

RESERVOIR SEDIMENTATION
DATA SUMMARY

Lake Pillsbury (Scott Dam)

NAME OF RESERVOIR

72-13

DATA SHEET NO.

| | | | | | | | | | | | |
|------------------------------------|--|---|---|-------------------------------|---|---------------------------------|---|-----------------------------------|--|--|--|
| DAM | 1. OWNER Pacific Gas & Elec. Co. | | | 2. RIVER Eel | | | 3. STATE California | | | | |
| | 4. SEC. 14&23 TWP. 18N RANGE 10W | | | 5. NEAREST TOWN Potter Valley | | | 6. COUNTY Lake | | | | |
| | 7. STREAM BED ELEV. 1,723 | | | 8. TOP OF DAM ELEV. 1,838 | | | 9. SPILLWAY CREST ELEV. 1,828 ^{1/} | | | | |
| 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 | | | | | Dec. 1921 | | | | | |
| | b. POWER | 1,828 | 2,280 | 93,724 | 94,396 | | | | | | |
| | c. WATER SUPPLY | | | | | 16. DATE NORMAL OPER. BEGAN | | | | | |
| | d. IRRIGATION | | | | | | | | | | |
| | e. CONSERVATION | | | | | Dec. 1921 | | | | | |
| | f. INACTIVE | 1,741 | 80 | 672 | 672 | | | | | | |
| 17. LENGTH OF RESERVOIR 4.50 MILES | | AV. WIDTH OF RESERVOIR .79 MILES | | | | | | | | | |
| WATERSHED | 18. TOTAL DRAINAGE AREA 288 SQ. MI. | | 22. MEAN ANNUAL PRECIPITATION -- INCHES | | | | | | | | |
| | 19. NET SEDIMENT CONTRIBUTING AREA 284 SQ. MI. | | 23. MEAN ANNUAL RUNOFF 24.8 (36 yrs.) INCHES | | | | | | | | |
| | 20. LENGTH 26 MILES; AV. WIDTH 11 MILES | | 24. MEAN ANNUAL RUNOFF 380,800 ^{2/} (36 yrs) AC.-FT. | | | | | | | | |
| | 21. MAX. ELEV. 7,000 | | MIN. ELEV. 1,723 | | 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. | | | |
| | Dec. 1921 | -- | -- | Contour | 10 feet | 2,280* | 94,396 | 328 | | | |
| | May 1959 | 37.5 | 37.5 | Contour (D) | 5 feet | 2,280 | 86,785 | 301 | | | |
| | 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 | | | | |
| | May 1959 | -- | 380,800 ^{2/} | 949,200 ^{3/} | 14,280,800 ^{3/} | 380,800 ^{2/} | 14,280,000 ^{3/} | | | | |
| | 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 | | | | |
| | May 1959 | 7,620 | 203 | 0.71 | 7,620 | 203 | 0.710 | | | | |
| | 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 | | | | |
| May 1959 | 73 | 1,129 | 1,129 | 0.216 | 8.10 | -- | -- | | | | |

*Assumed

| | | | | | | | | | | | | |
|-----------------------|---|-------|-------|-------|-------|-------|-------|-------|-------|------|---------|--|
| 26. DATE OF SURVEY | 43. DEPTH DESIGNATION RANGE IN FEET ABOVE, AND BELOW, CREST ELEVATION | | | | | | | | | | | |
| | 105-98 | 98-88 | 88-78 | 78-68 | 68-58 | 58-48 | 48-38 | 38-28 | 28-18 | 18-8 | 8-crest | |
| | PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION | | | | | | | | | | | |
| May 1959 | 1 | 2 | 4 | 2 | 4 | 13 | 17 | 17 | 19 | 14 | 7 | |

| | | | | | | | | | | | | | | | |
|-----------------------|---|-------|-------|-------|-------|-------|-------|-------|-------|--------|------|------|------|------|------|
| 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 <u>3/</u> | | | | | | | |
|--|------------|------------|-----------------------|------------|------------|------------|----------------|
| WATER YEAR | MAX. ELEV. | MIN. ELEV. | INFLOW AC.-FT. | WATER YEAR | MAX. ELEV. | MIN. ELEV. | INFLOW AC.-FT. |
| 1925 | 1,829 | | 400,000 ^{4/} | | | | |
| 1932 | | 1,741 | 186,000 ^{4/} | | | | |

| 46. ELEVATION-AREA-CAPACITY DATA | | | | | | | | |
|----------------------------------|-------|----------|-----------|-------|----------|-----------|-------|----------|
| ELEVATION | AREA | CAPACITY | ELEVATION | AREA | CAPACITY | ELEVATION | AREA | CAPACITY |
| m.s.l. | acres | acre-ft. | m.s.l. | acres | acre-ft. | m.s.l. | acres | acre-ft. |
| 1,728 | -- | -- | 1,765 | 505 | 6,911 | 1,805 | 1,440 | 43,470 |
| 1,730 | 13.5 | 12 | 1,770 | 610 | 9,699 | 1,810 | 1,620 | 51,120 |
| 1,735 | 27 | 108 | 1,775 | 663 | 12,896 | 1,815 | 1,790 | 59,645 |
| 1,740 | 71 | 345 | 1,780 | 756 | 16,436 | 1,820 | 1,985 | 69,075 |
| 1,745 | 122 | 826 | 1,785 | 871 | 20,494 | 1,825 | 2,165 | 79,460 |
| 1,750 | 204 | 1,636 | 1,790 | 1,020 | 25,220 | 1,828 | 2,280 | 86,785 |
| 1,755 | 299 | 2,883 | 1,795 | 1,140 | 30,620 | | | |
| 1,760 | 404 | 4,641 | 1,800 | 1,280 | 36,670 | | | |

47. REMARKS AND REFERENCES The weighted median diameter of sediment deposited in the reservoir is 0.093 mm.

1/ Top of spillway 1,818 ft., top of spillway gates 1,828 ft. above mean sea level.

2/ Mean annual inflow for period 1923-58, less evaporation and seepage losses.

3/ Record of water contents available in U. S. Geological Survey Water-Supply Papers, "Surface Water Supply of the United States, Part 11".

4/ Less evaporation and seepage losses.

48. AGENCY SUPPLYING DATA U. S. Geological Survey, Water 49. DATE August, 1961