

RESERVOIR SEDIMENTATION
DATA SUMMARY

Atwood Reservoir

21-27

NAME OF RESERVOIR

DATA SHEET NO.

1. OWNER Dept of the Army, C of E			2. RIVER Indian Fork			3. STATE Ohio		
4. SEC. 22 TWP. 15N RANGE 7W			5. NEAREST TOWN Sherrodsville			6. COUNTY Tuscarawas		
7. STREAM BED ELEV. 890			8. TOP OF DAM ELEV. 955.0			9. SPILLWAY CREST ELEV. 941.0		
RESERVOIR	10. STORAGE ALLOCATION	11. ELEVATION TOP OF POOL	12. SURFACE AREA ACRES	13. STORAGE ACRE-FEET	14. ACCUMULATED ACRE-FEET	15. DATE STORAGE BEGAN		
	a. FLOOD CONTROL	941.0	2,460	26,100	49,700	1 Apr 40		
	b. POWER	-	-	-	-			
	c. WATER SUPPLY	-	-	-	-	16. DATE NORMAL OPER. BEGAN		
	d. IRRIGATION	-	-	-	-			
	e. CONSERVATION	928.0	1,540	23,600	23,600	3 Jun 47 1/		
f. INACTIVE	-	-	-	-				
17. LENGTH OF RESERVOIR 10.7 MILES			AV. WIDTH OF RESERVOIR 0.36 MILES					
WATERSHED	18. TOTAL DRAINAGE AREA 70 SQ. MI.		22. MEAN ANNUAL PRECIPITATION 38.12 (39-62 yrs) INCHES					
	19. NET SEDIMENT CONTRIBUTING AREA 66.2 SQ. MI.		23. MEAN ANNUAL RUNOFF 13.39 (11 yrs) INCHES					
	20. LENGTH 15 MILES AV. WIDTH 4.7 MILES		24. MEAN ANNUAL RUNOFF 50,000 AC.-FT.					
	21. MAX. ELEV. 1350 MIN. ELEV. 890		25. CLIMATIC CLASSIFICATION Humid					
SURVEY DATA	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.
	1 Apr 40	-	-	-	-	2,460	49,700	710
	Dec 46	6.7	6.7	Range (R)	12	2,460	49,570	708
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	
	Dec 46	38.03"	51,150	63,800	342,700	51,150	342,700	
SURVEY DATA	26. DATE OF SURVEY	37. PERIOD SEDIMENT DEPOSITS ACRE-FEET			38. TOTAL SED. DEPOSITS TO DATE ACRE-FEET			
		a. PERIOD TOTAL	b. AV. ANNUAL	c. PER SQ. MI.-YR.	a. TOTAL TO DATE	b. AV. ANNUAL	c. PER SQ. MI.-YR.	
	Dec 46	130	19.4	0.29	130	19.4	0.29	
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	
			a. PERIOD	b. TOTAL TO DATE	a. AV. ANNUAL	b. TO DATE	a. PERIOD	b. TO DATE
	Dec 46	65*	410	410	0.039%	0.262%	395	395

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET ABOVE, AND BELOW, CREST ELEVATION											
	51-27	27-crest										
Dec 46	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION											
	100	0										
Elevation-capacity curve not available.												

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
Dec 46	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN REACH DESIGNATION														
	27.3	37.5	22.0	13.2	0	0	0	0	0	0					

45. RANGE IN RESERVOIR OPERATION							
WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW AC.-FT.	WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW AC.-FT.
1940	920.8	894.2	26,060	(Period of 1 Apr - 30 Sep 1940)			
1941	917.6	913.9	39,270				
1942	915.2	913.6	45,020				
1943	921.7	913.4	63,570				
1944	915.1	912.8	34,120				
1945	927.3	912.1	62,080				
1946	919.0	913.7	62,710				
1947	914.2	890.8	6,270	(Period of 1 Oct - 31 Dec 1946)			

46. ELEVATION-AREA-CAPACITY DATA								
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY
928.0	1,540	23,470						
941.0	2,460	49,570						
Elevation-capacity curve not available								

47. REMARKS AND REFERENCES 1/ Conservation pool raised to elev 928.0 on 3 June 1947. During period April 1940 to April 1947, pool had been maintained at elev 914. Reservoir was emptied Nov and Dec 1946. Drawdown commenced 18 Oct 46 and was completed 29 Oct. Some sediment may have been washed out of reservoir during drawdown, as channel below dam was filled with sediment. Sediment was predominately a fine silt with some coarse silt and sand. Original wet color was dark with a purple tinge, which changed to tan when dry.