

RESERVOIR SEDIMENT
DATA SUMMARY

SCS-34 Rev. 6-66

Saul-Mathay PA-459

NAME OF RESERVOIR

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

21 - 65

DATA SHEET NO.

DAM	1. OWNER <u>Mercer Co. SWCD</u>		2. STREAM <u>Mathay Run</u>		3. STATE <u>Pa.</u>			
	4. SEC. - TWP. - RANGE -		5. NEAREST P. O. <u>Greenville</u>		6. COUNTY <u>Mercer</u>			
	7. LAT <u>41° 22'</u> " LONG. <u>80° 23'</u> "		8. TOP OF DAM ELEVATION <u>1223.2</u>		9. SPILLWAY CREST ELEV. <u>1220.0</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	<u>1220.0</u>	<u>87.42</u>	<u>526.9</u>	<u>549.37</u>	<u>8/62</u>		
	b. MULTIPLE USE							
	c. POWER							
	d. WATER SUPPLY					16. DATE NORMAL OPER. BEGAN		
	e. IRRIGATION							
	f. CONSERVATION					<u>8/62</u>		
	g. INACTIVE	<u>1206.9</u>	<u>5.64</u>	<u>22.47</u>	<u>22.47</u>			
WATERSHED	17. LENGTH OF RESERVOIR <u>0.54</u> MILES		AV. WIDTH OF RESERVOIR <u>0.20</u> MILES					
	18. TOTAL DRAINAGE AREA <u>1.87</u> SQ. MI.		22. MEAN ANNUAL PRECIPITATION <u>42-46</u> INCHES					
	19. NET SEDIMENT CONTRIBUTING AREA <u>1.84</u> SQ. MI.		23. MEAN ANNUAL RUNOFF <u>75</u> INCHES					
	20. LENGTH <u>1.50</u> MILES	AV. WIDTH <u>1.42</u> MILES	24. MEAN ANNUAL RUNOFF <u>1496</u> AC.-F.T.					
	21. MAX. ELEV. <u>1370</u>		MIN. ELEV. <u>1200</u>		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.
	<u>8/62</u>	-	-	<u>Initial Survey</u>		<u>87.42</u>	<u>549.37</u>	<u>0.37</u>
	<u>8/67</u>	<u>5</u>	<u>5</u>	<u>Range</u>	<u>18 Ranges</u>	<u>87.42</u>	<u>22.47^{1/}</u> <u>549.16^{2/}</u> <u>22.26^{2/}</u>	<u>0.02^{1/}</u> <u>0.37^{2/}</u> <u>0.02^{2/}</u>
	<u>7/77</u>	<u>9.9</u>	<u>14.9</u>	<u>Range</u>	<u>18 R</u> <u>10 R</u>	<u>87.42</u> <u>5.64^{2/}</u>	<u>546.04^{3/}</u> <u>20.18^{2/}</u>	<u>0.36^{3/}</u> <u>0.01^{2/}</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>8/67</u>	<u>40.69</u>						
	<u>7/77</u>	<u>44.68</u>	<u>2977^{1/}</u>	<u>4,153^{1/}</u>	<u>27,710^{1/}</u>	<u>2,799</u>	<u>41,705</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>8/67</u>	<u>0.207</u>	<u>0.04</u>	<u>0.024</u>	<u>0.207</u>	<u>0.04</u>	<u>0.024</u>	
	<u>7/77</u>	<u>2.08^{2/}</u> <u>3.12^{3/}</u>	<u>0.21^{2/}</u> <u>0.32^{3/}</u>	<u>0.11^{2/}</u> <u>0.18^{3/}</u>	<u>2.29^{2/}</u> <u>3.33^{3/}</u>	<u>0.15^{2/}</u> <u>0.22^{3/}</u>	<u>0.08^{2/}</u> <u>0.13^{3/}</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>8/67</u>	<u>60^{4/}</u> <u>2/</u>	<u>29.5^{2/}</u>	<u>29.5^{2/}</u>	<u>.0075</u>	<u>.038</u>			
<u>7/77</u>	<u>85^{5/}</u> <u>90^{6/}</u>	<u>215.2^{2/}</u> <u>364.4^{3/}</u>	<u>152.9^{2/}</u> <u>252.7^{3/}</u>	<u>.67^{2/}</u> <u>.04^{3/}</u>	<u>10.19^{2/}</u> <u>.61^{3/}</u>	<u>105</u> <u>166</u>	<u>75</u> <u>115</u>	

TYPE 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
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

- 1/ Area from dam to range 18 and the 1220 contour, total reservoir.
- 2/ Sediment pool only.
- 3/ Total reservoir below crest elevation 1220.
- 4/ Estimated
- 5/ Measured wet sediment
- 6/ Weighted average dry unit weight for wet and dry sediment.
- 7/ Water resource data for Pa.

48. AGENCY MAKING SURVEY
 49. AGENCY SUPPLYING DATA Soil Conservation Service 50. DATE _____