

RESERVOIR SEDIMENT DATA SUMMARY

MORRIS POND

17- 28

NAME OF RESERVOIR

DATA SHEET NO.

| | | | | | | | | | | |
|---------------|---|-------------------------------------|-------------------------------------|---------------------------------------|---|-------------------------|--------------------------------------|-------------------------------------|------------------------------|-----------------------------|
| DAM | 1. OWNER <u>Robert Morris</u> | | | 2. STREAM <u>Trib. of Harmony Cr.</u> | | | 3. STATE <u>Indiana</u> | | | |
| | 4. SEC. <u>6</u> TWP. <u>5 S</u> RANGE <u>13 W</u> | | | 5. NEAREST P. O. <u>New Harmony</u> | | | 6. COUNTY <u>Posey</u> | | | |
| | 7. LAT. <u>38° 7' 19"</u> LONG. <u>87° 54' 23"</u> | | | 8. TOP OF DAM ELEVATION <u>407.9</u> | | | 9. SPILLWAY CREST ELEV. <u>406.5</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 | | | | | | | | | 1949 |
| | b. MULTIPLE USE | | | | | | | | | |
| | c. POWER | | | | | | | | | |
| | d. WATER SUPPLY | | <u>406.5</u> | | <u>3.82</u> | | <u>24.94</u> | | <u>24.94</u> | 16. DATE NORMAL OPER. BEGAN |
| | e. IRRIGATION | | | | | | | | | |
| | f. CONSERVATION | | | | | | | | | |
| | g. INACTIVE | | | | | | | | | 1949 |
| WATERSHED | 17. LENGTH OF RESERVOIR <u>0.180</u> MILES | | | | AV. WIDTH OF RESERVOIR <u>0.033</u> MILES | | | | | |
| | 18. TOTAL DRAINAGE AREA <u>0.138</u> SQ. MI. | | | | 22. MEAN ANNUAL PRECIPITATION <u>40.90</u> INCHES | | | | | |
| | 19. NET SEDIMENT CONTRIBUTING AREA <u>0.132</u> SQ. MI. | | | | 23. MEAN ANNUAL RUNOFF <u>15.28¹</u> INCHES | | | | | |
| | 20. LENGTH <u>0.739</u> MILES | | AV. WIDTH <u>0.187</u> MILES | | 24. MEAN ANNUAL RUNOFF <u>112.1¹</u> AC.-FT. | | | | | |
| | 21. MAX. ELEV. <u>515</u> | | MIN. ELEV. <u>391.9</u> | | 25. ANNUAL TEMP.: MEAN <u>56.4</u> 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>April, 1949</u> | <u>-</u> | <u>-</u> | <u>-</u> | <u>-</u> | <u>3.82</u> | <u>24.94</u> | <u>0.223</u> | | |
| | <u>4-6-76</u> | <u>27</u> | <u>27</u> | <u>Range (D)</u> | <u>10</u> | <u>3.82</u> | <u>18.41</u> | <u>0.164</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>4-6-76</u> | <u>40.9</u> | <u>112</u> | <u>-</u> | <u>3024</u> | <u>112</u> | <u>3024</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>4-6-76</u> | <u>6.53</u> | <u>0.242</u> | <u>1.83</u> | <u>6.53</u> | <u>0.242</u> | <u>1.83</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>4-6-76</u> | <u>78.32¹</u> | <u>3121</u> | <u>3121</u> | <u>0.97</u> | <u>26.2</u> | | | | | |

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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. 1976 Survey | | | ELEVATION-AREA-CAPACITY DATA 1949 (original) | | | | | |
|-----------------|-------|----------|--|------|----------|-----------|-------|----------|
| ELEVATION | AREA | CAPACITY | ELEVATION | AREA | CAPACITY | ELEVATION | AREA | CAPACITY |
| 394.5 | 0.100 | 0.050 | | | | 392.5 | 0.100 | 0.080 |
| 396.5 | 0.500 | 0.650 | | | | 394.5 | 0.450 | 0.630 |
| 398.5 | 0.860 | 2.010 | | | | 396.5 | 0.910 | 1.990 |
| 400.5 | 1.290 | 4.160 | | | | 398.5 | 1.280 | 4.180 |
| 402.5 | 1.940 | 7.390 | | | | 400.5 | 1.930 | 7.390 |
| 404.5 | 2.630 | 11.960 | | | | 402.5 | 2.630 | 11.950 |
| 406.5 | 3.820 | 18.410 | | | | 404.5 | 3.270 | 17.850 |
| | | | | | | 406.5 | 3.820 | 24.940 |

47. REMARKS AND REFERENCES

1/ From gage at Big Creek near Wadesville, Indiana.

2/ Texture - USDA Classification = silt loam.

9-10% clay

76-91% silt

2-15% fine sand

5-6% organics

48. AGENCY MAKING SURVEY Soil Conservation Service

49. AGENCY SUPPLYING DATA Soil Conservation Service

50. DATE 15 July 1976