

RESERVOIR SEDIMENT
DATA SUMMARY

SCS-34 Rev. 6-66

Acton Lake

NAME OF RESERVOIR

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

19-52

DATA SHEET NO.

State of Ohio

DAM	1. OWNER <u>Div. of Pks. & Recreation</u>		2. STREAM <u>Four Mile Creek</u>		3. STATE <u>Ohio</u>			
	4. SEC. <u>2</u> TWP. <u>5N</u> RANGE <u>1E</u>		5. NEAREST P.O. <u>Oxford</u>		6. COUNTY <u>Butler</u>			
	7. <u>Stream Bed Elevation 832</u>		8. TOP OF DAM ELEVATION <u>875*</u>		9. SPILLWAY CREST ELEV. <u>863.1</u>			
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						Feb. 4, 1957	
	b. MULTIPLE USE							
	c. POWER							
	d. WATER SUPPLY							
	e. IRRIGATION						16. DATE NORMAL OPER. BEGAN	
	f. CONSERVATION		<u>863.1</u>	<u>602</u>	<u>9,607</u>	<u>9,607</u>	Feb. 4, 1957	
	g. INACTIVE							
17. LENGTH OF RESERVOIR <u>2.58</u> MILES			AV. WIDTH OF RESERVOIR <u>0.36</u> MILES					
WATERSHED	18. TOTAL DRAINAGE AREA <u>107.4</u> SQ. MI.			22. MEAN ANNUAL PRECIPITATION <u>38.5 (30)</u> INCHES				
	19. NET SEDIMENT CONTRIBUTING AREA <u>106.5</u> SQ. MI.			23. MEAN ANNUAL RUNOFF <u>12.5 (30)</u> INCHES				
	20. LENGTH <u>23.9</u> MILES		AV. WIDTH <u>4.5</u> MILES		24. MEAN ANNUAL RUNOFF <u>71,600</u> AC.-FT.			
	21. MAX. ELEV. <u>1230</u>		MIN. ELEV. <u>832</u>		25. Climatic Classification <u>Humid</u>			
	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
<u>1957^{1/2}</u>		<u>-</u>	<u>-</u>	<u>D. Range</u>	<u>31</u>	<u>602</u>	<u>9607</u>	<u>89.4</u>
<u>Aug. 1961</u>		<u>5.0^{1/2}</u>	<u>5.0</u>	<u>D. Range</u>	<u>31</u>	<u>602</u>	<u>9393</u>	<u>87.4</u>
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
<u>Aug. 1961</u>		<u>41</u>		<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
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	
<u>Aug. 1961</u>		<u>214</u>	<u>42.8</u>	<u>0.402</u>	<u>214</u>	<u>42.8</u>	<u>0.402</u>	
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
<u>Aug. 1961</u>		<u>-</u>	<u>-</u>	<u>-</u>	<u>0.44</u>	<u>2.22</u>	<u>--</u>	<u>-</u>

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. ELEVATION-AREA-CAPACITY DATA															
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY							
47. REMARKS AND REFERENCES															
<p><u>1/</u> The original survey was done in the fall of 1956, though the gates were not closed until February 4, 1957. Since only about 5% of the sediment load passed before February 1957 all of the "water year" 1957 was used to compute the period of years.</p>															
48. AGENCY MAKING SURVEY					Ohio Division of Water										
49. AGENCY SUPPLYING DATA					Ohio Division of Water					50. DATE <u>April 15, 1968</u>					