

Jan. 1958

U.S. DEPARTMENT OF AGRICULTURE

RESERVOIR SEDIMENTATION
DATA SUMMARY

Teakettle #7 (1938-1960)

SOIL CONSERVATION SERVICE

71-35

NAME OF RESERVOIR

Kings R.

DATA SHEET NO.

| DAM | 1. OWNER USDA, Forest Service | | 2. RIVER Teakettle Cr. trib./ | | 3. STATE California | | | | | |
|-------------------------|------------------------------------|-----------------------------------|---|------------------------------------|---------------------------------------|---|------------------------|---------------------------------|-----------------------------------|--|
| | 4. SEC. 22 TWP. 11S RANGE 27E | | 5. NEAREST TOWN Fresno | | 6. COUNTY Fresno | | | | | |
| | 7. STREAM BED ELEV. 6800 ft. | | 8. TOP OF DAM ELEV. 6803 ft. | | 9. SPILLWAY CREST ELEV. 6803 ft. | | | | | |
| 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 | | | | | Fall, 1938 | | | | |
| | b. POWER | | | | | | | | | |
| | c. WATER SUPPLY | | | | | | | | | |
| | d. IRRIGATION | | | | | | | | | |
| | e. CONSERVATION | | | | | 16. DATE NORMAL OPER. BEGAN | | | | |
| | f. INACTIVE 1) | 6803 | 0.055 | 0.222 2) | | Fall, 1956 | | | | |
| 17. LENGTH OF RESERVOIR | | 0.0076 MILES | | AV. WIDTH OF RESERVOIR | | 0.0114 MILES | | | | |
| WATERSHED | 18. TOTAL DRAINAGE AREA | | 0.091 SQ. MI. | | 22. MEAN ANNUAL PRECIPITATION | | 40 INCHES | | | |
| | 19. NET SEDIMENT CONTRIBUTING AREA | | 0.091 SQ. MI. | | 23. MEAN ANNUAL RUNOFF | | 16.8 INCHES | | | |
| | 20. LENGTH 0.3 MILES | | AV. WIDTH 0.3 MILES | | 24. MEAN ANNUAL RUNOFF | | 1.40 AC.-FT. | | | |
| | 21. MAX. ELEV. 7100 ft. | | MIN. ELEV. 6800 ft. | | 25. CLIMATIC CLASSIFICATION | | Humid | | | |
| | 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. | |
| Fall, 1956 | | (1938-1956) | | | -- | 0.055 | 0.222 | 2.440 | | |
| " , 1957 | | 19.0 | 19.0 | Detailed | -- | " | 0.181 | 1.989 | | |
| " , 1958 | | 1.0 | 20.0 | " | -- | " | 0.178 | 1.956 | | |
| " , 1959 | | 1.0 | 21.0 | " | -- | " | 0.182 | 2.000 | | |
| " , 1960 | | 1.0 | 22.0 | " | -- | " | 0.178 | 1.956 | | |
| SURVEY DATA | 26. DATE OF SURVEY | | 34. PERIOD ANNUAL PRECIPITATION | | 35. PERIOD WATER INFLOW ACRE- FEET 3) | | | 36. WATER INFL. TO DATE AC.-FT. | | |
| | | | a. MEAN ANNUAL | b. MAX. ANNUAL | c. PERIOD TOTAL | | d. MEAN ANNUAL | | b. TOTAL TO DATE | |
| | Fall, 1958 | | 53.00 | 1.860 | 1,860 | 1,860 | 1,860 | 1,860 | 1,860 | |
| | " , 1959 | | 31.74 | 497 | 497 | 497 | 1,178 | 1,178 | 2,357 | |
| | " , 1960 | | 18.37 | 473 | 473 | 473 | 943 | 943 | 2,830 | |
| | 26. DATE OF SURVEY | | 37. PERIOD SEDIMENT DEPOSITS ACRE- FEET | | | 38. TOTAL SED. DEPOSITS TO DATE ACRE- FEET 5) | | | | |
| | | | a. PERIOD TOTAL | b. AV. ANNUAL | c. PER SQ. MI.-YEAR | d. TOTAL TO DATE | e. AV. ANNUAL | f. PER SQ. MI.-YEAR | | |
| 1938-1956 | | - | - | - | - | - | - | | | |
| Fall, 1957 | | 0.0489 | 0.0026 | 0.029 | 0.0489 | 0.00257 | 0.0282 | | | |
| " , 1958 | | -0.0012 | -0.0012 | -0.013 4) | 0.0477 | 0.00238 | 0.0268 6) | | | |
| " , 1959 | | -0.0034 | -0.0034 | -0.037 4) | 0.0443 | 0.00211 | 0.0232 6) | | | |
| " , 1960 | | 0.0063 | 0.0063 | 0.069 | 0.0506 | 0.00230 | 0.0253 6) | | | |
| 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 P.P.M. | | |
| | | | | a. PERIOD | b. TOTAL TO DATE | a. AV. ANNUAL | b. TOT. TO DATE | a. PERIOD | b. TOT. TO DATE | |
| | | | | | | | | | | |

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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 | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |

| 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

- 1) Item 10f: Water yield research facility; inflow = outflow over weir.
- 2) Item 13f: New capacity after removing sediment (fall, 1956).
- 3) Item 35: First year recorded by water-storage recorder is 1957-58.
- 4) Item 37c: Loss of sediment not applicable to watershed as a whole.
- 5) Item 38: Not including sediment 1938-1956.
- 6) Item 38c: These values computed as if total-to-date had remained at 0.0489 for 1958 and 1959.

48. AGENCY SUPPLYING DATA U. S. Forest Service

49. DATE March 26, 1962