

RESERVOIR SEDIMENT DATA SUMMARY

Saddle Lake

17- 29

NAME OF RESERVOIR

DATA SHEET NO.

DAM	1. OWNER U.S. Forest Service		2. STREAM Theis Creek		3. STATE Indiana			
	4. SEC. 19 TWP. 5S RANGE 2W		5. NEAREST P.O. Tell City		6. COUNTY Perry			
	7. LAT. 38° 3' 50" LONG. 86° 40' 0"		8. TOP OF DAM ELEVATION 513.5		9. SPILLWAY CREST ELEV. 508.4			
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	508.0	74.3	797.0	1285.0	Nov. 1965		
	b. MULTIPLE USE	494.0	40.8	432.6	488.0			
	c. POWER					16. DATE NORMAL OPER. BEGAN		
	d. WATER SUPPLY							
	e. IRRIGATION							
	f. CONSERVATION					Jan. 1966		
g. INACTIVE	477.0	12.1	55.4	55.4				
17. LENGTH OF RESERVOIR 0.97 ^{1/2}		MILES		AV. WIDTH OF RESERVOIR 0.0657		MILES		
WATERSHED	18. TOTAL DRAINAGE AREA 3.53		SQ. MI.		22. MEAN ANNUAL PRECIPITATION 44.98		INCHES	
	19. NET SEDIMENT CONTRIBUTING AREA 3.41		SQ. MI.		23. MEAN ANNUAL RUNOFF 18.97 ^{2/3}		INCHES	
	20. LENGTH 2.69	MILES	AV. WIDTH 1.31	MILES	24. MEAN ANNUAL RUNOFF 3571		AC.-FT.	
	21. MAX. ELEV. 790		MIN. ELEV. 465		25. ANNUAL TEMP: MEAN 54.8 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.
12-15-65	-	-	-	-	40.8	488.00 ^{3/4}	0.137	
5-12-76	10.4	10.4	Range (S)	10	40.8	457.48 ^{3/4}	0.128	
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		
	5-12-76	44.98	3571	-	37,138	3571	37,138	
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		
5-12-76	30.52 ^{3/4}	2.93 ^{3/4}	0.85 ^{3/4}	30.52 ^{3/4}	2.93 ^{3/4}	0.85 ^{3/4}		
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		
5-12-76	45 ^{4/4}	830 ^{3/4}	830 ^{3/4}	0.60	6.25			

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														

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

46. Dec. 1965			ELEVATION-AREA-CAPACITY DATA			May 1976		
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY
466.0	0	0				466.0	0	0
470.0	2.40	4.80				470.0	3.20	6.40
474.0	7.90	25.40				474.0	7.60	28.00
478.0	13.80	68.40				478.0	11.70	66.60
482.0	18.90	133.80				482.0	17.60	125.20
486.0	25.70	223.00				486.0	24.00	208.40
490.0	33.00	340.40				490.0	29.87	316.14
494.0	40.80	488.00				494.0	40.80	457.48

47. REMARKS AND REFERENCES

1/ Two principal arms - east arm is 0.53 mi. long; south arm is 0.44 mi. long. Multiple use pool only.

2/ Data from gauge on Middle Fork of Anderson River near Briston, IN.

3/ Multiple use and inactive pools. Sediment not measured above elevation 494.0.

4/ Texture: Submerged sediment is a grey, clayey silt. Deltaic sediment is an organic-rich silt.

48. AGENCY MAKING SURVEY Soil Conservation Service
 49. AGENCY SUPPLYING DATA Soil Conservation Service
 50. DATE 3 Aug 76