

RESERVOIR SEDIMENT
DATA SUMMARY

SCS-34 Rev. 6-66

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

 Lake Adrian
NAME OF RESERVOIR

 22-34

DATA SHEET NO.

| | | | | | | | | | | | | | | | | |
|---|--------------------------------|------------------------------------|-------------------------------------|-------------------------------------|--|------------------------|--|----------------------------------|-----------------------------------|--|-----------------------------|------------------|-------------------------|--|-------------------------------------|--|
| DAM | 1. OWNER <u>City of Adrian</u> | | | 2. STREAM <u>Wolf Creek</u> | | | 3. STATE <u>Michigan</u> | | | | | | | | | |
| | 4. SEC. TWP. RANGE | | | 5. NEAREST P. O. <u>Adrian</u> | | | 6. COUNTY <u>Tenawee</u> | | | | | | | | | |
| | 7. LAT. " LONG. | | | 8. TOP OF DAM ELEVATION | | | 9. SPILLWAY CREST ELEV. <u>755*</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 | | | | | | | | | | 1942 | | | | | |
| | b. MULTIPLE USE | | | | | | | | | | | | | | | |
| | c. POWER | | | | | | | | | | 16. DATE NORMAL OPER. BEGAN | | | | | |
| | d. WATER SUPPLY | | <u>755</u> | | <u>86</u> | | <u>1,000</u> | | <u>1,000</u> | | | | | | | |
| | e. IRRIGATION | | | | | | | | | | 1942 | | | | | |
| | f. CONSERVATION | | | | | | | | | | | | | | | |
| | g. INACTIVE | | | | | | | | | | | | | | | |
| 17. LENGTH OF RESERVOIR <u>1.3</u> MILES | | | | | AV. WIDTH OF RESERVOIR <u>.1</u> MILES | | | | | | | | | | | |
| 18. TOTAL DRAINAGE AREA <u>65</u> SQ. MI. | | | | | 22. MEAN ANNUAL PRECIPITATION <u>32</u> INCHES | | | | | | | | | | | |
| | | | | | 19. NET SEDIMENT CONTRIBUTING AREA <u>59</u> SQ. MI. | | | | | 23. MEAN ANNUAL RUNOFF <u>9</u> INCHES | | | | | | |
| 20. LENGTH <u>13</u> MILES | | | AV. WIDTH <u>4</u> MILES | | | | | | | 24. MEAN ANNUAL RUNOFF <u>31,198</u> AC.-FT. | | | | | | |
| 21. MAX. ELEV. <u>1,085</u> | | | | | MIN. ELEV. <u>735</u> | | | | | | | | | | | |
| 25. ANNUAL TEMP: MEAN | | | | | RANGE | | | | | | | | | | | |
| WATERSHED | 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>Sept. 8, 1969</u> | | <u>28</u> | | | | <u>Mod. Range</u> | | <u>7</u> | | <u>86</u> | | Original <u>1,000</u> | | <u>.032</u> | |
| | | | | | | | | | | | | | Present <u>851</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 | | | | |
| | | | | | | | | | | | | | | | | |
| SURVEY DATA | 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>Sept. 8, 1969</u> | | <u>149</u> | | <u>5.32</u> | | <u>.09</u> | | <u>149</u> | | <u>5.32</u> | | <u>.09</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>Sept. 8, 1969</u> | | <u>75.1</u> | | <u>147</u> | | <u>147</u> | | <u>.54</u> | | <u>15</u> | | | | | | |

* Water level 1.2 ft above spillway

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|--|---|--|--|--|--|--|--|--|--|--|--|--|
| 26. DATE OF SURVEY | 43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION | | | | | | | | | | | |
| | | | | | | | | | | | | |
| PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION | | | | | | | | | | | | |
| | | | | | | | | | | | | |

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|--|---|-------|-------|-------|-------|-------|-------|-------|-------|--------|------|------|------|------|
| 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

Geology: The watershed is mostly in moraine and ground moraine with some outwash and clay lake deposits.

Soils: 80% somewhat poorly and poorly drained loams and sandy loam soils 0-3% slopes. 20% well drained sands and loamy sands > 12% slope.

48. AGENCY MAKING SURVEY USDA, Soil Conservation Service
 49. AGENCY SUPPLYING DATA Michigan RB & WFP
 50. DATE September 9, 1969