

RESERVOIR SEDIMENTATION
DATA SUMMARY

Radnor Lake

NAME OF RESERVOIR

18-1

DATA SHEET NO.

516

| | | | | | | | | | | | | |
|-------------|-------------------------------------------------------|--|-----------------------------------------|-----------------|-------------------------------------------------------|---------------------------------------------|------------------------------------|---------------------------------|------------------------------------|--|-----------------------------|--|
| DAM | 1. OWNER Louisville & Nashville RR | | | | 2. RIVER Other Creek | | 3. STATE Tennessee | | | | | |
| | 4. SEC. 36° 04' N. 86° 48' W RANGE | | | | 5. NEAREST TOWN 5 Mi. S. Nashville | | 6. COUNTY Davidson | | | | | |
| | 7. STREAM BED ELEV. 726 | | | | 8. TOP OF DAM ELEV. 776 | | 9. SPILLWAY CREST ELEV. 770 | | | | | |
| 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 | | | | | | | | | | March 1915 | |
| | b. POWER | | | | | | | | | | | |
| | c. WATER SUPPLY | | 770 | | 80.1 | | 1,313 | | 1,313 | | 16. DATE NORMAL OPER. BEGAN | |
| | d. IRRIGATION | | | | | | | | | | | |
| | e. CONSERVATION | | | | | | | | | | | |
| | f. INACTIVE | | | | | | | | | | | |
| WATERSHED | 17. LENGTH OF RESERVOIR 0.7 MILES | | | | AV. WIDTH OF RESERVOIR 0.18 MILES | | | | | | | |
| | 18. TOTAL DRAINAGE AREA 2.1 SQ. MI. | | | | 22. MEAN ANNUAL PRECIPITATION 47.2 (69) INCHES | | | | | | | |
| | 19. NET SEDIMENT CONTRIBUTING AREA 2.0 SQ. MI. | | | | 23. MEAN ANNUAL RUNOFF INCHES | | | | | | | |
| | 20. LENGTH MILES | | AV. WIDTH MILES | | 24. MEAN ANNUAL RUNOFF AC.- FT. | | | | | | | |
| | 21. MAX. ELEV. | | MIN. ELEV. | | 25. CLIMATIC CLASSIFICATION Humid | | | | | | | |
| 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/W RATIO AC.- FT. PER SQ. MI. | | | |
| | March 1915 | | - | - | - | - | 80.1 | 1,313 | 625 | | | |
| | Nov. 1940 | | 25.7 | 25.7 | Range Recon. | 7 | 80.1 | 1,279 | 609 | | | |
| | 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 | | | | |
| | Nov. 1940 | | 34.0 | 1.32 | 0.660 | 34.0 | 1.32 | 0.660 | | | | |
| | 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 | | | |
| Nov. 1940 | | | | | | 0.10 | 2.59 | | | | | |

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| 26. DATE OF SURVEY | 43. DEPTH DESIGNATION RANGE IN FEET ABOVE, AND BELOW, 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 | -125 |
| | PERCENT OF TOTAL SEDIMENT LOCATED WITHIN REACH DESIGNATION | | | | | | | | | | | | | | |
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| 45. RANGE IN RESERVOIR OPERATION | | | | | | | |
| WATER YEAR | MAX. ELEV. | MIN. ELEV. | INFLOW AC.-FT. | WATER YEAR | MAX. ELEV. | MIN. ELEV. | INFLOW AC.-FT. |
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| 46. ELEVATION-AREA-CAPACITY DATA | | | | | | | | |
| ELEVATION | AREA | CAPACITY | ELEVATION | AREA | CAPACITY | ELEVATION | AREA | CAPACITY |
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| 47. REMARKS AND REFERENCES | |
| Region 2, Soil Conservation Service U. S. Dept. of Agriculture Spartanburg, S. C. | |
| 48. AGENCY SUPPLYING DATA | 49. DATE <u>October 1950</u> |