir.

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET ABOVE, AND BELOW, 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														
7/8-18/63	9.6	21.5	20.3	10.0	6.4	6.7	5.6	5.7	10.2	4.0					

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
 This is the first survey and report of sedimentation studies for this reservoir. Permanent monuments have been set at the range ends for later use. During construction of U.S. Highway No. 27, parts of which pass through the east side of the drainage area, considerable soil eroded from the construction area of the new highway during its period of construction.
 In October 1962 the lake was drained for about 6 weeks to remove rough fish.

48. AGENCY MAKING SURVEY
 49. AGENCY SUPPLYING DATA Soil Conservation Service, USDA
 50. DATE August 1963