

RESERVOIR SEDIMENT DATA SUMMARY

Stony Brook #5
Baldwin Lake

3 - 6

DATA SHEET NO.

NAME OF RESERVOIR

| DAM | 1. OWNER State N.J | | | 2. STREAM Baldwin Ck. | | | 3. STATE N.J | | | | | |
|--------------------|---|------------------------------------|-------------------------------------|-------------------------------|--|--|----------------------------------|----------------------------------|-------------------------------------|--|-----------------------------|--|
| | 4. SEC. - TWP. - RANGE - | | | 5. NEAREST P.O. Pennington | | | 6. COUNTY Mercer | | | | | |
| | 7. LAT. 40° 20' 26" LONG. 74° 46' 45" | | | 8. TOP OF DAM ELEVATION 165.3 | | | 9. SPILLWAY CREST ELEV. 159.6 | | | | | |
| 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 | | 162.6 | | 27.4 | | 60.3 | | 139.63 | | 8/16/62 | |
| | b. MULTIPLE USE | | | | | | | | | | | |
| | c. POWER | | | | | | | | | | | |
| | d. WATER SUPPLY | | | | | | | | | | 16. DATE NORMAL OPER. BEGAN | |
| | e. IRRIGATION | | | | | | | | | | | |
| | f. CONSERVATION | | 159.6 ^{1/} | | 16 | | 79.33 | | 79.33 | | ? | |
| g. INACTIVE | | | | | | | | | | | | |
| WATERSHED | 17. LENGTH OF RESERVOIR 0.43 MILES | | | | AV. WIDTH OF RESERVOIR .06 MILES | | | | | | | |
| | 18. TOTAL DRAINAGE AREA 2.51 SQ. MI. | | | | 22. MEAN ANNUAL PRECIPITATION 42.26 INCHES | | | | | | | |
| | 19. NET SEDIMENT CONTRIBUTING AREA 2.40 SQ. MI. | | | | 23. MEAN ANNUAL RUNOFF 18 INCHES | | | | | | | |
| | 20. LENGTH 2.46 MILES | | AV. WIDTH 1.8 MILES | | 24. MEAN ANNUAL RUNOFF 2409 AC.-FT. | | | | | | | |
| | 21. MAX. ELEV. 460 + | | MIN. ELEV. 144.6 | | 25. ANNUAL TEMP: MEAN RANGE Jan 32 Jul 75 | | | | | | | |
| 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. | | | |
| | 8-16-62 | | 0 | 0 | - | - | 15.91 | 79.33 | .033 | | | |
| | 3-29-71 | | 8.6 | 8.6 | Range | 20 | 15.91 | 73.38 | .030 | | | |
| | 3-15-76 | | 5.0 | 13.6 | Range | 20 | 15.9 | 68.37 | .028 | | | |
| | 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 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 | | | | |
| | 8-16-62 | | - | - | - | - | - | - | | | | |
| 3-29-71 | | 5.95 | 0.69 | 0.28 | 5.95 | 0.69 | 0.28 | | | | | |
| 3-15-76 | | 5.01 | 1.002 | 0.4 | 10.96 | 0.81 | 0.32 | | | | | |
| 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 | | | | |
| 8-16-62 | | - | - | - | - | - | - | - | | | | |
| 3-29-71 | | 52 | 315.3 | 315.3 | .5% ^{2/} | 4.26 | - | - | | | | |
| 3-15-76 | | 55* | 514.3 | 388.5 | .58 ^{3/} | 7.91 | - | - | | | | |

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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 | | | | | | | | | | | | | | |
| 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 | | | | | | | | | | | | | | | |
| <p><u>1/</u> Sediment Pool - Reservoir was designed for sediment control</p> <p><u>2/</u> .87% of sediment pool lost annually 1962-1971</p> <p><u>3/</u> 1.02% of sediment pool lost annually 1962-1976</p> | | | | | | | | | | | | | | | |
| 48. AGENCY MAKING SURVEY | | | | | USDA SCS | | | | | | | | | | |
| 49. AGENCY SUPPLYING DATA | | | | | USDA SCS | | | | | | | | | | |
| 50. DATE _____ | | | | | | | | | | | | | | | |