

**RESERVOIR SEDIMENTATION
DATA SUMMARY**

Misselbeck
NAME OF RESERVOIR

72 - 12
DATA SHEET NO.

DAM	1. OWNER Happy Valley Water Co.			2. RIVER N. Fk. Cottonwood Cr.			3. STATE California			
	4. SEC. 31 TWP. 31N RANGE 7W			5. NEAREST TOWN Redding			6. COUNTY Shasta			
	7. STREAM BED ELEV. 2,090			8. TOP OF DAM ELEV. 2,200			9. SPILLWAY CREST ELEV. 2,190.5			
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					May 1920				
	b. POWER									
	c. WATER SUPPLY									
	d. IRRIGATION	2,190.5 1/	115	4,300	4,300	16. DATE NORMAL OPER. BEGAN				
	e. CONSERVATION									
	f. INACTIVE									
WATERSHED	17. LENGTH OF RESERVOIR			MILES	AV. WIDTH OF RESERVOIR			MILES		
	18. TOTAL DRAINAGE AREA			12.0	SQ. MI.	22. MEAN ANNUAL PRECIPITATION			50 - 60	INCHES
	19. NET SEDIMENT CONTRIBUTING AREA			11.8	SQ. MI.	23. MEAN ANNUAL RUNOFF			INCHES	
	20. LENGTH		MILES	AV. WIDTH		MILES	24. MEAN ANNUAL RUNOFF			AC.-FT.
	21. MAX. ELEV.		7,000	MIN. ELEV.		2,090	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.		
	May 1920	-	-	-	-	115	4,300	358		
	Dec. 1945	25.5	25.5	Range recon.	5	115	4,086	341		
	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			
	Dec. 1945	214	8.39	0.711	214	8.39	0.711			
	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			
Dec. 1945	75 *	1,161	1,161	0.20	4.98					

* Assumed

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															
<u>1/</u> Top of temporary timber structure 4.5 feet high built on concrete spillway sill. Brown, C. B. and Thorp, E. M. Reservoir sedimentation in the Sacramento-San Joaquin Drainage Basins, California. U. S. Soil Conserv. Serv. Special Report No. 10, 69 pp., illus., processed, Washington, D. C. July 1947. Region 7, Soil Conservation Service U. S. Dept. of Agriculture Portland, Oregon															
48. AGENCY SUPPLYING DATA						49. DATE February 26, 1951									