

RESERVOIR SEDIMENTATION

Bridgeport Reservoir

51-15

DATA SUMMARY & Improvement Dist. No. 1

NAME OF RESERVOIR

DATA SHEET NO.

| | | | | | | | | |
|------------------------------|---|---|-------------------------------------|------------------------------------|---|-----------------------------|---------------------------------|-----------------------------------|
| DAM | 1. OWNER Tarrant Co. Water Control | | 2. RIVER W. Fork of Trinity R. | | 3. STATE Texas | | | |
| | 4. SEC. TWP. RANGE | | 5. NEAREST TOWN Bridgeport | | 6. COUNTY Wise | | | |
| | 7. STREAM BED ELEV. | | 8. TOP OF DAM ELEV. | | 9. SPILLWAY CREST ELEV. 826 | | | |
| 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 | 851 | 14,400 | 524,000 ^{1/} | 816,000 | 1932 | | |
| | b. POWER | | | | | | | |
| | c. WATER SUPPLY | 826 | 11,400 | 292,000 | 292,000 | 16. DATE NORMAL OPER. BEGAN | | |
| | d. IRRIGATION | | | | | | | |
| | e. CONSERVATION | | | | | 1932 | | |
| | f. INACTIVE | | | | | | | |
| 17. LENGTH OF RESERVOIR 12.9 | | MILES | | AV. WIDTH OF RESERVOIR 1.4 | | MILES | | |
| WATERSHED | 18. TOTAL DRAINAGE AREA 1051 | | SQ. MI. | | 22. MEAN ANNUAL PRECIPITATION 30.9 (29) | | INCHES | |
| | 19. NET SEDIMENT CONTRIBUTING AREA 1033 | | SQ. MI. | | 23. MEAN ANNUAL RUNOFF | | INCHES | |
| | 20. LENGTH 53 | | MILES | | AV. WIDTH 20 | | MILES | |
| | 21. MAX. ELEV. 1300 | | 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. |
| | 1932 | - | - | - | - | 11,400 | 292,000 | 278 |
| | Feb. 1943 | 10.8 | 10.8 | Range Recon. | 18 | 11,400 | 283,240 | 269 |
| | 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 | d. MEAN ANNUAL | e. 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 | |
| | Feb. 1943 | 8,760 | 811 | 0.785 | 8,760 | 811 | 0.785 | |
| | 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 | |
| Feb. 1943 | | | | 0.10 (0.28) ^{2/} | 1.07 (3.0) ^{2/} | - | - | |

1/ Surcharge storage
 2/ Based on water supply pool

| | | | | | | | | | | | | | | | |
|--|---|------------|----------------|------------|------------|------------|----------------|----------|-------|----------------------------|------|------|------|------|------|
| 26. DATE OF SURVEY | 43. DEPTH DESIGNATION RANGE IN FEET ABOVE, AND BELOW, 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 | | | | | | | | | | | | | | | |
| Most of the sediment in the lake is clay and silt, but several of the tributaries have sandy deltas. | | | | | | | | | | | | | | | |
| Region 4, Soil Conservation Service U. S. Department of Agriculture Fort Worth, Texas | | | | | | | | | | | | | | | |
| 48. AGENCY SUPPLYING DATA | | | | | | | | | | 49. DATE <u>March 1951</u> | | | | | |