

RESERVOIR SEDIMENTATION
DATA SUMMARY

Meander Creek Reservoir
NAME OF RESERVOIR

DAM	1. OWNER Mahoning Valley Sanitary Dist ^R		2. TWP. Meander Cr.		3. STATE Ohio			
	4. SEC. TWP. 3 N RANGE 3 W		5. NEAREST TOWN Youngstown		6. COUNTY Trumbull & Mahoning			
	7. STREAM BED ELEV.		8. TOP OF DAM ELEV.		9. SPILLWAY CREST ELEV. 905'			
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	905'				1929 (est.)		
	b. POWER							
	c. WATER SUPPLY	905'	2010	32,400	32,400	16. DATE NORMAL OPER. BEGAN		
	d. IRRIGATION							
	e. CONSERVATION							
	f. INACTIVE					1929		
17. LENGTH OF RESERVOIR 6.0 MILES			AV. WIDTH OF RESERVOIR .52 MILES					
WATERSHED	18. TOTAL DRAINAGE AREA 84.9 SQ. MI.		22. MEAN ANNUAL PRECIPITATION 35.5 INCHES					
	19. NET SEDIMENT CONTRIBUTING AREA 81.76 SQ. MI.		23. MEAN ANNUAL RUNOFF 12 (1921-45) INCHES					
	20. LENGTH 13.6 MILES	AV. WIDTH 6.0 MILES	24. MEAN ANNUAL RUNOFF 54,300 (1921-45) AC.-FT.					
	21. MAX. ELEV. 1200'		MIN. ELEV. 910'		25. CLIMATIC CLASSIFICATION Humid			
	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.
1929	-	-	-	-	2010	32,400	382	
1949	20	20	Range Rec.	15	2010	31,835	375	
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		
	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.-YEAR	a. TOTAL TO DATE	b. AV. ANNUAL	c. PER SQ. MI.-YEAR		
1949	565	28.25	.346	565	28.25	.346		
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. TOT. TO DATE	a. PERIOD	b. TOT. TO DATE	
1949	65.0(est)	489	489	.0872	1.7			

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														

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

1947 survey: Test pits excavated at 25 locations (in shallowest portion of reservoir) showed deposits ranging from 3 inches to 17½ inches & averaging 6 inches in depth.

Minimum number of ranges in 1949 survey indicates questionable reliability of results obtained, especially when compared with sediment deposited in Lake Milton & Berlin Reservoir

48. AGENCY SUPPLYING DATA Dept. of Natural Resources
Division of Water

49. DATE Feb. 21, 1962

RESERVOIR SEDIMENT
DATA SUMMARY

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Havard Mason

SCS-34 Rev. 6-66

NAME OF RESERVOIR

21-49 a
DATA SHEET NO.

DAM	1. OWNER Havard Mason			2. STREAM Salem Fork			3. STATE West Virginia									
	4. SEC. TWP. RANGE			5. NEAREST P. O. Salem			6. COUNTY Harrison									
	7. LAT. 39° 18' 25" LONG. 80° 34' 22"			8. TOP OF DAM ELEVATION 1150.8			9. SPILLWAY CREST ELEV. 1132.7									
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		1148.1		6.75 ^{1/}		62.82		69.58		10/54					
	b. MULTIPLE USE															
	c. POWER															
	d. WATER SUPPLY										16. DATE NORMAL OPER. BEGAN					
	e. IRRIGATION															
	f. CONSERVATION															
g. INACTIVE		1132.7		0.92 ^{1/}		6.76		6.76		10/54						
WATERSHED	17. LENGTH OF RESERVOIR				0.26 MILES		AV. WIDTH OF RESERVOIR				0.04 MILES					
	18. TOTAL DRAINAGE AREA				0.29 SQ. MI.		22. MEAN ANNUAL PRECIPITATION				42.0 INCHES					
	19. NET SEDIMENT CONTRIBUTING AREA				0.28 SQ. MI.		23. MEAN ANNUAL RUNOFF				17 INCHES					
	20. LENGTH		0.80 MILES		AV. WIDTH		0.36 MILES		24. MEAN ANNUAL RUNOFF				263 AC.-FT.			
	21. MAX. ELEV. 1480				MIN. ELEV. 1125				25. ANNUAL TEMP: MEAN RANGE							
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/I. RATIO, AC.-FT. PER AC.-FT.	
	10/54		0		0		Range		19		6.75		69.58		.265	
	10/56		2		2		(D)		19		2/		68.95		.262	
	10/58		2		4				19		2/		68.77		.261	
	12/60		2.2		6.2				19		2/		68.60		.261	
	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			
	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			
10/56		0.63		0.315		1.13		0.63		0.315		1.13				
10/58		0.18		0.090		0.32		0.81		0.203		0.73				
12/60		0.17		0.077		0.28		0.98		0.158		0.56				
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				
10/56		60 ^{3/}		1476.7		1476.7		0.452		0.91						
10/58		60 ^{3/}		420.1		954.0		0.292		1.16						
10/60		60 ^{3/}		358.2		731.9		0.227		1.41						

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION														
	-7.7	1132.77	+	15.4											
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION														
10/56	23.3			76.7											
10/58	29.7			70.3											
10/60	33.7			66.3											
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. ELEVATION-AREA-CAPACITY DATA															
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY							
47. REMARKS AND REFERENCES															
<u>1/</u> Data from Table 3, Watershed Work Plan (SCS) <u>2/</u> Data not available. <u>3/</u> Assumed															
48. AGENCY MAKING SURVEY				Soil Conservation Service				50. DATE <u>8/65</u>							
49. AGENCY SUPPLYING DATA															